



| 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 | Vincent Patterson | | | |
| Business/Agency | Organic Humboldt Inc. | | | |
| Mailing Address | 83 Wildflower Lane | | | |
| City, State, Zip | Benbow, CA 95542 | | | |
| Telephone | 707-223-2933 | Fax | | |
| Email | | | | |

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

| | | | | |
|------------------|--|-----|--|--|
| Name | G. Austin Corbett (OurEvolution Engineering) | | | |
| Street Address | 1821 Buttermilk Lane | | | |
| City, State, Zip | Arcata, CA 95521 | | | |
| Telephone | 707-845-4778 | Fax | | |
| Email | gaustincorbett@gmail.com | | | |

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

| | | | | |
|------------------|-------------------|-----|--|--|
| Name | Vincent Patterson | | | |
| Street Address | PO Box 1313 | | | |
| City, State, Zip | Redway, CA 95560 | | | |
| Telephone | 707-223-2933 | Fax | | |
| Email | | | | |

4. PROJECT NAME AND AGREEMENT TERM

| | | | | |
|-----------------------------|---------------|--|----------------------|------------------------|
| A. Project Name | | Wood Ranch Agreement | | |
| 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) | |
| 2018 | 2023 | June 1 | October 15th | |
| | | | | 450 |



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: _____ |
| 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 | Please See attached | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| Calculator also available at: https://www.wildlife.ca.gov/Conservation/LSA/Forms | | D. Base Fee (if applicable) | |
| | | E. TOTAL FEE* | \$ 0.00 |

* 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)

Heading south from Eureka on Highway 101, take the Redwood Drive exit (642), and turn west to take Wood Ranch road. Continue up Wood ranch Road for 3.9 miles to APN 214-233-002, arriving at 1520 Wood Ranch road.

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? Hooker Creek

D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts? Yes No Unknown

E. County Humboldt

| F. USGS 7.5 Minute Quad Map Name | G. Township | H. Range | I. Section | J. ¼ Section |
|----------------------------------|-------------|----------|------------|--------------|
| Miranda | T 3 S | R 3 E | unnamed | section |
| | | | | |

Continued on additional page(s)

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

L. Assessor's Parcel Number(s)

214-233-002

Continued on additional page(s)



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.

Please see attached narrative.

Continued on additional page(s)

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

Small excavator or Backhoe, Skid-Steer or Bobcat, Pickup truck, 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.

Please See Attached.

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, shrubs. | Linear feet: <u>390</u> Total area: <u>1830</u> | Linear feet: _____ Total area: _____ |
| | Linear feet: _____ Total area: _____ | Linear feet: _____ Total area: _____ |

| Tree Species | Number of Trees to be Removed | Trunk Diameter (range) |
|--------------|-------------------------------|------------------------|
| N/A | N/A | N/A |
| | | |
| | | |

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

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.

Please See Attached.

Continued on additional page(s)

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

Please See Attached.

Continued on additional page(s)

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

Please See Attached.

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 CMMLUO Applied Issued
- B. ISDU (Please see attached) Applied Issued
- C. NCRWQCB Waiver of Waste Discharge 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
- Initial Study
- Negative Declaration
- THP/ NTMP

- Mitigated Negative Declaration
- Environmental Impact Report
- Notice of Determination (Enclose)
- Mitigation, Monitoring, Reporting Plan

NEPA document (type):

B. State Clearinghouse Number (if applicable) N/A

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 Humboldt County Dept. of Planning

E. Contact Person Rodney Yandell F. Telephone Number 707-268-3732

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).

Please See Attached.

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)

No requirement for CEQA or lead agency has been determined. However, if CEQA is required, Humboldt County Planning Dept. will act as the lead agency.

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*) Austin Corbett
 at (*insert telephone number*) 707-845-4778 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 _____

 Print Name



Applicant Name: Vincent Patterson

Project Name: Wood Ranch Agreement

ATTACHMENT C

Water Diversion/Extraction/Impoundment

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 | POD #3 - Domestic | 3 GPM | 0 | .135 |
| Jan 1 | Dec 31 | POD #1 - Irrigation | 5 GPM | .1 | .71 |
| Jan 1 | Dec 31 | POD #2 - Irrigation | 3 GPM | .1 | .71 |
| | | | | | |
| | | | | | |

- 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).

POD #1 - 5 gpm
 POD #2 - 3 gpm
 POD #3 - 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.*

Applicant will apply for an appropriative right specific to commercial cannabis irrigation when it becomes available to facilitate diversion to storage to meet the forbearance period set by SWRCB

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:

unknown

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:



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): _____

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: _____

B. Date of dam removal: _____

C. Amount of time it will take to construct the dam: _____

D. Amount of time it will take to remove the dam: _____

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

N/A



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 |
|--------------------------|--------------------------------|--------------------|
| OurEvolution Engineering | Andrew Sorter, P.E. | 360-791-3259 |

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)

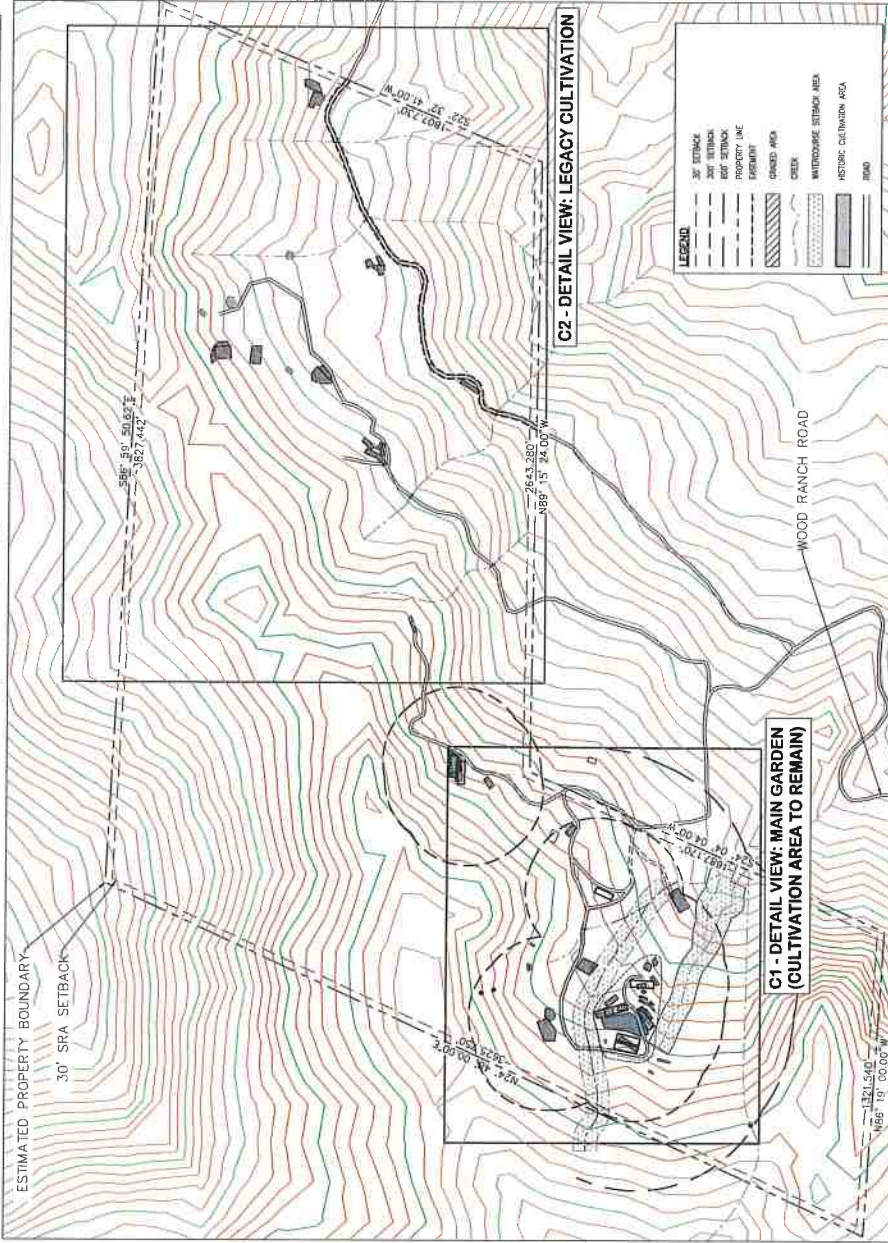
VICINITY MAP (N.I.S.)



- SHEET INDEX:**
- CO SITE PLAN WITH SETBACKS
 - C1 DETAIL VIEW MAIN GARDEN (PROPOSED CULTIVATION AREA)
 - C2 DETAIL VIEW LEGACY CULTIVATION AREAS (TO BE DECOMMISSIONED)

ADDRESS: 1520 WOOD RANCH ROAD
 REDWAY, CA 95560
 APN: 214-233-002
 OWNER: VINCENT PATTERSON
 63 WINDFLOWER LANE
 BENDON, CA 95542
 PHONE: 707-223-2933
 SETBACK: 30' PERMETER
 ZONING: RPZ
 LOT SIZE: 4189 SQUARE FEET

LSAA SITE PLAN



DIRECTIONS:

- EXIT US-HWY 101 S (642) TO REDWOOD DR.
- CONTINUE ON REDWOOD DRIVE FOR ±0.3 MILES.
- TURN RIGHT TOWARD WOOD RANCH ROAD.
- CONTINUE FOR ±4 MILES DRIVEWAY IS ON THE LEFT.

PROJECT DESCRIPTION:

THE APPLICANT IS PROPOSING MAINTENANCE, REPLACEMENT OR REMOVAL OF 9 STREAM CROSSINGS, 4 PONDS, AND 3 POINTS OF DIVERSION RELATED TO AN APPLICATION TO HUMBOLDT COUNTY PLANNING DEPARTMENT FOR A CONDITIONAL USE PERMIT FOR LESS THAN 43,560 SQ FT OF EXISTING OUTDOOR CANNABIS CULTIVATION AND CONDITIONAL USE PERMIT FOR LESS THAN 22,000 SQ FT OF EXISTING MIXED LIGHT CANNABIS CULTIVATION.

NOTES:

1. PROPERTY BOUNDARIES ARE APPROXIMATE BASED ON ASSESSORS' MAP AND HUMBOLDT WEB GIS AND HAVE NOT BEEN SURVEYED NOR VERIFIED BY OUREVOLUTION.
2. WRITTEN DIMENSIONS SUPERCEDE SCALED DIMENSIONS.
3. APPLICANT HAS FILED INITIAL STATEMENTS OF WATER USE AND DIVERSION FOR THE POINTS OF DIVERSION AND WILL APPLY FOR APPROPRIATE RIGHTS FOR STORAGE OF CANNABIS IRRIGATION WATER WHEN IT BECOMES AVAILABLE.
4. APPLICANT HAS ENROLLED IN THE NORTH COAST REGIONAL WATER BOARD WASTE DISCHARGE ORDER.

| | | |
|---|---|--|
| ORGANIC HUMBOLDT INC. 1520 WOOD RANCH ROAD REDWAY, CA APN: 214-233-002 LSAA SITE PLAN | NO. _____ HISTORY / REVISION BY / DATE _____ DATE _____ | DRAWN: GAC CHECK: ACS APPROVED: _____ DATE: 12/27/17 JOB NO.: 17-3141 SHEET: CO |
|---|---|--|

OUREVOLUTION
 ENERGY & ENGINEERING
 1821 BUTTERMILK LANE
 AROATA, CA 95621
 707.693.4210
 WWW.OUREVOLUTION.COM



Wood Ranch Agreement

Additional pages

TO: California Department of Fish and Wildlife, Region 1

FROM: Andy Sorter, P.E.
Austin Corbett, Staff Engineer (EIT), OurEvolution Energy & Engineering (OE)

RE: **APN 214-233-002 LSAA Vincent Patterson additional pages**

Date: December 12, 2017

6. Fees

Fees for projects include 2017 price quotes for culvert piping purchased from C & K Johnson Industries, Arcata CA. The applicant has access to heavy equipment and labor, and will provide heavy machinery and labor. Costs for Stream crossings include price of culvert(s), coupler(s), and applicant subsidized labor and heavy equipment costs. See Fee Table, below.

| Fee Table for Wood Ranch Agreement | | |
|---|----------------------|--------------------|
| Project | Project Costs | Project Fee |
| SC #1 | \$995.00 | \$577.25 |
| SC #2 | \$1,760.00 | \$577.25 |
| SC #3 | \$2,015.00 | \$577.25 |
| SC #4 | \$1,760.00 | \$577.25 |
| SC #5 | \$515.00 | \$577.25 |
| SC #6 | \$995.00 | \$577.25 |
| SC #7 | \$150.00 | \$577.25 |
| SC #8 | \$515.00 | \$577.25 |
| SC #9 | \$1,000.00 | \$577.25 |
| | | |
| Pond #1 | \$3,130.00 | \$577.25 |
| Pond #2 | \$1,000.00 | \$577.25 |
| Pond #3 | \$1,000.00 | \$577.25 |
| Pond #4 | \$1,000.00 | \$577.25 |
| | | |
| POD #1 | \$300.00 | \$577.25 |
| POD #2 | \$300.00 | \$577.25 |
| POD #3 | \$300.00 | \$577.25 |
| | | |
| Total Project Fees due to CDFW: | | |
| | | \$9,236.00 |

APN:212-233-002
Vincent Patterson

10. Project Description

This LSAA is being submitted for 9 existing stream crossings, 3 existing surface water diversions, and 4 existing ponds.

Stream Crossing #1



Photo 1. Stream Crossing #1, view of 24-inch diameter culvert outlet. Flow plunges approximately 2 feet before re-entering natural channel. Minor erosion of outboard fill slope noted.



Photo 2. Stream Crossing #1, downstream view of 24-inch diameter culvert inlet and heavily wooded channel. Culvert was not plugged or impeded by woody debris at time of site visit.

Summary of Stream Crossing #1:

A Class III watercourse is conveyed through a 24-inch diameter metal culvert. The culvert is sized to handle the 100-year streamflow and associated debris, and appears to be well functioning. Situated in the correct natural orientation of the channel, the culvert is placed short and high in the fill, resulting in the watercourse plunging at the outlet approximately 2 feet before re-entering the stream channel. Minor erosion of the outboard fill slope (OBF) was noted. The culvert exhibits an approximate 6" rustline, and undermining was noted at the culvert outlet, resulting in 1-2 feet of scour beneath the pipe. The culvert was unimpeded at the time of the site visit, but upland debris may warrant the installation and yearly maintenance of single trash rack.

Corrective action:

Replace existing culvert with a 24-inch diameter, 40 foot long, steel culvert, sized for 100-year stream flows and associated debris, installed as close as feasible to the natural channel grade, in the correct orientation of the channel and at the base of fill.

Install a single post trash rack above the inlet of the culvert, and maintain annually to ensure that the culvert does not become plugged.

Currently, there is no drainage structure in place to prevent stream diversion should the culvert become plugged. A critical dip will be installed on the right hinge line of the road to prevent stream diversion in the event of culvert failure.

All disturbed areas capable of delivering sediment will be seeded with barley or wheat based erosion control seed, and mulched with weed free straw. Application rates will be no less than 50 lbs / acre seed, and 4,000 lbs/acre straw. Spoils generated during construction will be stored in a stable location, and adequate BMPs (Best Management Practices) including tarping, mulching, and a straw wattle perimeter will be implemented to mitigate sediment delivery.

Stream Crossing #2

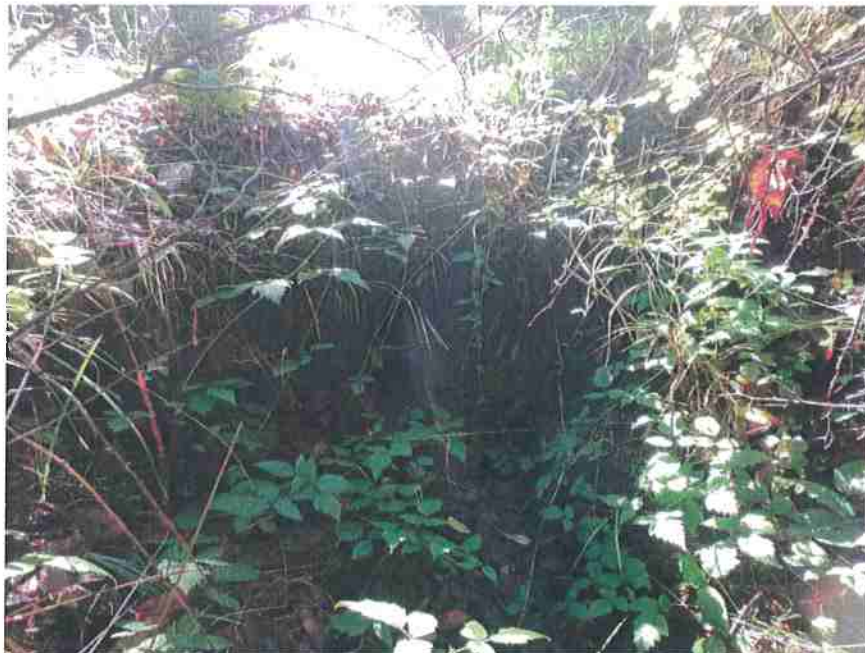


Photo 3. Stream Crossing #2, view of 24-inch diameter culvert inlet. Upstream of the culvert inlet, a fair amount of woody debris was observed, however the inlet was unencumbered at time of site visit.



Photo 4. Stream Crossing #2, view of culvert outlet placed short and high in the fill. Culvert is not properly aligned with the natural grade of the stream channel, and outlets water onto rock and fill material.

Summary of Stream Crossing #2:

A Class III watercourse is conveyed through a 24-inch diameter metal culvert. The Culvert is not properly sized to handle the 100-year streamflow and associated debris, is placed short and high in the fill. This has resulted in the outflow of the watercourse plunging at the outlet and eroding the fill slope below the culvert outlet. Light to moderate erosion of the OBF was observed above the culvert outlet, flanking the outlet on both sides and continuing upward to the road bench. The culvert was unplugged and unimpeded at the time of the site visit, but upland debris warrant the installation and yearly maintenance of single trash rack. The crossing outlet appears to have been installed in an altered position from the original channel. The current (and apparently well established) channel has incised to a similar position, and appears stable. The two channels part around a central pad of native material and confluence together several hundred feet downslope.

Corrective action:

Install a single post trash rack above the inlet of the culvert, and maintain annually to ensure that the culvert does not become plugged.

Replace existing culvert with a 30-inch diameter by 35-foot long steel culvert, sized for 100-year stream flows and associated debris, installed at the natural channel grade, in the correct orientation of the channel and at the base of fill. It does not appear likely that replacing the watercourse to the original channel will be of any significant benefit to wildlife habitat.

Currently, there is no drainage structure in place to prevent stream erosion in the event that the culvert becomes plugged. A critical dip will be installed on the right hinge line of the road to prevent stream diversion in the event of culvert failure.

All disturbed areas capable of delivering sediment will be seeded with barley or wheat based erosion control seed, and mulched with weed free straw. Application rates will be no less than 50 lbs / acre seed, and 4,000 lbs/acre straw. Spoils generated during construction will be stored in a stable location, and adequate BMPs (Best Management Practices) including tarping, mulching, and a straw wattle perimeter will be implemented to mitigate sediment delivery.

Stream Crossing #3



Photo 5. Stream Crossing #3, view of 24-inch diameter culvert inlet.



Photo 6. Stream Crossing #3, view of culvert outlet placed high in the fill with 3-4 feet of barrel projection. Culvert is set nearly to the natural grade of the stream channel, and outlets water onto rock armor before plunging approximately 4 foot below to re-enter channel.



Photo 7. Stream Crossing #3, upstream view of culvert outlet placed short and high in the fill. Significant erosion was not noted at the outlet.

Summary of Stream Crossing #3:

A Class II watercourse is conveyed through a 24-inch diameter metal culvert. The culvert is not properly sized to handle the 100-year streamflow and associated debris, is placed high in the fill with 3-4 foot barrel projection at the outlet. This has resulted in the outflow of the watercourse plunging at the outlet approximately 4 feet before re-entering the stream channel and falling onto rock armor. Significant erosion of the OBF was not observed, as the culvert outlet is armored with 6" plus angular rock.

The road naturally dips in both directions at this crossing, minimizing risk of stream diversion should the culvert become plugged.

Corrective action:

Replace existing culvert with a 30-inch diameter, 45 foot long, steel culvert, sized for 100-year stream flows and associated debris, installed as close as feasible to the natural channel grade, in the correct orientation of the channel and at the base of fill.

All disturbed areas capable of delivering sediment will be seeded with barley or wheat based erosion control seed, and mulched with weed free straw. Application rates will be no less than 50 lbs / acre seed, and 4,000 lbs/acre straw. Spoils generated during construction will be stored in a stable location, and adequate BMPs (Best Management Practices) including tarping, mulching, and a straw wattle perimeter will be implemented to mitigate sediment delivery.

Stream Crossing #4



Photo 8. Stream Crossing #4, upstream view of channel of Class II watercourse leading to culvert inlet.



Photo 9. Stream Crossing #4, view of Stream channel entering culvert inlet. Culvert receives sediment contribution from nearby quarry which drains to this crossing during rainfall events.



Photo 10. Stream Crossing #4, view of watercourse exiting culvert outlet. Culvert is placed short and high in the fill. Flow path takes an approximate 2-foot plunge at the outlet.

Summary of Stream Crossing #4:

A Class II watercourse is conveyed through a 24-inch diameter metal culvert. The culvert is not properly sized to handle the 100-year streamflow and associated debris. The culvert appears to be short in the fill, and is being undermined at the outlet by approximately 3-4 feet. The culvert was rusted through at the outlet in several locations. Erosion was observed at the outlet of the road prism. The flow path appears to be misaligned with the natural flow path by approximately 45-degrees at the bottom of the fill slope, where the channel takes an abrupt turn at a well rocked drop. No erosion was noted at this location, the channel is primarily bedrock at this junction.

Corrective action: Replace existing culvert with a 30-inch diameter by steel culvert, sized for 100-year stream flows and associated debris, installed as close as feasible to the natural channel grade, in the correct orientation of the channel and at the base of fill.

Currently, there is no drainage structure in place to prevent stream erosion should the culvert becomes plugged. A critical dip will be installed on the right hinge line of the road to prevent stream diversion in the event of culvert failure.

All disturbed areas capable of delivering sediment will be seeded with barley or wheat based erosion control seed, and mulched with weed free straw. Application rates will be no less than 50 lbs / acre seed, and 4,000 lbs/acre straw. Spoils generated during construction will be stored in a stable location, and adequate BMPs (Best Management Practices) including tarping, mulching, and a straw wattle perimeter will be implemented to mitigate sediment delivery.

Stream Crossing #5



Photo 11. Stream Crossing #5, upstream view of channel of Class III watercourse leading to culvert inlet.



Photo 12. Stream Crossing #5, view of stream channel entering culvert inlet. Culvert is properly aligned with the natural grade of the stream channel.



Photo 13. Stream Crossing #5, view of watercourse exiting culvert outlet. Culvert is placed at the natural grade of the stream channel, and outlets onto a well emplaced rip rap apron.

Summary of Stream Crossing #4:

A Class III watercourse is conveyed through a 12-inch diameter metal culvert. The Culvert is not properly sized to handle the 100-year streamflow and associated debris. The culvert appears to be short in the fill, but is functioning adequately and outlets onto rip rap. Minimal erosion was observed at the inlet and outlet of the road prism, and the channel banks surrounding both inlet and outlet are heavily vegetated. Rip rap armor was observed at the outlet and no significant scour or erosion was noted. With a watershed area of 1.84 acres, this seasonal crossing exhibits a lack of channel definition below the crossing.

Corrective action:

Currently, there is no drainage structure in place to prevent stream erosion should the culvert become plugged. A critical dip will be installed on the right hinge line of the road to prevent stream diversion in the event of culvert failure.

Replace existing culvert with a 24-inch diameter by steel culvert, sized for 100-year stream flows and associated debris, installed as close as feasible to the natural channel grade, in the correct orientation of the channel and at the base of fill.

Alternatively, a flared inlet could be installed at the outlet to facilitate storm-flow runoff during heavy rainfall events.

All disturbed areas capable of delivering sediment will be seeded with barley or wheat based erosion control seed, and mulched with weed free straw. Application rates will be no less than 50 lbs / acre seed, and 4,000 lbs/acre straw. Spoils generated during construction will be stored in a stable location, and adequate BMPs (Best Management Practices) including tarping, mulching, and a straw wattle perimeter will be implemented to mitigate sediment delivery.

Stream Crossing #6



Photo 13. Stream Crossing #6, view of 16-inch diameter HDPE culvert inlet. IBF is armored with 6" plus angular rock, inlet is partially plugged with aggraded sediment and fines.



Photo 14. Stream Crossing #6, view of culvert outlet placed short in the fill. Culvert is properly aligned with the natural grade of the stream channel, and outlets water onto rock armor. OBF is armored to prevent erosion. Legacy waste was observed in the channel (tire).

Summary of Stream Crossing #6:

A Class III watercourse is conveyed through a 16-inch diameter HDPE culvert. The culvert is not properly sized to handle the 100-year streamflow and associated debris, and is placed short and high in the fill. The inlet and outlet are heavily rock armored to minimize fill slope and bank erosion. The inlet has aggraded sediments and fines, and is partially impeded but appeared to be functioning at the time of the site visit.

Corrective action:

Replace existing culvert with a 24-inch diameter steel culvert, sized for 100-year stream flows and associated debris, installed as close as feasible to the natural channel grade, in the correct orientation of the channel and at the base of fill. Ensure adequate barrel extension at the outlet to minimize future erosion of the OBF.

Remove legacy waste from the stream channel above and below the watercourse, taking care not to unduly disturb the existing bed and banks more than necessary.

Currently, there is no drainage structure in place to prevent stream erosion should the culvert become plugged. A critical dip will be installed on the left hinge line of the road to prevent stream diversion in the event of culvert failure.

All disturbed areas capable of delivering sediment will be seeded with barley or wheat based erosion control seed, and mulched with weed free straw. Application rates will be no less than 50 lbs / acre seed, and 4,000 lbs/acre straw. Spoils generated during construction will be stored in a stable location, and adequate BMPs (Best Management Practices) including tarping, mulching, and a straw wattle perimeter will be implemented to mitigate sediment delivery.

Stream Crossing #7



Photo 15. Stream Crossing #7, upslope view of springy area above inlet.



Photo 16. Stream Crossing #7, view of 24-in diameter HDPE culvert outlet. Culvert is properly aligned with the natural grade of the stream channel, and is resting on large roots of nearby conifer.



Photo 17. Stream Crossing #7, downstream view of channel below culvert outlet. Significant erosion of the bed and banks was not noted.

Summary of Stream Crossing #7:

An at origin, spring fed Class III watercourse is conveyed through a 24-inch diameter HDPE culvert. The culvert is properly sized to handle the 100-year streamflow and associated debris., the culvert outlet rests on large roots of a nearby tree and sits as close as feasible to the natural grade of the watercourse. Significant erosion was not noted at the outlet of this low power water course. The inlet has aggraded sediments and fines, but was open and functioning as of the time of the initial site visit.

Corrective action:

To minimize future erosion at the outlet, install 1 cubic yard of 9 inch D50 armor at the outlet and below the root structure upon which the culvert outlet rests.

Currently, there is no drainage structure in place to prevent stream erosion in the event that the culvert becomes plugged. A critical dip will be installed on the left hinge line of the road to prevent stream diversion in the event of culvert failure.

All disturbed areas capable of delivering sediment will be seeded with barley or wheat based erosion control seed, and mulched with weed free straw. Application rates will be no less than 50 lbs / acre seed, and 4,000 lbs/acre straw. Spoils generated during construction will be stored in a stable location, and adequate BMPs (Best Management Practices) including tarping, mulching, and a straw wattle perimeter will be implemented to mitigate sediment delivery.

Stream Crossing #8



Photo 18. Stream Crossing #8, view of Class III stream channel leading to 18-inch diameter HDPE culvert inlet.



Photo 19. Stream Crossing #8, view of 18-inch diameter culvert. Culvert is properly aligned with the natural grade of the stream channel.



Photo 20. Stream Crossing #8, downslope view of channel below outlet.



Photo 21. Stream Crossing #8, view of outlet. Stream flow exits culvert onto 6" minus angular rock apron.

Summary of Stream Crossing #8:

A Class III watercourse is conveyed through an 18-inch diameter HDPE culvert. The culvert is sized to handle the 100-year streamflow at a headwater to depth ratio near 1.0 which is likely sufficient given the apparent lack of sediment and upstream debris. The culvert is set in the natural horizontal orientation of the channel, and at the natural channel grade. No significant erosion was noted at the inlet and outlet.

Corrective action:

Currently, there is no drainage structure in place to prevent stream erosion in the event that the culvert becomes plugged. A critical dip will be installed on the left hinge line of the road to prevent stream diversion in the event of culvert failure.

All disturbed areas capable of delivering sediment will be seeded with barley or wheat based erosion control seed, and mulched with weed free straw. Application rates will be no less than 50 lbs / acre seed, and 4,000 lbs/acre straw. Spoils generated during construction will be stored in a

stable location, and adequate BMPs (Best Management Practices) including tarping, mulching, and a straw wattle perimeter will be implemented to mitigate sediment delivery.

Stream Crossing #9



Photo 22. Stream Crossing #9, upstream view of gully incised into a legacy road resulting from a buried culvert inlet. A Class II stream still flows through the 12-inch diameter plastic culvert outlet, and overtops during high flow events following the gully path back into the channel.



Photo 23. Stream Crossing #9, view of 12-inch diameter culvert outlet. Culvert is properly aligned with the natural grade of the stream channel, and at natural grade but is undersized for the expected 100-year streamflow event and associated debris. Culvert is plugged at inlet, obscured beneath aggraded sediments.



Photo 24. Stream Crossing #9, downslope view of gully redirecting overflow back into channel above outlet.

Summary of Stream Crossing #9:

A Class II watercourse is conveyed through a 12-inch diameter HDPE culvert. The culvert is not properly sized to handle the 100-year streamflow and associated debris, and is impeded at the inlet, being visibly buried beneath aggraded sediments. A large gulley has resulted from frequent overtopping of the plugged culvert inlet, and a scour channel has eroded along the legacy road bench. The culvert is set in the natural horizontal orientation of the channel, and at the natural channel grade.

This watercourse appears to have been diverted from the original channel in the past, likely when the road infrastructure was added to the parcel. The new channel exhibits similar erosional characteristics and depths of incision as the legacy channel, indicating that a stable channel baseline resting upon bedrock has been reached. Riparian vegetation has become well established downstream of the crossing in and along the new channel. The channel rejoins the legacy channel several hundred feet below the crossing at a confluence of several streams. It is not expected that returning the watercourse to its legacy channel will significantly benefit wildlife or habitat.

Corrective action:

Decommission stream crossing. Remove existing buried pipe, and lay back channel banks to a stable 2:1 ratio, excavate the buried inlet to the base of outboard fill, working to restore the flow path to the natural gradient of the channel. Spoil locally at legacy garden site alongside crossing, ensuring that spoils will not enter watercourse.

All disturbed areas including spoil pile generated through decommissioning, capable of delivering sediment will be seeded with barley or wheat based erosion control seed, and mulched with weed free straw. Application rates will be no less than 50 lbs / acre seed, and 4,000 lbs/acre straw. Spoils generated during construction will be stored in a stable location, and adequate BMPs (Best Management Practices) including tarping, mulching, and a straw wattle perimeter will be implemented to mitigate sediment delivery.

Table 1. Culvert Sizing for estimated 100-year flow and associated debris.

| Stream Crossing # | Existing Culvert Diameter (in) | Rec. Culvert Diameter (in) | Watershed Area (Acres) | Q100 (cubic ft/sec) |
|-------------------|--------------------------------|----------------------------|------------------------|---------------------|
| SC #1 | 24 | 24 | 10.8 | 12.2 |
| SC #2 | 24 | 30 | 17.7 | 20.0 |
| SC #3 | 24 | 30 | 14.4 | 16.3 |
| SC #4 | 24 | 30 | 10.8 | 12.2 |
| SC #5 | 12 | 24 | 2.71 | 3.1 |
| SC #6 | 16 | 24 | 8.87 | 10.0 |
| SC #7 | 24 | 24 | 2.1 | 2.4 |
| SC #8 | 24 | 24 | 6.71 | 7.6 |
| SC #9 | 12 | 36 (Decommission) | 25.4 | 28.8 |

The stream crossing upgrades proposed in this application are recommendations from the Patterson Water Resource Protection Plan (WRPP) being developed by OE as part of the Regional Water Quality Control Board’s Waiver of Waste Discharge program. Methods for determining the 100-year design discharge include the Rational method, and the USGS Magnitude and Frequency Method. All stream crossing upgrades on the property will be constructed according to the standards provided in the “Handbook for Forest, Ranch and Rural roads,” (Weaver, Weppner, and Hagens, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver et al., 2006). Implementation of the WRPP will also disconnect any hydrologically connected road reaches and road side ditches from stream crossings to the greatest degree feasible through the installation of rolling dips, and additional ditch relief culverts.

POD #1

No photo available

POD #1, photo of inlet of Point of Diversion #1. Small mesh screen is zip-tied over metal screened intake, which is secured to a 3/4" diameter polyline. Water is gravity fed to holding tanks.

POD #1 Summary:

The point of diversion involves taking water from the headwaters at the origin of an unnamed Class II tributary to Hooker Creek. Located at 40.1818N, -123.8203W water is taken via a screened inlet situated in a small container placed within the stream channel. The diversion consists of a metal screened inlet, which is covered with screen mesh and maintained / cleaned annually to prevent incidental take of riparian wildlife. The cover screens a 3/4" black polyline, and the diverted water is gravity fed to a holding tank downslope, which is then distributed to a series of holding tanks totaling 32,000 gallons. Maximum diversion rate is approximately 5.0 gallons per minute. Diverted water serves domestic and agricultural irrigation purposes, and is used to irrigate 32,780 sq. feet of cannabis, and supply water to the shop building on site.

A flow (water) meter will be installed downstream of the point of diversion to monitor and record water use. Flow rates will be calculated monthly (with a bucket and stopwatch or tank fill time) to determine lowest and highest level of flow. Additionally, an Initial Statement of Diversion and Use (ISDU) has been filed with the State Water Resources Control Board, Division of Water rights for the diversion (see attached).

POD #2



Photo 25. POD #2, photo of inlet of Point of Diversion #2. Small mesh screen is zip-tied over metal screened intake, which is secured to a 3/4" diameter polyline. Water is gravity fed down to holding tanks.

POD #2 Summary:

The point of diversion involves taking water from the headwaters at the origin of an unnamed Class II tributary to Hooker Creek. Located at 40.18469N, -123.81766W water is taken via a screened inlet situated in a spring box emplaced within the stream bed. The diversion consists of a metal screened inlet, which is covered with screen mesh and maintained / cleaned annually to prevent incidental take of riparian wildlife. The cover screens a 1" black polyline, and the diverted water is gravity fed to a holding tank downslope, which is then distributed to a series of holding tanks totaling 32,000 gallons. Maximum diversion rate is approximately 3.0 gallons per minute. Diverted water serves agricultural irrigation purposes, irrigating 32,780 sq. feet of cannabis.

A flow (water) meter will be installed downstream of the point of diversion to monitor and record water use. Flow rates will be calculated monthly (with a bucket and stopwatch) to determine lowest and highest level of flow. Additionally, an Initial Statement of Diversion and Use (ISDU) has been filed with the State Water Resources Control Board, Division of Water rights for the diversion (see attached).

POD #3



Photo 26. POD #3, photo of inlet of Point of Diversion #3, and diversion site. Diversion structure is standing out of the water for photo. Small mesh screen is zip-tied over metal screened intake, which is secured to a 3/4" diameter polyline. Water is gravity fed down to holding tanks.

POD #3 Summary:

The point of diversion involves taking water from an unnamed spring at the origin of an unnamed Class II tributary to Hooker Creek. Located at 40.18483N, -123.81762W water is taken via a screened inlet situated within the stream channel. The diversion consists of a metal screened inlet, which is covered with screen mesh and maintained / cleaned annually to prevent incidental take of riparian wildlife. The cover screens a 1" black polyline, and the diverted water is gravity fed to a holding tank downslope, which is then distributed to a series of holding tanks totaling 32,000 gallons. Maximum diversion rate is 3.00 gallons per minute. Diverted water serves domestic purposes, and is used to supply water to the shop building on site.

A flow (water) meter will be installed downstream of the point of diversion to monitor and record water use. Flow rates will be calculated monthly (with a bucket and stopwatch) to determine lowest and highest level of flow. Additionally, an Initial Statement of Diversion and Use (ISDU) has been filed with the State Water Resources Control Board, Division of Water rights for the diversion (see attached).

Pond #1



Photo 27. Pond #1, a spring fed rainwater catchment pond. The pond collects spring seepage, stormwaterflows and direct rainfall. The pond is unused and unlined. The overflow for the pond consists of a 12" diameter HDPE culvert.



Photo 28. Pond #1-View of Pond #1 spillway culvert outlet. Culvert outlets onto a legacy skid road, which has gullied for several hundred feet down the road before laying out across a natural flat and another legacy haul road.

Pond #1 Summary:

Pond #1 is a seasonal pond which appears to be fed primarily by rainfall along with secondary spring flow. The pond is located in a natural swale, drains annually, and appears to have been constructed by excavation into the natural swale by a previous occupant of the land. According to the landowner, the pond has never showed signs of failure. The pond and embankment appears to be generally stable, although the existing overflow was placed in the corner of the embankment with shallow and inadequately compacted backfill which has subsequently undergone some minor erosion in the vicinity of the pipe. Other than this, OE staff did not note any stress cracks, slumping, or obvious instability of the embankment. Following the corrective actions, the applicant proposes to keep the pond with a reduced capacity for aesthetic uses and emergency fire suppression.

All necessary inspection, engineering, and monitoring will be performed as required by the Humboldt County Building Department.

Corrective action: Remove the existing overflow, backfill the resulting void in the embankment and compact according to the 2016 California Building Codes, Appendix J. Install a new 24-inch diameter culverted spillway with inlet set 1 foot below depth of the observed high watermark in the pond. Install an approximately 20 foot downspout down the face of the embankment to direct the spillway into the natural orientation of the existing downslope swale, and away from the current diversion path down the road. Armor the spillway outlet with angular rock to Caltrans specifications as covered in the Caltrans Storm Water Quality Handbook on outlet protection/velocity dissipation devices.

Pond #2



Photo 29. Pond #2- Located in the natural flow path below Pond #1, Pond #2 appears to be a natural occurrence in a channelized depression which intersects a legacy logging skid road. View is from road bench looking upslope.

Pond #2 Summary:

Pond #2 is an onstream, unlined pond which is historically fed from the swale below the flow path of Pond #1. Located on a Class III stream, in a natural swale, the pond collects water naturally but does not hold water year-round. Current spillway consists of a small rill cut across the legacy skid road which girdles the pond. Major erosion was not noted at the spillway. Surrounding area appears to be a natural flat, and likely retains moisture for much of the year.

Corrective action: Lay back legacy logging road at downstream end of pond to at least a stable 2:1 ratio. Flow path here is minor as topography flattens out. Store spoils locally along legacy road, ensuring spoils will not enter any watercourse.

Pond #3 (Guerrilla Pond #1)



Photo 30. Pond #3 (Guerrilla Pond #1) - A previous occupant of this property excavated a small containment basin, lined it with a liner of unknown materials, and covered it with sheet metal. It was recently discovered by the applicants, who intend to decommission it.

Corrective Action: Remove sheet metal covering, liner, and any other legacy construction materials which may endanger wildlife or human health and safety. Using a hydraulic excavator fill in the pond by taking native fill material from the sides and filling in the depression. Seed and mulch any bare soil with native seed.

Pond #4 (Guerrilla Pond #2)



Photo 31. Pond #4 (Guerrilla Pond #2)- A previous occupant of this property excavated a small containment basin below a natural spring, lined it with a liner of unknown materials and attempted to concrete the embankments. In an attempt to camouflage the pond, it was covered it with sheet metal and vegetation. It was recently discovered by the applicants, who intend to decommission it.



Photo 32. Pond #4 (Guerrilla Pond #2) - View of the concrete embankments, wooden frame and sheet metal roofing of the legacy Guerrilla Pond #2.

Pond #4 (Guerrilla Pond #2) Summary: A previous landowner/operator excavated a small containment basin below a natural spring, and covered it with sheet metal and wood framing. The applicant will decommission it as soon as possible.

Corrective Action: Remove sheet metal covering, liner, and any other legacy construction materials which may endanger wildlife or human health and safety. Using an excavator, fill in the pond by taking native fill material from the sides and filling in the depression. Seed and mulch any bare soil with native seed.

11. Project Impacts

The disturbance area at each Point of Diversion is limited to the diversion structure and will include the installation of flow (water) meters at each diversion.

Permanent impacts to existing native channel bed, channel, watercourse banks and associated riparian habitat will be negligible and avoided. Incidental destruction of small areas of incidental riparian vegetation growing on existing road fill or in disturbed channel areas is expected at some of the upgrade crossings during remediation.

Stream Crossing #1: Disturbance within the bed and banks of the stream will be limited to the road footprint of the crossings measuring approximately 4 feet wide by 35 feet long.

Stream Crossing #2: Disturbance within the bed and banks of the stream will be limited to the road footprint of the crossings measuring approximately 5 feet wide by 40 feet long.

Stream Crossing #3: Disturbance within the bed and banks of the stream will be limited to the road footprint of the crossings measuring approximately 5 feet wide by 45 feet long.

Stream Crossing #4: Disturbance within the bed and banks of the stream will be limited to the road footprint of the crossings measuring approximately 4 feet wide by 40 feet long.

Stream Crossing #5: Disturbance within the bed and banks of the stream will be limited to the road footprint of the crossings measuring approximately 4 feet wide by 20 feet long.

Stream Crossing #6: Disturbance within the bed and banks of the stream will be limited to the road footprint of the crossings measuring approximately 4 feet wide by 40 feet long.

Stream Crossing #7: No disturbance within the bed and banks of the stream is anticipated or intended.

Stream Crossing #8: Disturbance within the bed and banks of the stream will be limited to the road footprint of the crossings measuring approximately 4 feet wide by 30 feet long.

Stream Crossing #9: Disturbance within the bed and banks of the stream will be limited to the road footprint of the crossings measuring approximately 4 feet wide by 20 feet long.

Pond #1: Disturbance will be limited installation of a new spillway, with area disturbed measuring 4 feet wide by 20 feet long.

Pond #2: Disturbance will be limited to the decommissioning of a legacy road which contains the outboard edge of the pond, approximate area is 10 feet wide by 10 feet long.

Pond #3 (Guerrilla Pond #1): Disturbance will be limited to the infilling of the guerrilla pond, measuring approximately 15 feet wide by 15 feet long.

Pond #4 (Guerrilla pond #2): Disturbance will be limited to the infilling of the guerrilla pond, measuring approximately 15 feet wide by 15 feet long.

Total temporary impact area for all projects is 1,830 ft².

Total temporary impact length for all watercourse related projects is 390 ft.

No permanent impact areas have been identified.

12. Measure to Protect Fish, Wildlife, and Plant Resources

All standards of work will conform with CDFW's California Salmonid Stream Habitat Restoration Manual Part X (Weaver et al, 2016), and the Handbook for Forest, Ranch and Rural roads (Weaver, Weppner and Hagans, 2015), and will occur during the summer months (June 1st – October 15th). Care shall be taken to not unduly disturb the native channel and stream banks outside of the project areas. Fill to be permanently removed will be stored in designated locations that pose no risk of sediment delivery to any watercourse (See Site Plan C1 and C2). All disturbed areas where sediment delivery from surface erosion process might occur will be seeded and mulched to reduce surface erosion and transport potential.

The proposed stream crossing upgrades outlined in this project shall only occur on in-use roads. All disturbances associated with this project will be limited to the road, stream channels and banks immediately adjacent to the individual crossings for the purposes of storm proofing and upgrading the crossings. Further road disturbance (as outlined in the WRPP), will be completed on road reaches that are hydrologically disconnected from stream crossings, thereby further reducing anthropogenic impacts and sediment delivery potential to the Hooker Creek watershed from the rural road network on the property.

Work will only occur during the period of June 15th through October 31st (or first significant rainfall) to limit and avoid impacts to aquatic habitat and salmonids. Vegetation will only be removed from sites where it is necessary for the implementation of effective storm-proofing treatments, where erosion is likely to occur, or where it is growing on anthropogenically placed fill material.

13. Permits

North Coast Regional Water Quality Control Board, Waiver of Waste Discharge
Enrolled: March 1st, 2017

California State Water Resources Control Board, Division of Water Rights:
Initial Statement of Diversion and Use, POD #1; filed:
Initial Statement of Diversion and Use, POD #2; filed:
Initial Statement of Diversion and Use, POD #3; filed:

Humboldt County Commercial Medical Marijuana Land Use Ordinance:
Applied: 12/22/2016 (Application #12312)
Application Status: In review

14. Environmental Review

The project described in this application was identified in a property wide inspection conducted by OurEvolution (OE) under contract with the property owner in order to achieve compliance with the California Department of Fish and Wildlife, the California North Coast Regional and California State Water Resources Control Boards, and the County of Humboldt. The storm-proofing encroachments proposed in this application will be further bolstered by the installation of rolling dips, and ditch relief drains to establish a hydrologically disconnected road network, with the ultimate goal of reducing and minimizing sediment delivery to any watercourse. Hydrologic disconnection of the road network will reduce sediment delivery to the Hooker Creek and South Fork Eel river watersheds. This project is confined to existing in-use roads, and is thus exempt from CEQA. In the event that a determination leading to the requirement of CEQA is made, Humboldt County will be the lead CEQA agency for all landowners pursuing permits under the Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO).



California Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
REGION 1 – NORTHERN REGION
619 Second Street
Eureka, CA 95501
www.wildlife.ca.gov

GAVIN C. NEWSOM, Governor
CHARLTON H. BONHAM, Director



November 19, 2020

Vincent Patterson
83 Wildflower Lane
Benbow, CA 95542

Subject: **Notification of Lake or Streambed Alteration No. 1600-2018-0374-R1
Humboldt County Assessor's Parcel Numbers 214-233-002**

Dear Vincent Patterson:

On June 18, 2018, the California Department of Fish and Wildlife (CDFW) received your Notification of Lake or Streambed Alteration (Notification). Additional information was received on October 12, 2018. On November 11, 2018, your Notification was deemed complete due to the passage of 30 days with no action taken by CDFW.

The Department is required to submit a draft Lake or Streambed Alteration Agreement (Agreement) to you within 60 calendar days from the date the Notification is complete. Therefore, the Department had until January 10, 2019, to issue you a draft Agreement or inform you that an Agreement is not required. Due to current staffing limitations, the Department did not meet that date. As a result, by law, you may now complete the **project described in your notification** without an Agreement.

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

This letter does not retroactively permit any stream crossings, water diversions or other encroachments not described and included as projects within the notification received. Any additional projects would require the submittal of a new Notification.

Also note that while you are entitled to complete the project without an Agreement, you are still responsible for complying with other applicable local, state, and federal laws. These include FGC sections 5650 and 5652 which make it unlawful to pollute waters of the state. FGC section 5650 makes it unlawful to deposit in, permit to pass into, or place where it can pass into waters of the state any substance or material deleterious to fish,

Conserving California's Wildlife Since 1870

Vincent Patterson
November 19, 2020
Page 2 of 2

plant life, mammals, or bird life, including, but not limited to gasoline and oil, as well as sediment. FGC section 5652 makes it unlawful to deposit in, permit to pass into, or place where it can pass into waters of the state, or to abandon, dispose of, or throw away, within 150 feet of the high water mark of the waters of the state, any garbage, refuse, or waste, among other materials. A person who violates FGC sections 1602, 5650, and 5652 in conjunction with the cultivation or production of cannabis is subject to significant penalties or fines. Specifically, CDFW may impose civil penalties administratively against any person found by CDFW to have violated these FGC sections in connection with the production or cultivation of cannabis following a complaint and, if requested, a hearing.

Other statutes in the FGC that might apply to your activity, include, but not limited to the following sections: 2080 et seq. (species listed as threatened or endangered, or a candidate for listing under the California Endangered Species Act); 1908 (rare native plants); 3511, 4700, 5050, and 5515 (fully protected species); 3503 (bird nests and eggs); 3503.5 (birds of prey); 5901 (fish passage); 5937 (sufficient water for fish); and 5948 (obstruction of stream).

Finally, if you decide to proceed with your project without an Agreement, you must have a copy of this letter and your notification with all attachments available at all times at the work site. Please note this letter is only valid until **January 10, 2024** which is 5 years from the date the Department was required to provide a Draft Agreement.

If you have any questions regarding this letter, please contact Andrew Orahoske, Environmental Scientist at Andrew.orahoske@wildlife.ca.gov.

Sincerely,



Cheri Sanville
Senior Environmental Scientist Supervisor

ec: Austin Corbett, gaustincorbett@gmail.com

California Department of Fish and Wildlife
Andrew Orahoske, andrew.orahoske@wildlife.ca.gov