

RECEIVED

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
REGION 1 – NORTHERN REGION
619 Second Street
Eureka, CA 95501

JUL 13 2016

CDFW - EUREKA



STREAMBED ALTERATION AGREEMENT

NOTIFICATION NO. 1600-2016-0056-R1

Unnamed Tributary to the Eel River and the Pacific Ocean

Mr. Steven Baassiri
Baassiri Water Diversions and Stream Crossing Project
3 Encroachments

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and Mr. Steven Baassiri (Permittee).

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, the Permittee initially notified CDFW on February 12, 2016, with updated information submitted June 15, 2016, that the Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, the Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, the Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

The project to be completed is located within the Eel River watershed, approximately 1.7 miles southwest of the town of Alderpoint, County of Humboldt, State of California. The project is located in Section 32, T5S, R3E, Humboldt Base and Meridian; in the Dinsmore U.S. Geological Survey 7.5-minute quadrangle; Assessor's Parcel Number 216-244-02; latitude 40.1659 N and longitude 123.6380 W at the Point of Diversion (POD-1), and latitude 40.1640 N and longitude 123.6393 W at POD-2.

PROJECT DESCRIPTION

The project is limited to three encroachments. Two encroachments are for water diversion and include one POD from a Class III stream that will provide water for irrigation and storage, and one POD from the main stem Eel River which will provide water for domestic use. Work for the water diversion will include installation, use, and

maintenance of the water diversion infrastructure. The third encroachment is to replace an undersized failing 12" diameter culvert with a minimum 18" diameter culvert. This project work includes removal of the failing culvert and approximately 15 cubic yards of material and installation of the new culvert, armoring, and native fill.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include: Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), steelhead trout (*O. mykiss*), amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

The adverse effects the project could have on the fish or wildlife resources identified above include:

Impacts to water quality:

increased water temperature;
reduced instream flow;
temporary increase in fine sediment transport;

Impacts to bed, channel, or bank and direct effects on fish, wildlife, and their habitat:

loss or decline of riparian habitat;
direct impacts on benthic organisms;

Impacts to natural flow and effects on habitat structure and process:

cumulative effect when other diversions on the same stream are considered;
diversion of flow from activity site;
direct and/or incidental take;
indirect impacts;
impediment of up- or down-stream migration;
water quality degradation; and
damage to aquatic habitat and function.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

The Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. The Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.

- 1.2 Providing Agreement to Persons at Project Site. The Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of the Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Adherence to Existing Authorizations. All water diversion facilities that the Permittee owns, operates, or controls shall be operated and maintained in accordance with current law and applicable water rights.
- 1.4 Change of Conditions and Need to Cease Operations. If conditions arise, or change, in such a manner as to be considered deleterious by CDFW to the stream or wildlife, operations shall cease until corrective measures approved by CDFW are taken. This includes new information becoming available that indicates that the bypass flows and diversion rates provided in this agreement are not providing adequate protection to keep aquatic life downstream in good condition or to avoid "take" or "incidental take" of federal or State listed species.
- 1.5 Notification of Conflicting Provisions. The Permittee shall notify CDFW if the Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact the Permittee to resolve any conflict.
- 1.6 Project Site Entry. The Permittee agrees to allow CDFW employees access to any property it owns and/or manages for the purpose of inspecting and/or monitoring the activities covered by this Agreement, provided CDFW: a) provides 24 hours advance notice; and b) allows the Permittee or representatives to participate in the inspection and/or monitoring. This condition does not apply to CDFW enforcement personnel.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, the Permittee shall implement each measure listed below.

- 2.1 Permitted Project Activities. Except where otherwise stipulated in this Agreement, all work shall be in accordance with the Permittee Notification received on February 12, 2016, including additional information submitted on June 15, 2016, together with all maps, BMP's, photographs, drawings, and other supporting documents submitted with the Notification.
- 2.2 Maximum Diversion Rate – Class III. The maximum instantaneous diversion rate from the water intake shall not exceed 25% of the total flow at any time.
- 2.3 Maximum Diversion Rate – Eel River. The maximum instantaneous diversion rate from the water intake shall not exceed 10 gallons per minute.

- 2.4 Bypass Flow. The Permittee shall pass sufficient flow at all times to keep all aquatic species including fish and other aquatic life in good condition below the point of diversion.
- 2.5 Measurement of Diverted Flow. The Permittee shall install a device acceptable to CDFW for measuring the quantity of water diverted to and from the spring and well. This measurement shall begin as soon as this Agreement is signed by the Permittee. The Permittee shall record the quantity of water pumped to and from the system on a weekly basis. Alternatively, the Permittee can record the frequency of pumping and the time to fill storage.
- 2.6 Intake Structure. No polluting materials (e.g., particle board, plastic sheeting, bentonite) shall be used to construct or screen, or cover the diversion intake structure.
- 2.7 Intake Screening. Screens shall be installed on intakes wherever water is diverted, and shall be in place whenever water is diverted. Openings in intakes shall not exceed 1/8 inch diameter (horizontal for slotted or square openings) or 3/32 inch for round openings. The Permittee shall regularly inspect, clean, and maintain screens in good condition.
- 2.8 Intake Shall Not Impede Aquatic Species Passage. The water diversion structures shall be designed, constructed, and maintained such that they do not constitute a barrier to upstream or downstream movement of aquatic life.
- 2.9 Water Conservation. The Permittee shall make best efforts to minimize water use, and to follow best practices for water conservation and management.
- 2.10 Water Storage Maintenance. Storage tanks shall have a float valve to shut off the diversion when tanks are full to prevent overflow from being diverted when not needed. The Permittee shall install any other measures necessary to prevent overflow of tanks resulting in more water being diverted than is used.
- 2.11 State Water Code. This Agreement does not constitute a valid water right. The Permittee shall comply with State Water Code sections 5100 and 1200 et seq. as appropriate for the water diversion and water storage. The application for this registration is found at:
http://www.swrcb.ca.gov/waterrights/publications_forms/forms/docs/sdu_registration.pdf.

Stream Crossings

- 2.12 Work Period. All work, not including water diversion, shall be confined to the period June 15 through October 15 of each year. Work within the active channel of a stream shall be restricted to periods of **no stream flow and dry weather**. Precipitation forecasts and potential increases in stream flow shall be considered

when planning construction activities. Construction activities shall cease and all necessary erosion control measures shall be implemented prior to the onset of precipitation.

2.13 Excavated Fill. Excavated fill material shall be placed in locations where it cannot deliver to a watercourse. To minimize the potential for material to enter the watercourse during the winter period, all excavated and relocated fill material shall be tractor contoured (to drain water) and tractor compacted to effectively incorporate and stabilize loose material into existing road and/or landing features.

2.14 Runoff from Steep Areas. The Permittee shall make preparations so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential or contained behind erosion control structures. Erosion control structures such as straw bales and/or siltation control fencing shall be placed and maintained until the threat of erosion ceases. Frequent water checks shall be placed on dirt roads, cat tracks, or other work trails to control erosion.

2.15 Culvert Installation.

2.15.1 Existing fill material in the crossing shall be excavated down vertically to the approximate original channel and outwards horizontally to the approximate crossing hinge points (transition between naturally occurring soil and remnant temporary crossing fill material) to remove any potential unstable debris and voids in the older fill prism.

2.15.2 Culvert shall be installed to grade, aligned with the natural stream channel, and extend lengthwise completely beyond the toe of fill. If culvert cannot be set to grade, it shall be oriented in the lower third of the fill face, and a downspout or energy dissipator (such as boulders, rip-rap, or rocks) shall be installed above or below the outfall as needed to effectively control stream bed, channel, or bank erosion (scouring, headcutting, or downcutting).

2.15.3 Culvert bed shall be composed of either compacted rock-free soil or gravel. Bedding beneath the culvert shall provide for even distribution of the load over the length of the pipe, and allow for natural settling and compaction to help the pipe settle into a straight profile. The crossing backfill materials shall be free of rocks, limbs, or other debris that could allow water to seep around the pipe, and shall be compacted.

2.15.4 Culvert inlet, outlet (including the outfall area), and fill faces shall be armored where stream flow, road runoff, or rainfall energy is likely to erode fill material and the outfall area.

2.15.5 Permanent culverts shall be sized to accommodate the estimated 100-year flood flow [i.e. ≥ 1.5 times the width of the active (bankfull) channel width or the 100-year flood size, whichever is greater], including debris, culvert embedding, and sediment loads.

2.16 Rock Armor Placement.

2.16.1 No heavy equipment shall enter the wetted stream channel.

2.16.2 No fill material, other than clean rock, shall be placed in the stream channel.

2.16.3 Rock shall be sized to withstand washout from high stream flows, and extend above the ordinary high water level.

2.16.4 Rock armoring shall not constrict the natural stream channel width and shall be keyed into a footing trench with a depth sufficient to prevent instability.

2.17 Stream Protection. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other deleterious material from project activities shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the stream. All project materials and debris shall be removed from the project site and properly disposed of off-site upon project completion.

2.18 Equipment Maintenance. Refueling of machinery or heavy equipment, or adding or draining oil, lubricants, coolants or hydraulic fluids shall not take place within stream bed, channel and bank. All such fluids and containers shall be disposed of properly off-site. Heavy equipment used or stored within stream bed, channel and bank shall use drip pans or other devices (e.g., absorbent blankets, sheet barriers or other materials) as needed to prevent soil and water contamination.

2.19 Hazardous Spills. Any material, which could be hazardous or toxic to aquatic life and enters a stream (i.e. a piece of equipment tipping-over in a stream and dumping oil, fuel or hydraulic fluid), the Permittee shall immediately notify the California Emergency Management Agency State Warning Center at 1-800-852-7550, and immediately initiate clean-up activities. CDFW shall be notified by the Permittee within 24 hours at 707-445-6493 and consulted regarding clean-up procedures.

3. **Reporting Measures**

3.1 Measurement of Diverted Flow. Copies of the **water diversion records (condition 2.5)** shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501 office **no later than December 31 of each year beginning in 2016.**

CONTACT INFORMATION

Written communication that the Permittee or CDFW submits to the other shall be delivered to the address below unless the Permittee or CDFW specifies otherwise.

To Permittee:

Mr. Steven Baassiri
60 Pepperwood Circle
Garberville, California 95542

To CDFW:

Department of Fish and Wildlife
Northern Region
619 Second Street
Eureka, California 95501
Attn: Lake and Streambed Alteration Program
Notification #1600-2016-0056-R1

LIABILITY

The Permittee shall be solely liable for any violation of the Agreement, whether committed by the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require the Permittee to proceed with the project. The decision to proceed with the project is the Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety this Agreement if it determines that the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide the Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide the Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to the Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against the Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 *et seq.* (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

The Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and the Permittee. To request an amendment, the Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective,

unless the transfer or assignment is requested by the Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, the Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), the Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, the Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

If the Permittee fails to submit a request to extend the Agreement prior to its expiration, the Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (FGC section 1605(f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after the Permittee signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.wildlife.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall **expire five years** from date of execution, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. The Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of the Permittee, the signatory hereby acknowledges that he or she is doing so on the Permittee's behalf and represents and warrants that he or she has the authority to legally bind the Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If the Permittee begins or completes a project different from the project the Agreement authorizes, the Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

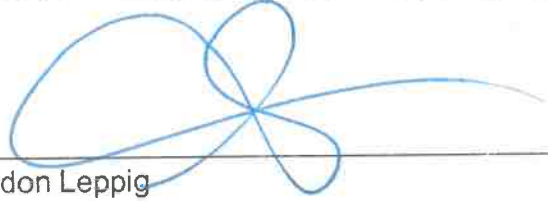
FOR Ms. Steven Baassiri



Steven Baassiri

06/27/2016
Date

FOR DEPARTMENT OF FISH AND WILDLIFE



Gordon Leppig
Senior Environmental Scientist Supervisor

7/13/16
Date



| 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 | GIOVANNI BAASSIRI | | |
| Business/Agency | | | |
| Mailing Address | 7583 BENBOW DRIVE | | |
| City, State, Zip | GARBERVILLE, CA, 95542 | | |
| Telephone | 412-334-8383 | Fax | |
| Email | | | |

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

| | | | |
|------------------|--|-----|--|
| Name | Chris Carrol @ Timberland Resource Consultants | | |
| Street Address | 165 South Fortuna Blvd | | |
| City, State, Zip | Fortuna, CA. 95540 | | |
| Telephone | 707-725-1897 | Fax | |
| Email | carroll@timberlandresource.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 | | BAASSIRI 1600 | | |
| 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) | |
| | | | | |



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 type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C) | SWRCB Number: _____ |
| E. | <input type="checkbox"/> Routine Maintenance (Attachment D) | |
| F. | <input checked="" 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 | 1 Stream Crossing | | \$561 |
| 2 | 1 Marijuana Remediation <1,000 sq. ft. | | \$3,000 |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| | | D. Base Fee (if applicable) | |
| | | E. TOTAL FEE* | \$3,561 |

* Cash, check, and Visa or MasterCard payments are accepted. When payment is made by Visa or MasterCard, the "Total Fee Enclosed" must include an additional credit card processing fee of 1.6%. 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)

200 THISTLE LANE BENBOW CA

See attached Location Map

Continued on additional page(s)

B. River, stream, or lake affected by the project. Class III watercourses

C. What water body is the river, stream, or lake tributary to? Fish Creek- South Fork 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 |
| Garberville, CA | 5S | 4E | 6 | NE |
| | | | | |

Continued on additional page(s)

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

L. Assessor's Parcel Number(s)

033-140-008

Continued on additional page(s)



| | | | |
|---|--|---|---|
| M. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes) | | | |
| Latitude/Longitude | Latitude: See Addendum 8M | | Longitude: |
| | <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 type="checkbox"/> |
| Water diversion with facility | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (specify): Decommissioning | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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.

See Addendum 10

Continued on additional page(s)

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

Excavator and dump truck

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 Addendum 10

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 Addendum 10 | 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) |
|--------------|-------------------------------|------------------------|
| | | |
| | | |
| | | |

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

Anadromous salmonids downstream

Continued on additional page(s)

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.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, WILDLIFE, AND PLANT RESOURCES

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

Soil Stabilization Measures attached. The Applicant shall adhere to CDFW's standard measures for stream crossings/ decommissioning, which consist of: Work within the active channel of a stream shall be restricted to periods of dry weather; Excavated fill material shall be placed in upland locations where it cannot deliver to a watercourse; and ensuring runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential or contained behind erosion control structures.

Continued on additional page(s)

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

Crossings shall be upgraded/ decommissioned per attached BMPs, which are taken from the California Salmonid Stream Habitat Restoration Manual & Handbook for Forest, Ranch and Rural Roads.

Continued on additional page(s)

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

The crossing upgrades/ decommissioning and building removal are expected to minimize baseline sedimentation levels entering the watershed from the property, and will avoid potential significant impacts associated with total crossing failure.

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. Water Quality Control Board Order No. 2015-0023 _____ | <input type="checkbox"/> Applied | <input type="checkbox"/> Issued |
| B. Commercial Medical Marijuana Land Use Ordinance _____ | <input type="checkbox"/> Applied | <input type="checkbox"/> Issued |
| C. _____ | <input type="checkbox"/> Applied | <input type="checkbox"/> 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.)

| | | |
|---|--|---|
| <input type="checkbox"/> Notice of Exemption | <input checked="" type="checkbox"/> Mitigated Negative Declaration | <input type="checkbox"/> NEPA document (type): _____ |
| <input type="checkbox"/> Initial Study | <input type="checkbox"/> Environmental Impact Report | |
| <input type="checkbox"/> Negative Declaration | <input type="checkbox"/> Notice of Determination (Enclose) | |
| <input type="checkbox"/> THP/ NTMP | <input type="checkbox"/> Mitigation, Monitoring, Reporting Plan | |
| | | |

B. State Clearinghouse Number (if applicable) No. 2015042074

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 Regional Water Quality Control Board North Coas

E. Contact Person Mathias St. John F. Telephone Number 707-570-3762

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).

See Addendum 10's discussion of California Regional Water Quality Control Board North Coast Region Order No. 2015-0023, Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and associated Activities or Operations with Similar Environmental Effects in the North Coast Region.

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*) Chris Carrol
 at (*insert telephone number*) 707-725-1897 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.

Chris Caroll

Signature of Applicant or Applicant's Authorized Representative

7-12-17

Date

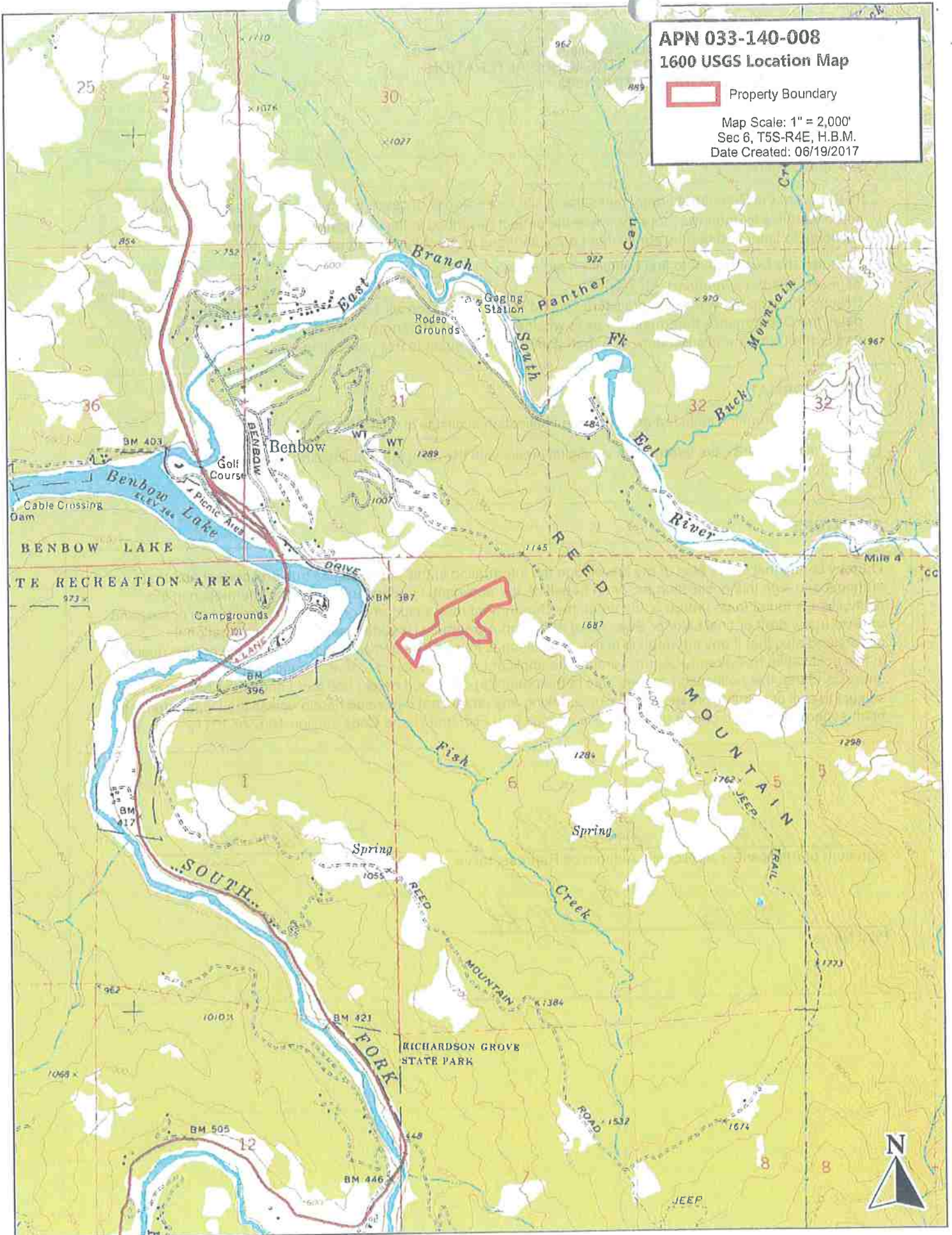
Chris Caroll

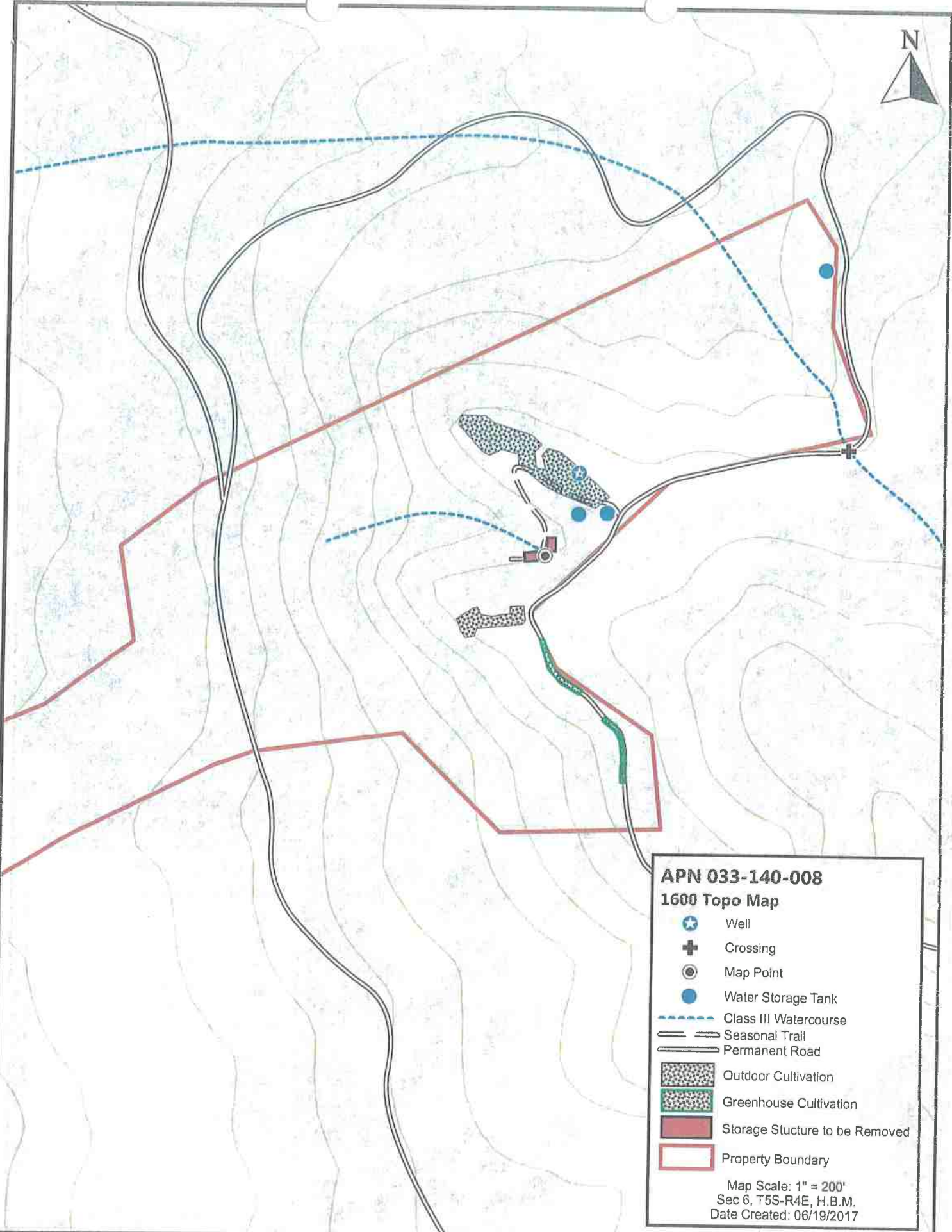
Print Name

APN 033-140-008
1600 USGS Location Map












 Property Boundary

Map Scale: 1" = 2,000'
Sec 6, T5S-R4E, H.B.M.
Date Created: 06/19/2017

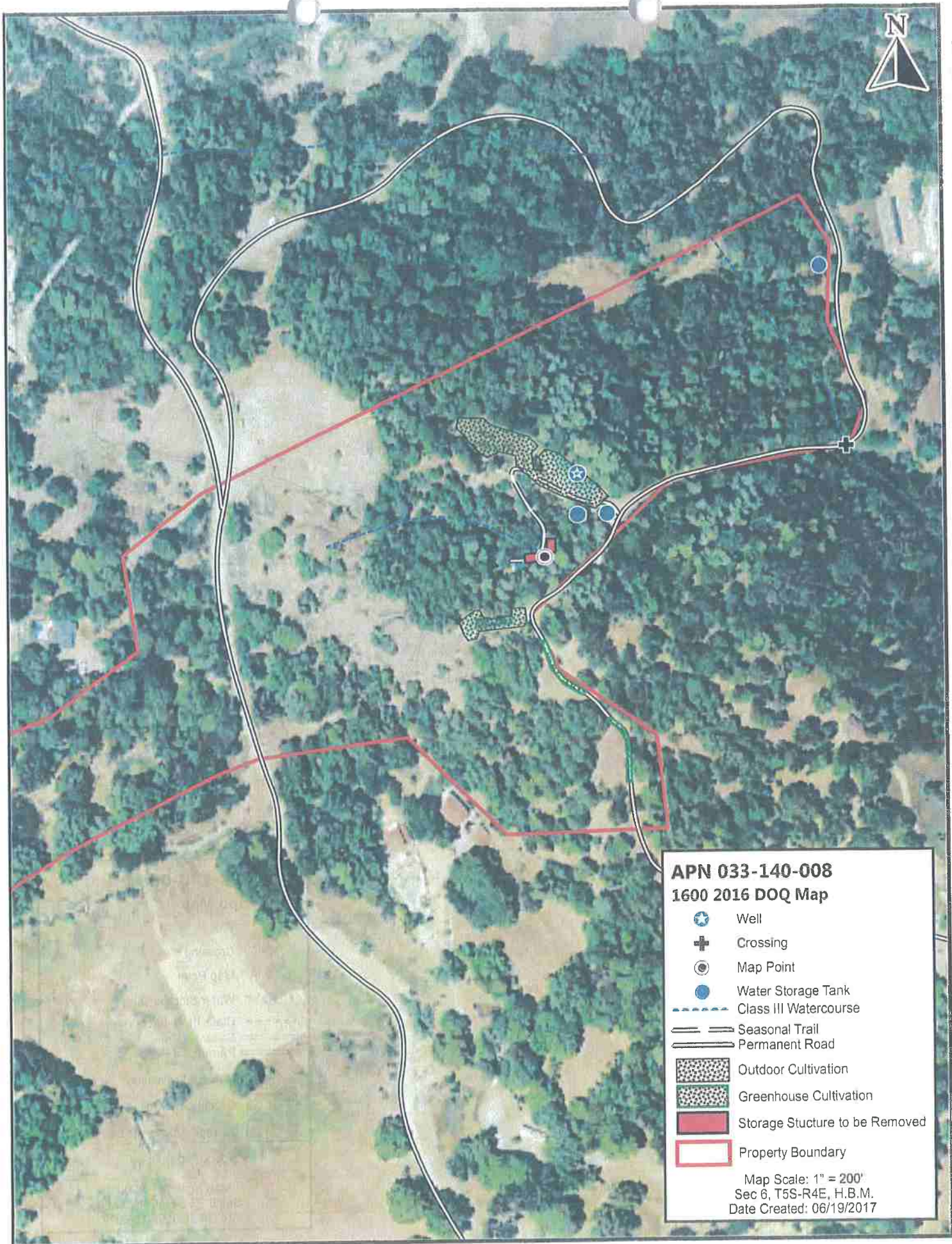


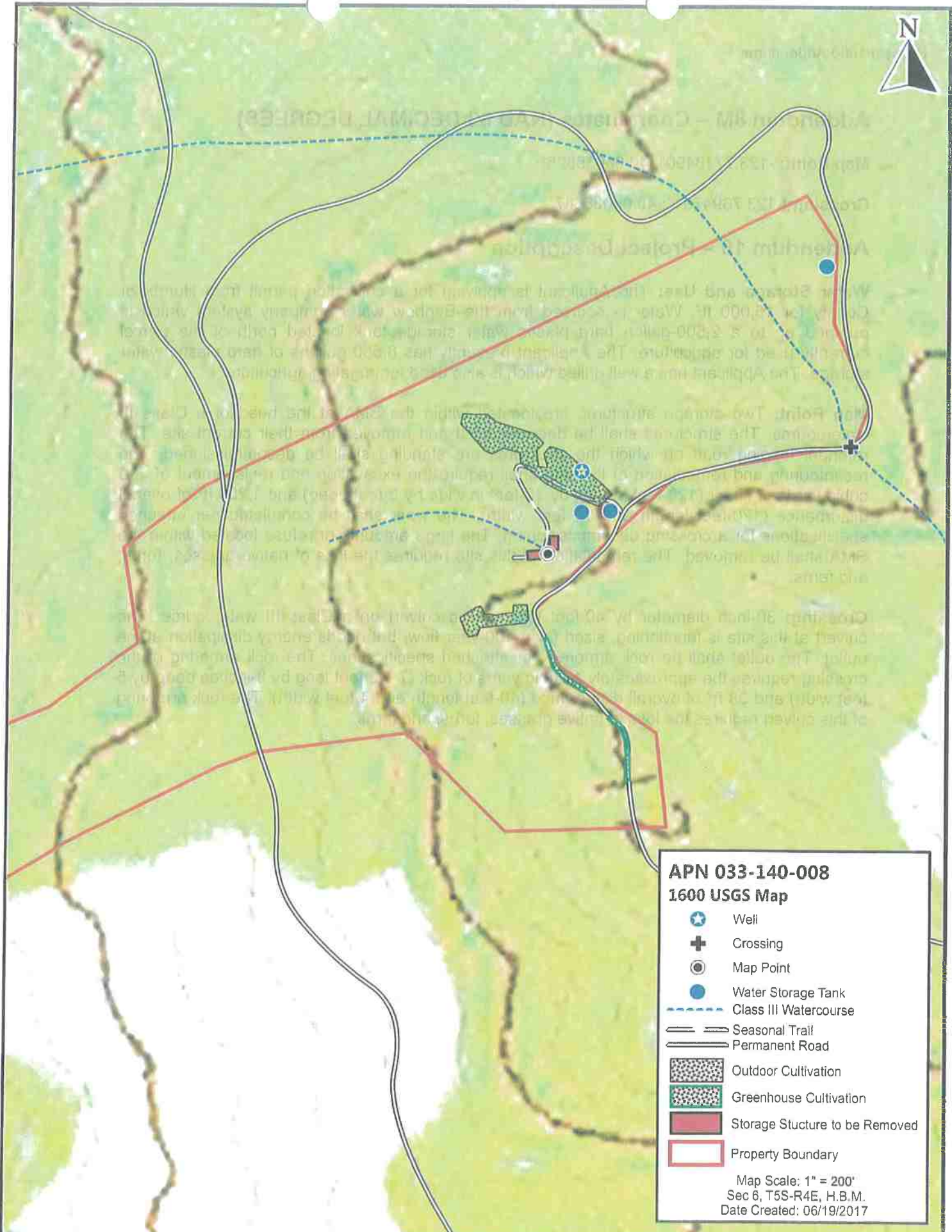


APN 033-140-008
1600 Topo Map

-  Well
-  Crossing
-  Map Point
-  Water Storage Tank
-  Class III Watercourse
-  Seasonal Trail
-  Permanent Road
-  Outdoor Cultivation
-  Greenhouse Cultivation
-  Storage Structure to be Removed
-  Property Boundary

Map Scale: 1" = 200"
Sec 6, T5S-R4E, H.B.M.
Date Created: 06/19/2017





APN 033-140-008
1600 USGS Map

-  Well
-  Crossing
-  Map Point
-  Water Storage Tank
-  Class III Watercourse
-  Seasonal Trail
-  Permanent Road
-  Outdoor Cultivation
-  Greenhouse Cultivation
-  Storage Structure to be Removed
-  Property Boundary

Map Scale: 1" = 200'
Sec 6, T5S-R4E, H.B.M.
Date Created: 06/19/2017

Addendum 8M – Coordinates (NAD 83 DECIMAL DEGREES)

Map Point: -123.7713490°; 40.06035825°

Crossing: -123.7694781°; 40.06088647°

Addendum 10 – Project Description

Water Storage and Use: The Applicant is applying for a cultivation permit from Humboldt County for 15,000 ft². Water is sourced from the Benbow water company system which is pumped up to a 2,500-gallon hard plastic water storage tank located north of the parcel currently used for agriculture. The Applicant presently has 6,550 gallons of hard plastic water storage. The Applicant has a well drilled which is also used for irrigating agriculture.

Map Point: Two storage structures are located within the SMA at the head of a Class III watercourse. The structures shall be deconstructed and removed from their current site. The remnant logging road on which the structures are standing shall be decommissioned. The recontouring and remediation of this site shall require the excavation and replacement of 110 cubic yards of fill for (120-feet in long by 10-feet in wide by 5-feet deep) and 1,200 ft² of overall disturbance (120-feet length and 10 feet width). The work shall be completed per attached specifications for a crossing decommissioning. The large amounts of refuse located within the SMA shall be removed. The remediation of this site requires the loss of native grasses, forbs, and ferns.

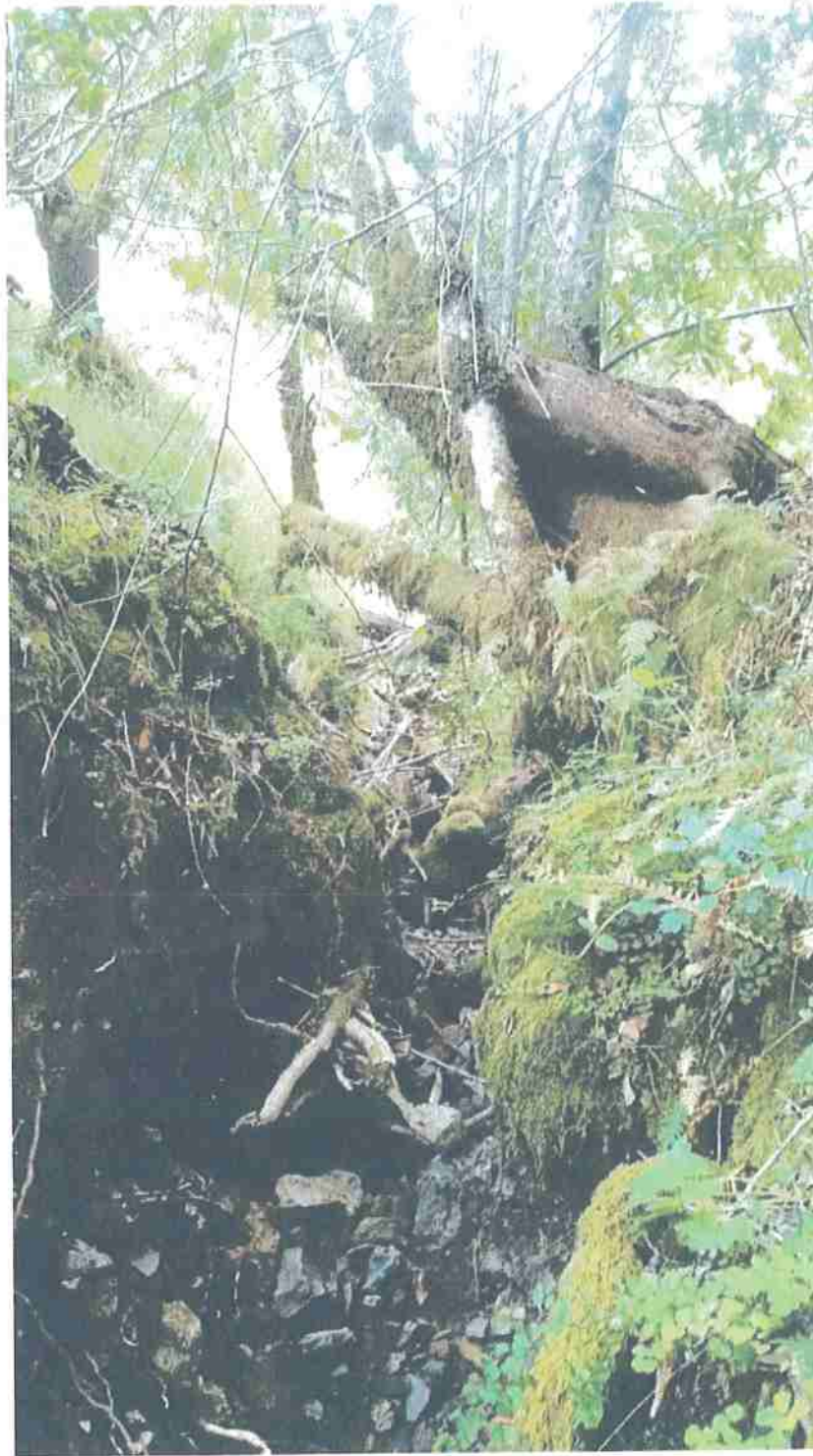
Crossing: 30-inch diameter by 40-foot long plastic culvert on a Class III watercourse. The culvert at this site is functioning, sized for a 100-year flow, but needs energy dissipation at the outlet. The outlet shall be rock armored per attached specifications. The rock armoring of the crossing requires the approximately 1 cubic yards of rock (7 1/2 feet long by 8-inches deep by 5 feet wide) and 38 ft² of overall disturbance (40-feet length and 4 feet width). The rock armoring of this culvert requires the loss of native grasses, forbs, and ferns.

Addendum 10 – Pictures



Picture 1: 2,500-gallon hard plastic water storage tank plumbed to Benbow's municipal water system. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 2: Looking upstream at the Crossing on a Class III watercourse. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 3: Crossing inlet. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 4: Crossing outlet. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



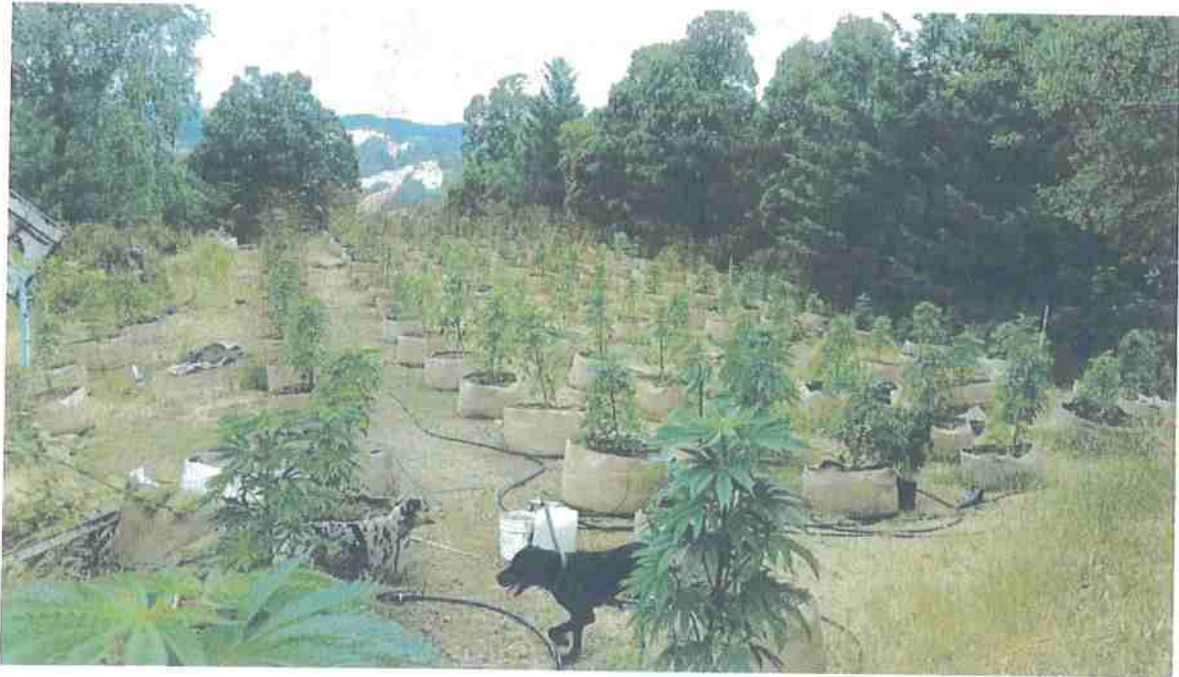
Picture 5: Looking downstream of Crossing on a Class III watercourse. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 6. Outdoor cultivation area. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 7. Outdoor cultivation area. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



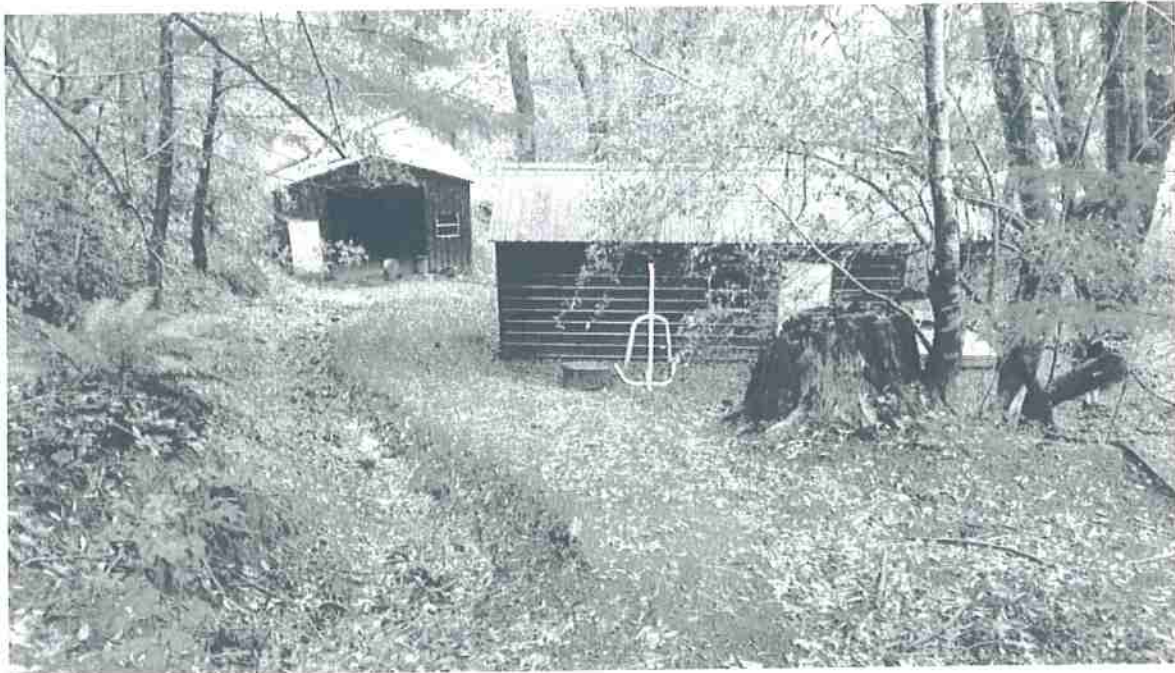
Picture 8: 2,500-gallon hard plastic water storage tank. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



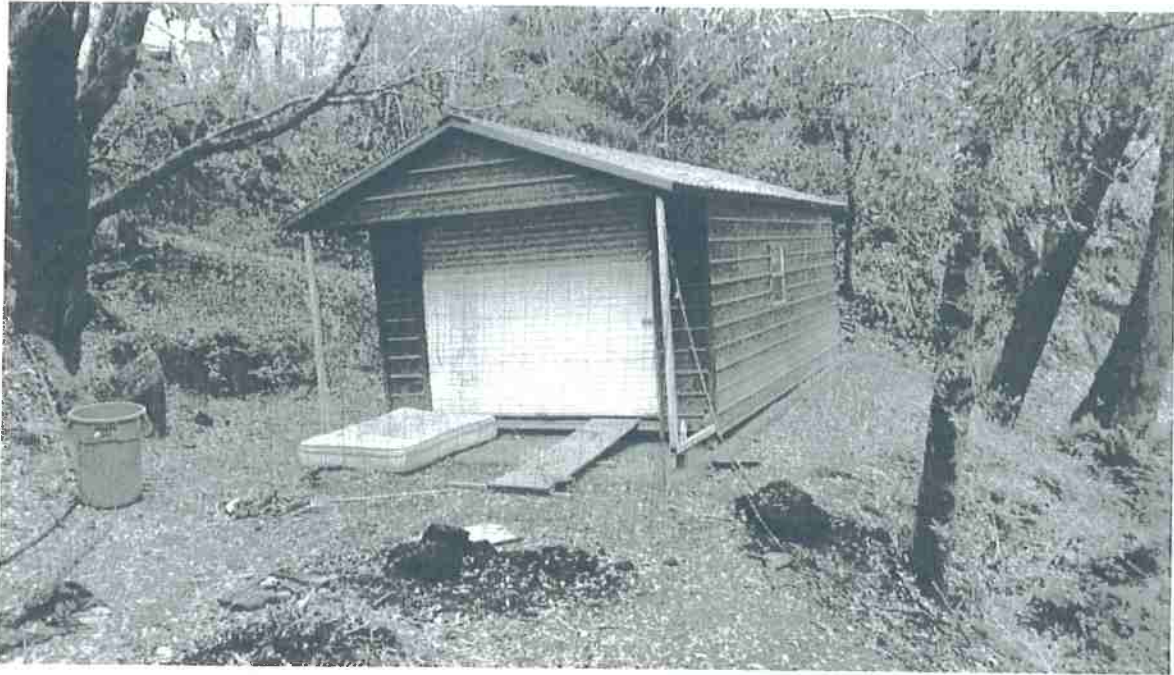
Picture 9: 550-gallon hard plastic water storage tank. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



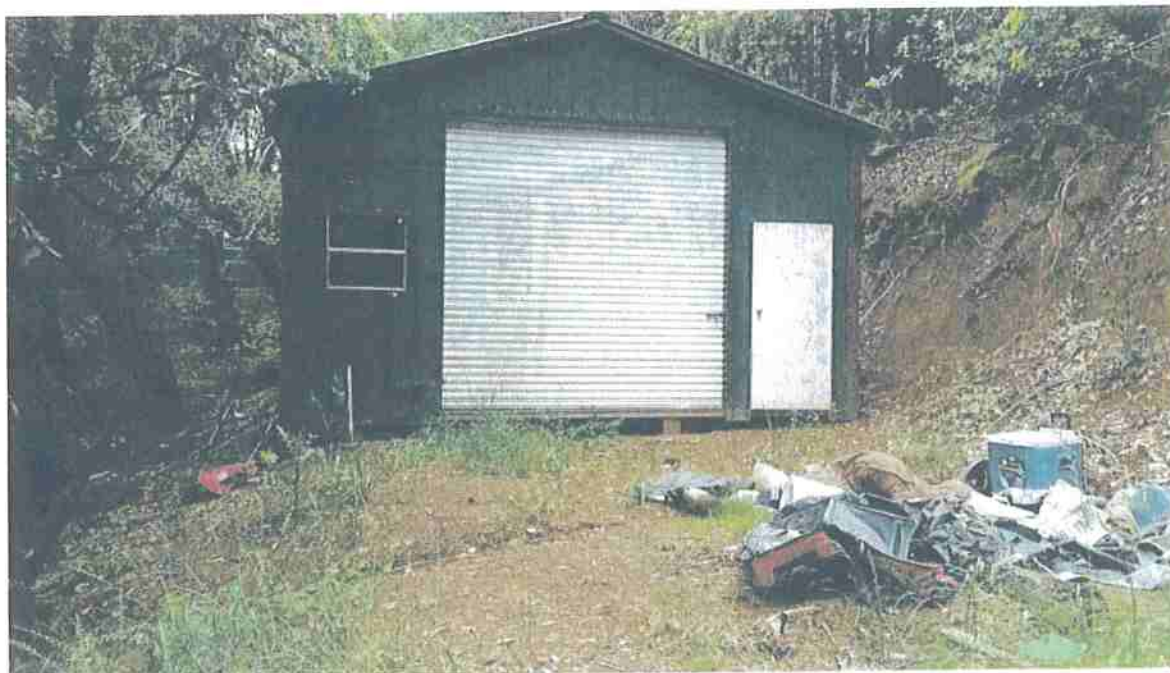
Picture 9: At the Map Point two storage structures located within the SMA shall be deconstructed and the remnant road crossing the watercourse shall be decommissioned. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 10: One of two the storage structures to be deconstructed within the SMA. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 11: One of two the storage structures to be deconstructed within the SMA. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 12: Head of a Class III watercourse located at the Map Point. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 13: The recontouring at head of the Class III watercourse aligned with the blue flagging. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 14: One of the storage structures has fill within the SMA this fill shall be pulled back on the flat and recontoured to the slope. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 15: Downstream of the Map Point the Class III watercourse ends at the rock pit. Photo date 7-5-2017.

Addendum 10 -- Pictures (Cont.)



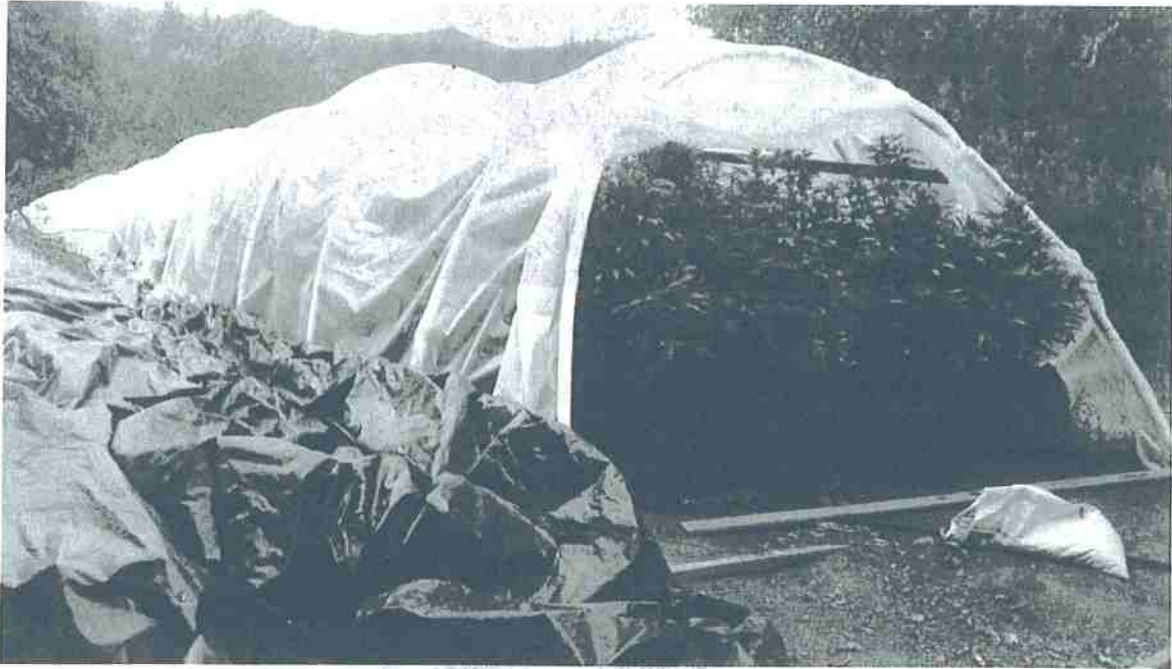
Picture 16: Outdoor cultivation area. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 17: Greenhouse cultivation 100-foot length by 12-foot width. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 18: Greenhouse cultivation 100-foot length by 12-foot width. Photo date 6-13-2017.

Addendum 10 – Pictures (Cont.)



Picture 19: Well located on outdoor cultivation area. Photo date 6-13-2017.

Addendum 11F – Hydrologic Study

This notification utilizes the Rationale Method to determine for 100-year flood flow utilizing methods recommended in "Designing Watercourse Crossings for Passage of 100-year Flood Flows, Wood, and Sediment". 2004 Peter Cafferata, Thomas Spittler, Michael Wopat, Greg Bundros, and Sam Flanagan. This report recommends that the rational method be limited to watersheds less than 100 acres. The 100-year Return-Period precipitation data is from:

http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca

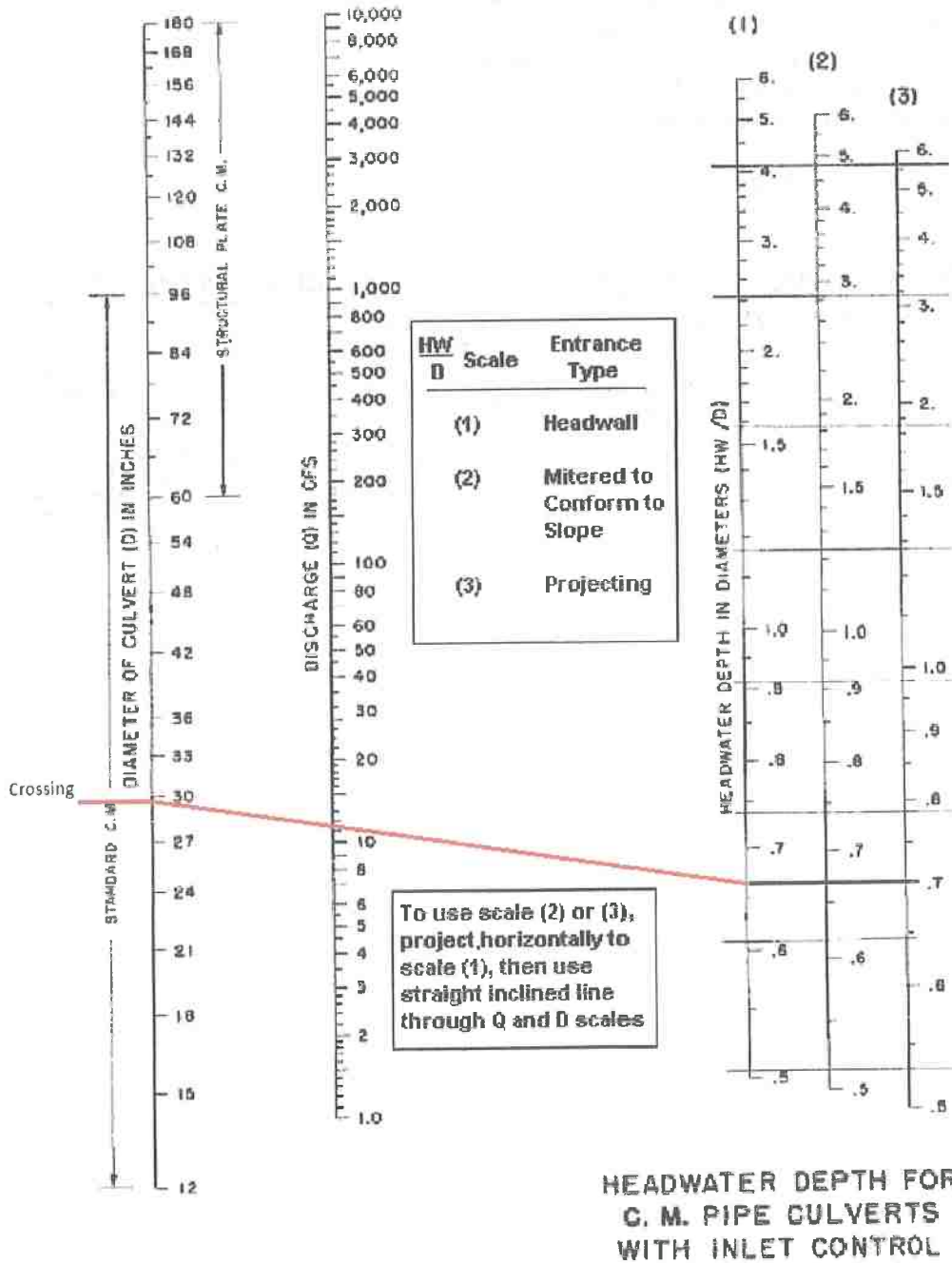
Rational Method for 100-year flood flow (A < 200 acres)

GIOVANNI BAASSIRI

| $T_c = 60((11.9 \times L^3)/H)^{0.385}$ | | | | $Q_{100} = CIA$ | | | | |
|---|----------|--|--------------------------------|--------------------------------|-------------------------|--|-------------------|---------------------------------|
| No. | Crossing | Channel length (to top of basin) (mi) L | Elevation difference (ft) H | Concentration time (min) Tc | Runoff coefficient C | 100-year Return-Period Precipitation (in/hr) I* | Area (acres) A | 100-yr flood flow (cfs) Q100 |
| 1 | 1 | | | | 0.35 | 3.672 | 8.7 | 11.2 |

Addendum 11F – Hydrologic Study (Cont.)

Normann and others (1985) culvert sizing nomograph



BUREAU OF PUBLIC ROADS JAN. 1963

This is the same culvert sizing nomograph (Figure 12) referenced in *Designing Watercourse Crossings for Passage of 100-year Flood Flows, Wood, and Sediment*. The nomograph is used by assuming inlet control and a headwater depth to pipe diameter ratio (HW/D) of 0.70.

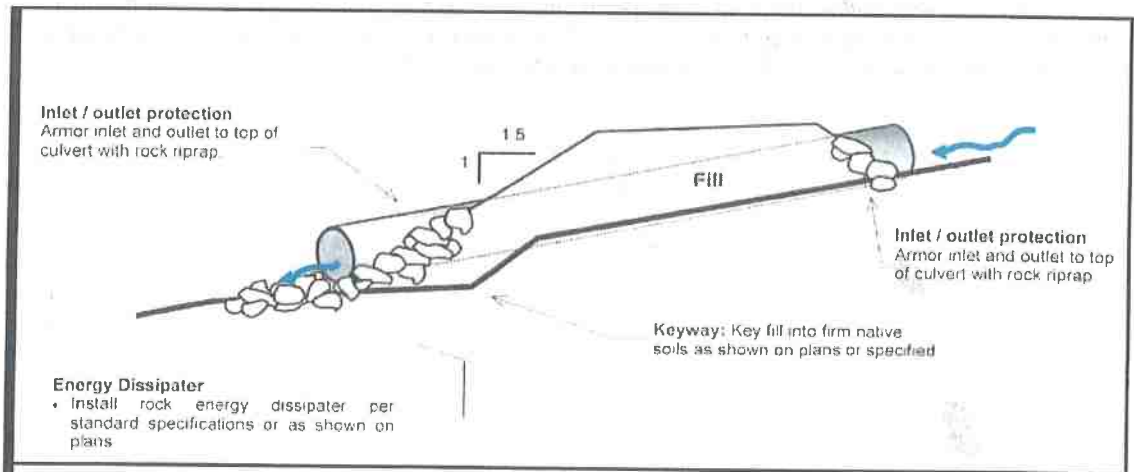
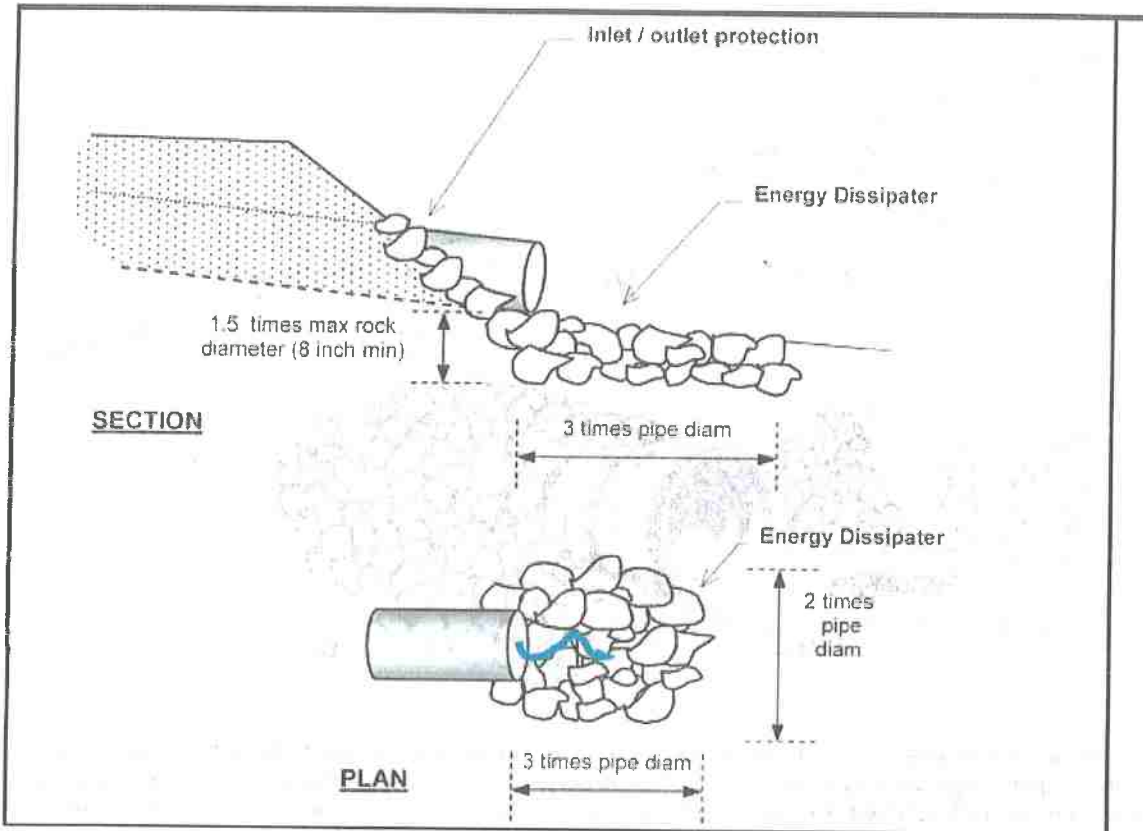
Addendum 12A – Erosion Control Measures

1. Timing for soil stabilization measures within the 100 feet of a watercourse or lake: For areas disturbed from May 1 through October 15, treatment shall be completed prior to the start of any rain that causes overland flow across or along the disturbed surface. For areas disturbed from October 16 through April 30, treatment shall be completed prior to any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or within 10 days, whichever is earlier.
2. Within 100 feet of a watercourse or lake, the traveled surface of logging roads shall be treated to prevent waterborne transport of sediment and concentration of runoff that results from operations. Treatment may consist of, but not limited to, rocking, outsloping, rolling dips, cross drains, waterbars, slope stabilization measures, or other practices appropriate to site-specific conditions.
3. The treatment for other disturbed areas within 100 feet of a watercourse or lake, including: (A) areas exceeding 100 contiguous square feet where operations have exposed bare soil, (B) road cut banks and fills, and (C) any other area of disturbed soil that threatens to discharge sediment into waters in amounts deleterious to the quality and beneficial uses of water, shall be grass seeded and mulched with straw. Grass seed shall be applied at a rate exceeding 100 pounds per acre. Straw mulch shall be applied in amounts sufficient to provide at least 2- 4-inch depth of straw with minimum 90% coverage. Slash may be substituted for straw mulch provided the depth, texture, and ground contact are equivalent to at least 2 – 4 inches of straw mulch. Any treated area that has been subject to reuse or has less than 90% surface cover shall be treated again prior to the end of operations.
4. Within 100 feet of a watercourse or lake, where the undisturbed natural ground cover cannot effectively protect beneficial uses of water from sediment introduction, the ground shall be treated with slope stabilization measures described in #3 above per timing described in #1 above.
5. Sidecast or fill material extending more than 20 feet in slope distance from the outside edge of a roadbed, which has access to a watercourse or lake, shall be treated with slope stabilization measures described in #3 above. Timing shall occur per #1 above unless outside 100 feet of a watercourse or lake, in which completion date is October 15.
6. All roads shall have drainage and/or drainage collection and storage facilities installed as soon as practical following operations and prior to either (1) the start of any rain which causes overland flow across or along the disturbed surface within 100 feet of a watercourse or lake protection, or (2) any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning, or a flash flood watch.

Culvert Installation Specifications

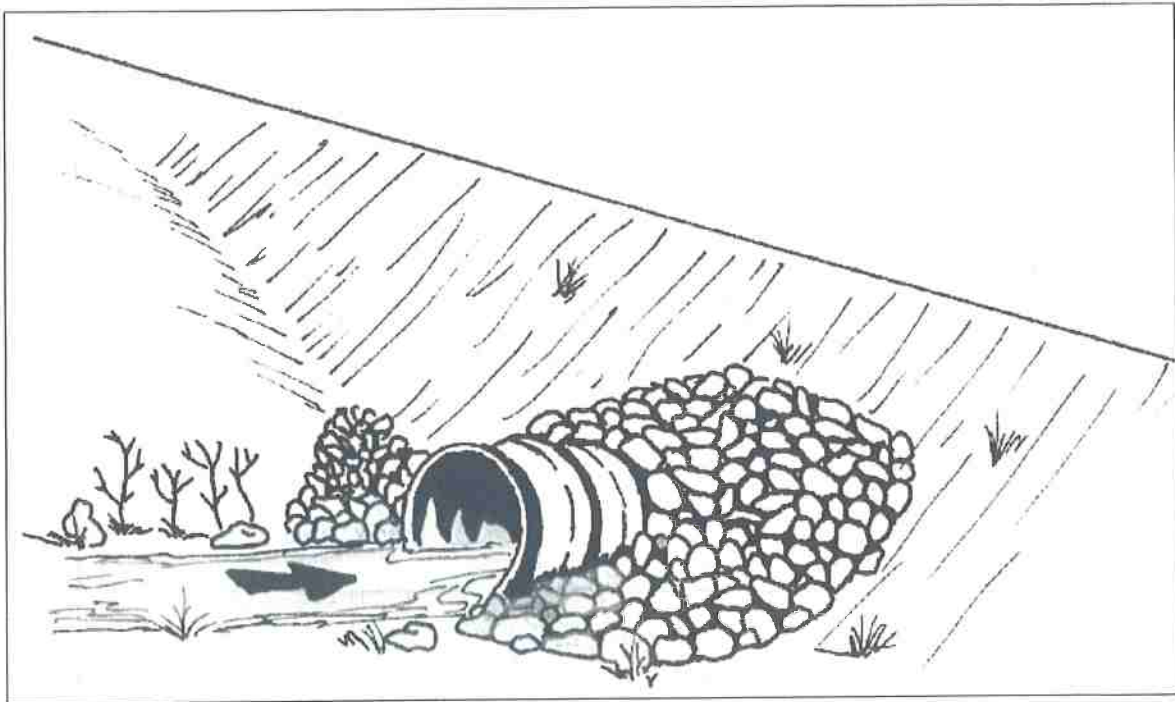
- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
 - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
 - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
 - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
 - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
 - Compact the base and sidewall material before placing the pipe in its bed.
 - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
 - Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
 - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
 - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
 - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
 - Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.
- Stabilize the site pursuant to Addendum 12A.

Culvert Installation Specifications

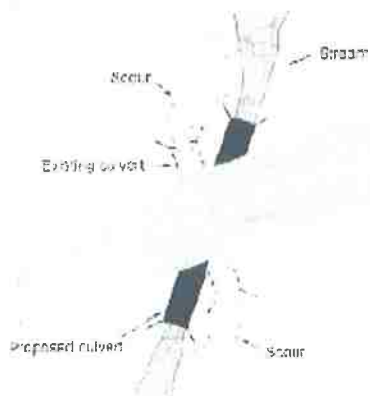


Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Culvert Installation Specifications



Rock armor used for inlet and outlet protection (i.e., not as energy dissipation) does not have to be sized to protect against high velocity scour. If the culvert is properly sized and its length is adequate, it should be able to transmit flood flows without scouring the inlet or eroding the outlet around the culvert. Armor shown here is designed to protect the culvert outlet and basal fill from splash erosion and from occasional submergence and currents within standing water (at the inlet) when the culvert plugs. Importantly, inlet and outlet armor also serves to trap sediment that has been eroded or slides down the new constructed fill face in its first several years, until the slope becomes well vegetated.



HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

FIGURE 97. Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).

Culvert Installation Specifications

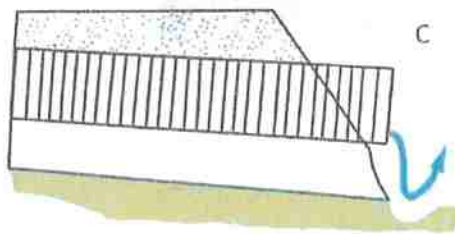
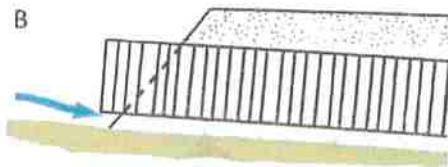
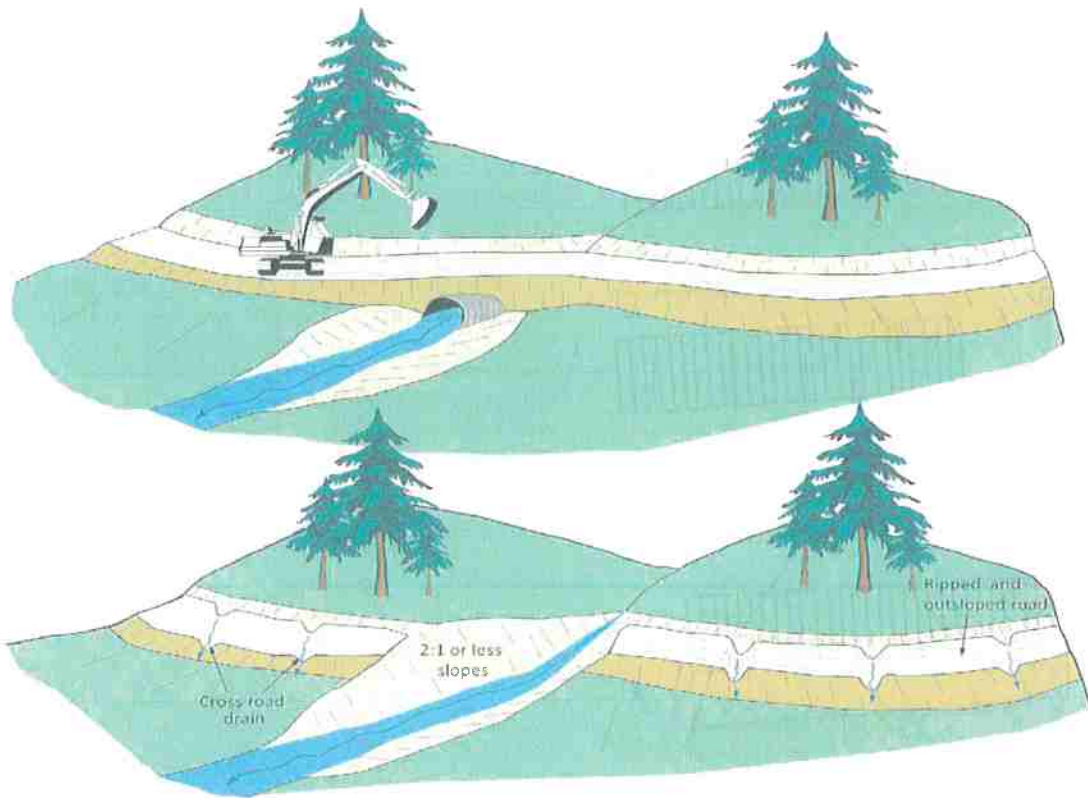


FIGURE 155. Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently ($\sim 25\%$ embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).

Permanent Crossing Decommissioning Specifications



Permanent Crossing Decommissioning Specifications (Cont.)



On roads that are to be closed (decommissioned), all stream crossing culverts and fills should be removed. Stream crossing excavations are best performed using an excavator. The original channel should be excavated and exhumed down to the former streambed, with a channel width equal or greater than the natural channel above and below the crossing. Sideslopes should be laid back to a stable angle, typically a 2:1 (50%) gradient, or less. Spoils can be endhailed off-site or stored on the road bench adjacent the crossing, provided it is placed and stabilized where it will not erode or fail and deliver to a watercourse.

Permanent Crossing Decommissioning Specifications (Cont.)

- Excavating and removing all fill materials placed in the stream channel when the crossing was originally built.
- Fill material should be excavated to recreate the original channel grade (slope) and orientation.
- The excavated channel bed should be as wide, or slightly wider than, the original watercourse channel.
 - This can be better determined by observing the channel width of the watercourse up slope of crossing to be removed at a point in which the crossing or any other disturbance has not affected the natural channel slope and width.
- If the channel sideslopes were disturbed, they should be graded (excavated) back to a stable angle (generally less than 50% (2:1)) to prevent slumping and soil movement.
- The bare soils should then be mulched, seeded, and planted to minimize erosion until vegetation can protect the surface.

The approaching, hydrologically connected road segments should be cross-road drained to prevent road runoff from discharging across the freshly excavated channel sideslopes.



Applicant Name: GIOVANNI BAASSIRI

Project Name: BAASSIRI 1600

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: Garberville 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: 1,200 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 |
|---------------------------|--------------------------------|--------------------|
| Timberland Resource Cons. | Chris Carroll | 707-725-1897 |

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: Benbow Water Company

Water hauling.
 Name of water hauler: _____

Other.
 Specify: _____

Continued on additional page(s)