



COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION

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Hearing Date: December 5, 2019

To: John H. Ford, Humboldt County Zoning Administrator

From: Cliff Johnson, Supervising Planner

Subject: **Amaranth Farms Special Permit**
Record Number: PLN-10897-SP
Assessor's Parcel Number: 108-033-014
1020 Windy Ridge Lane, Honeydew area

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Please contact Stephen Luther, Planner, at (707) 445-7541 or sluther@co.humboldt.ca.us if you have any questions about the scheduled public hearing item.

AGENDA ITEM TRANSMITTAL

Hearing Date December 5, 2019	Subject Special Permits	Contact Stephen Luther
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Project Description: Amaranth Farms seeks approval of a Special Permit (SP) to allow 10,000 square feet (sf) of existing outdoor cannabis cultivation. Cultivation occurs in greenhouses and an outdoor area. Propagation occurs on-site in a 960 square foot greenhouse. The irrigation water source is a Point of Diversion (POD) from a spring that is tributary to East Fork Honeydew Creek. Estimated annual water use is 110,393 gallons. The applicant will secure a contingent easement to access water from a fully-contained spring on the adjacent parcel 108-033-004, or will meet forbearance by installing storage in a sufficient amount. Storage would be in proposed hard tanks or in a proposed 180,000 gallon pond on-site. There is currently 10,000 gallons of hard tank storage. Drying and curing occurs onsite in an existing building. Processing is done off-site at a licensed processing facility. There will be up to three (3) people on-site during peak seasonal activities. Off-grid power is provided by a gas generator and a solar power system is proposed. A Special Permit is also requested in compliance with Humboldt Code Section 314-55.4.11(d) to allow a relaxation of the six hundred-foot (600') setback requirement from the King Range National Conservation Area. A Special Permit is requested per the Streamside Management Area Ordinance for the continued use and maintenance of a diversion from a spring used for irrigation water.

Project Location: The project is in the Honeydew area, on the North side of Windy Ridge Lane, approximately .90 miles west from the intersection of Windy Ridge Lane and Wilder Ridge Road, on the property known as 1020 Windy Ridge Lane.

Present Plan Land Use Designations: Residential Agriculture (RA40), Density: 40-160 acres per dwelling unit, Slope Stability: Moderate Instability (2)

Present Zoning: Unclassified (U)

Record Number: PLN-10897-SP

Assessor Parcel Number: 108-033-014

Applicant

Amaranth Farms
Karen Hessler
PO Box 907
Redway, CA 95560

Owner

Nya and Heidi Hessler
PO Box 962
Fortuna, CA 95540

Agent

N/A

Environmental Review: An Addendum to a previously adopted Mitigated Negative Declaration has been prepared for consideration per §15164 of CEQA Guidelines.

State Appeal Status: Project is NOT appealable to the California Coastal Commission.

Major Issues: None.

Amaranth Farms Special Permits
Record Number: PLN-10897-SP
Assessor's Parcel Number (APN): 108-033-014

Recommended Zoning Administrator Action

1. Describe the application as part of the Consent Agenda.
2. Survey the audience for any person who would like to discuss the application.
3. If no one requests discussion, make the following motion to approve the application as a part of the consent agenda:

Find that the Zoning Administrator has considered the Addendum to the Mitigated Negative Declaration adopted for the Commercial Medical Marijuana Land Use Ordinance pursuant to Section 15164 of the State CEQA Guidelines, make all of the required findings for approval of the Special Permits based on evidence in the staff report, and adopt the Resolution approving the proposed Amaranth Farms, LLC, Special Permits subject to the recommended conditions.

Executive Summary

Amaranth Farms seeks approval of a Special Permit (SP) to allow 10,000 square feet (sf) of existing outdoor cannabis cultivation. A Special Permit is also requested in compliance with Humboldt Code Section 314-55.4.11(d) to allow a relaxation of the six hundred-foot (600') setback requirement from the Bureau of Land Management King Range National Conservation Area. A Special Permit is also requested for development within the Streamside Management Area (SMA) to allow the continued use and maintenance of the Point of Diversion from a spring that supplies irrigation water. The source of power is two generators.

The approximately 41-acre project site contains an unoccupied cabin with an onsite wastewater treatment system (OWTS), in addition to the cultivation area. The applicant uses portable toilets provided by a commercial contractor for sanitation. No commercial processing can occur on-site until the OWTS has been permitted by the Division of Environmental Health.

Cultivation occurs in eight (8) hoop houses and an outdoor plot. Propagation occurs in a 960 square foot greenhouse. Light deprivation techniques are used to achieve up to two harvests per year. No supplemental lighting is used for flowering.

The irrigation water source is a diversion from an on-site spring that is tributary to East Fork Honeydew Creek. The applicant has a Right to Divert and Use Water from the State Water Resources- Division of Water Rights (H100465). The estimated annual irrigation water use is 110,393 gallons (11 gal/sf). Water storage currently totals 10,000 gallons in three (3) tanks. There is an existing 10,000-gallon water bladder. As a condition of approval, the use of the water bladder will be discontinued. The applicant proposes to increase the number of water storage tanks on-site in locations noted on the site plan submitted November 13, 2019. The applicant has also submitted a proposal for a pond according to the engineered grading plans that have been submitted for the proposal to enlarge an existing pond to hold a 180,000 gallon capacity. Within two years of provisional permit issuance, water storage in an amount sufficient to meet the forbearance period must be installed. Alternatively, the applicant may discontinue agricultural use of the diversion and utilize a non-diversionary source such as a groundwater well, rainwater catchment, or obtain a contingent easement to use water from the spring on the adjacent parcel 108-033-004.

According to the California Natural Diversity Database (CNDDDB), there are no sensitive or rare plant or animal species mapped on the subject parcel. The project is within an area that has the potential to provide habitat for the Marbled Murrelet, a federally listed endangered species. A

habitat scoping report was written for the project by Dennis Halligan, Senior Fisheries Biologist for Stillwater Sciences, on November 6, 2018 (see Attachment 4). The report identified potential nesting area for marbled murrelet in a stand of large conifers approximately 1,300 feet to the north of the subject parcel. The report concludes that project activities will have no adverse impact on the marbled murrelet. The nearest Northern Spotted Owl (NSO) sighting is 1.05 miles to the west of the project site, and the nearest activity center is 1.5 miles to the northwest. Staff incorporated conditions that require supplemental lighting used for the appurtenant nursery must meet Dark Sky Standards and light must not be visible from an hour before sunset to an hour after sunrise. Additionally, conditions of approval require combined noise levels of fans and generators to be 50 dB at 100 feet or edge of habitat, whichever is closer when exhaust fans and generators are in use.

Access to the site is a 0.5-mile segment of Windy Ridge Lane where it intersects Wilder Ridge Road, and a 0.75-mile private drive that accesses the subject parcel. The applicant has provided a Road Evaluation Report for the roads self-certifying that the roads meet the functional equivalence of a Category 4 road. Pictures taken at ¼ mile intervals were provided to supplement the road evaluation. There will be up to three (3) employees on site. Public Works commented and requested the intersection of Windy Ridge Lane and the County Road be paved for a width of 20 feet and length of 50 feet to meet commercial standards and sight visibility standards. These items are included as conditions of approval.

The applicant has signed a Final Lake and Streambed Alteration Agreement (LSAA No. 1600-2016-0487-R1) with the California Department of Fish and Wildlife (CDFW) for two (2) points of diversion, a pond, and seven (7) water crossings. CDFW commented on the project and requested a road system analysis for the roads used to access the site in order to identify non-point pollution sources. The applicant has identified improvements necessary to improve the roads within the project area. As an existing project, the impacts of the cultivation activity have been previously analyzed under the Mitigated Negative Declaration. By addressing the impacts of road crossings on the subject parcel, the environmental condition of the site will improve over baseline conditions. A condition of approval requires the applicant implement the road improvements of the Final LSA and complete all reporting and monitoring requirements of CDFW.

The cultivation area is approximately 450 feet from BLM land owned on APN 108-033-024 to the south of the subject parcel. The propagation nursery area and the proposed pond are located approximately 150 feet from the BLM managed land to the west on APN 108-033-015. The adjacent public lands are subject to the *2005 King Range National Conservation Area Resource Management Plan* (RMP). The lands adjacent to the project site are designated Frontcountry Zone in the RMP, and management activities in that zone include forest stand management, fuel reduction, fire break construction, and watershed restoration. The project is consistent with the RMP because the cultivation activities will protect fisheries and aquatic habitat on forest lands by restoring and maintaining buffers from streams and by placing controls on the storage and use of pesticides, rodenticides and fertilizers, and will minimize risk from wildfire by adhering to the County's Fire Safe Regulations and the requiring adequate road access. No supplemental lighting would be used in the natural-light outdoor cultivation, so there would be no glare or light pollution associated from this activity. The RMP's provisions for protection of heritage resources will be met through the project consultation with Tribal Historic Preservation Officers and avoidance of sensitive tribal cultural resources. The project is consistent with recreational use on public lands by maintaining a minimum 600 buffer separation from developed campgrounds and trails. The property was surveyed by Baird Engineering in July 2019. The professional engineer's stamped letter confirms that no cannabis cultivation or infrastructure is located on public lands (see Attachment 4).

Existing cultivation was verified on the parcel in an amount more than 10,000 square feet based on September 18, 2015 TerraServer imagery. In 2018, the applicant reconfigured the cultivation area such that it measured 7,900 square feet. In 2020, the applicant will cultivate in an existing outdoor area northwest of the residence, labeled as the proposed 2,090 square foot cultivation area. The applicant is proposing to construct four hoop houses in this previously disturbed area. The hoop houses may be used to achieve up to two harvest cycles per year using light deprivation methods. Using this method, the plants are smaller and would not require an increase in water use. The combined noise level of fans and generators shall not exceed 50 decibels. With these conditions, the operation as proposed will have less of an environmental impact over baseline conditions.

The existing pond was constructed without the benefit of County review. Conditions of approval require the applicant to notify the California Department of Fish and Wildlife (CDFW) to determine if improvements are required to ensure there's a spillway that can handle a 100-year storm event, minimize wildlife entrapment and draft and implement a bullfrog management plan. Conditions of approval also require the applicant to meter the water used for the operation to ensure there is sufficient water for annual irrigation. The applicant has enrolled in the North Coast Regional Water Quality Control Board (NCRWQCB) Cannabis Cultivation Waste Discharge Regulatory Program (Order No. R1-2015-0023) as a Tier 2 discharger. A Water Resources Protection Plan (WRPP) was prepared for the project site by Stillwater Sciences in December 2017 (see Attachment 4). As a condition of approval, the remedial actions recommended in the WRPP shall be implemented. The applicant was required to enroll in the State Cannabis Discharge program by July 2019. Conditions of approval require the applicant to submit evidence of enrollment into the State Cannabis Cultivation Discharge program by submitting copies of all documents filed with the State Water Resources Control Board, including, but not limited to, a Notice of Applicability and a Site Management Plan.

Timber conversion occurred on the property between 2205 to 2009. As a condition of approval, the applicant shall provide a Registered Professional Forester (RPF) report evaluating the conversion. The condition requires the applicant to implement all recommended improvements of the report.

Based on a review of Planning Division reference sources and comments from all involved referral agencies, planning staff supports approval of the provisional Special Permit request subject to the recommended conditions of approval. Staff recommends that the Zoning Administrator include the application as a part of the consent agenda, survey the audience to see if any person would like to discuss the application and, if no one requests discussion, make all the required findings based on the evidence in the record, and approve the application subject to the recommended conditions.

Alternatives: Several alternatives may be considered: 1) The Zoning Administrator could elect not to hear this item and put the decision making in front of the Planning Commission. Any decision to place this matter before the Planning Commission must be done before opening the public hearing on this project; 2) The Zoning Administrator could elect to add or delete conditions of approval; 3) The Zoning Administrator could deny approval of the requested permits if you are unable to make all of the required findings. Planning Division staff is confident that the required findings can be made based on the submitted evidence and subject to the recommended conditions of approval. Consequently, planning staff does not recommend further consideration of these alternatives.

**RESOLUTION OF THE ZONING ADMINISTRATOR
OF THE COUNTY OF HUMBOLDT**

Resolution Number 19-

**Record Number: PLN-10897-SP
Assessor's Parcel Number: 108-033-014**

Makes the required findings for certifying compliance with the California Environmental Quality Act and conditionally approves the Amaranth Farms, Special Permits request.

WHEREAS, Amaranth Farms, submitted an application and evidence in support of approving the Special Permits to relax the six hundred-foot (600') setback from the King Range National Conservation Area, to permit an existing ten-thousand (10,000) square foot commercial medical cannabis operation with a spring water source, drying and curing onsite with processing off-site, and to retroactively allow work for a diversion within a Streamside Management Area; and

WHEREAS, the County Planning Division has reviewed the submitted application and supporting substantial evidence and has referred the application and evidence to involved reviewing agencies for site inspections, comments and recommendations; and

WHEREAS, the County Planning Division, the lead agency, prepared an Addendum to the Final Mitigated Negative Declaration prepared for the Commercial Medical Land Use Ordinance (CMMLUO) adopted by the Humboldt County Board of Supervisors on January 26, 2016. The proposed project does not present substantial changes that would require major revisions to the previous mitigated negative declaration. No new information of substantial importance that was not known and could not be known at the time was presented as described by §15162(c) of CEQA Guidelines; and

WHEREAS, Attachment 2 in the Planning Division staff report includes substantial evidence in support of making all of the required findings for approving the proposed Special Permit (Record Number PLN-10897-SP and

WHEREAS, a public hearing was held on the matter before the Humboldt County Zoning Administrator on December 5, 2019.

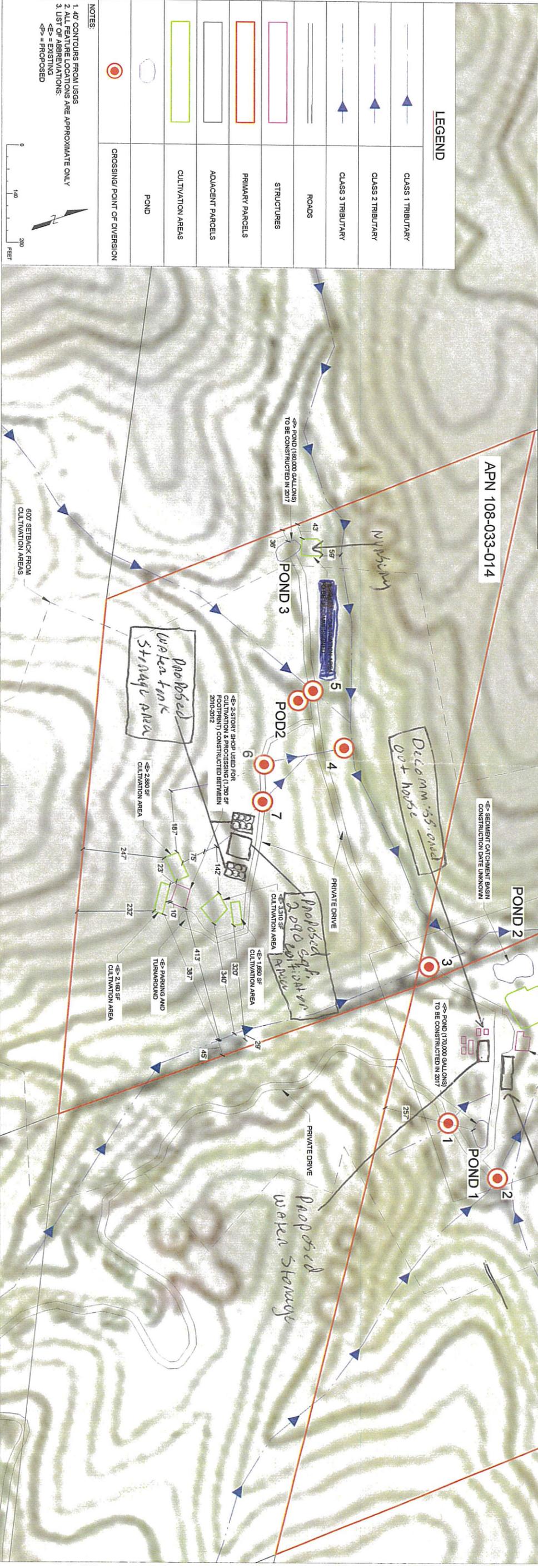
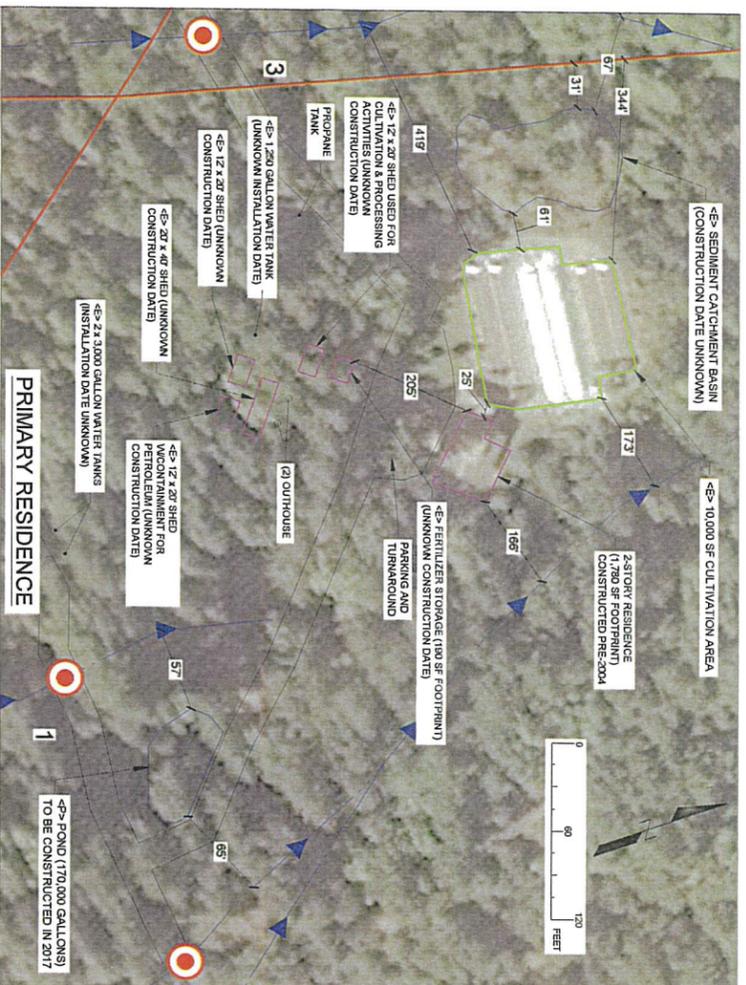
NOW, THEREFORE, be it resolved, determined, and ordered by the Humboldt County Zoning Administrator that:

1. The proposed project is exempt from environmental review; and
2. The findings in Attachment 2 of the Planning Division staff report support approval of Record Number PLN-10897-SP based on the submitted substantial evidence; and
3. Special Permit Record Number PLN-10897-SP is approved as recommended and conditioned in Attachment 1.

Adopted after review and consideration of all the evidence on December 5, 2019.

I, John Ford, Zoning Administrator of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above entitled matter by said Zoning Administrator at a meeting held on the date noted above.

John Ford, Zoning Administrator
Planning and Building Department
County of Humboldt



LEGEND

	CLASS 1 TRIBUTARY
	CLASS 2 TRIBUTARY
	CLASS 3 TRIBUTARY
	ROADS
	STRUCTURES
	PRIMARY PARCELS
	ADJACENT PARCELS
	CULTIVATION AREAS
	POND
	CROSSING POINT OF DIVERSION

NOTES:
 1. 40' CONTOURS FROM USGS
 2. ALL FEATURE LOCATIONS ARE APPROXIMATE ONLY
 3. LIST OF ABBREVIATIONS:
 <-> = EXISTING
 <-> = PROPOSED

APN'S 108-033-004 AND 108-033-014
PLOT PLAN
 HUMBOLDT COUNTY



Design:	JM
Drawn:	CL
Checked:	JM
Appr'd:	

SITE PLAN	
Project:	546.12
Scale:	AS NOTED
Date:	6/14/2017
Sheet:	2 OF 2

108-033-014

area
reduced

APN: 108-033-014
Cultivation Documentation

DATA SOURCES: Aerial Imagery, NAD 83
Block, Lot, Owners, LHM 2015

MAP PROJECTION:
NAD 1983 UTM Zone 18N
Transverse Mercator

LEGEND



Parcel



Cultivation

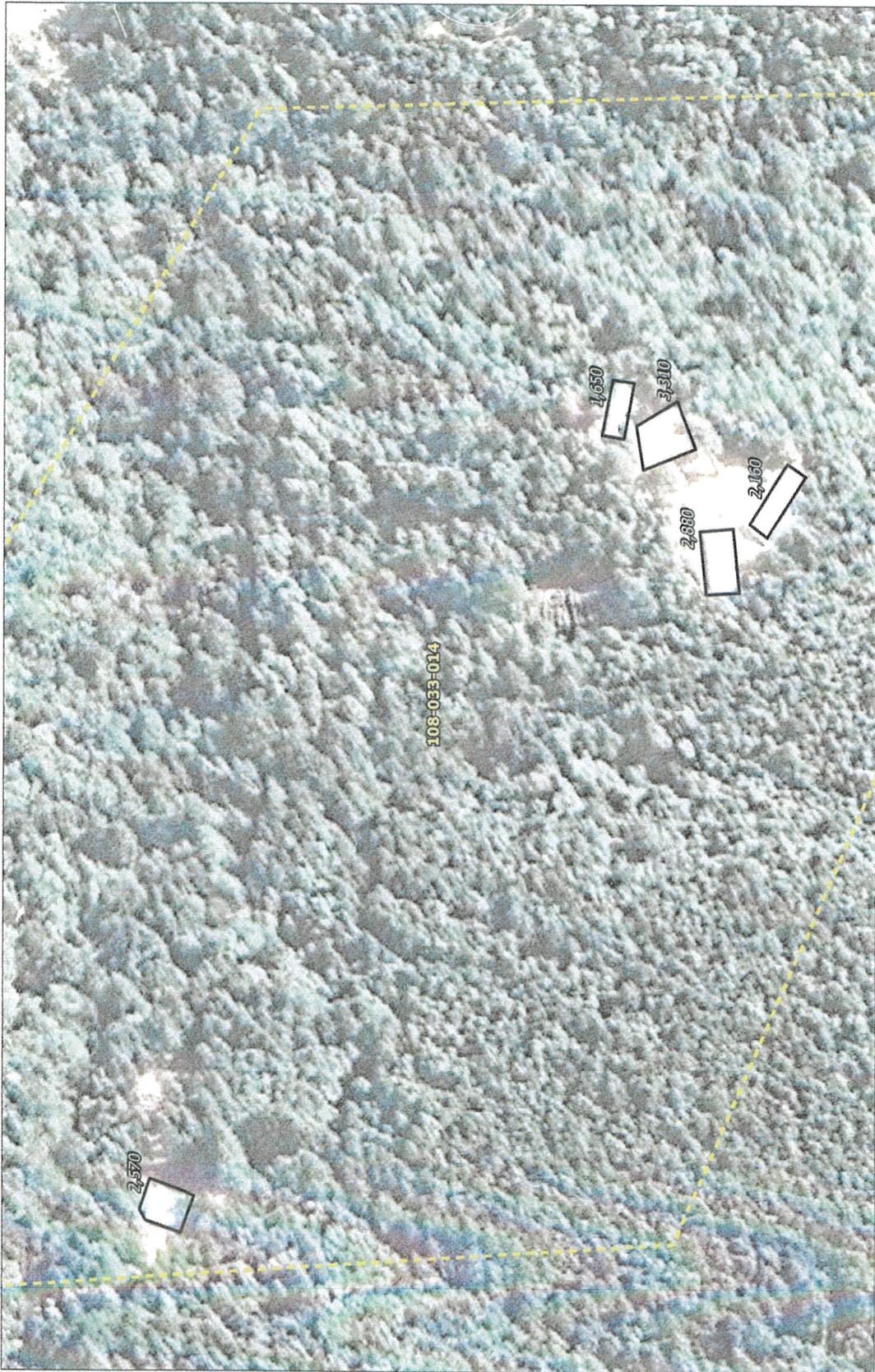
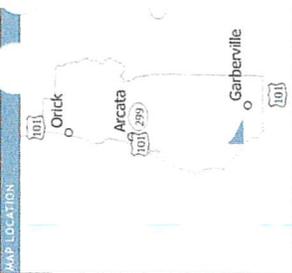
(labeled with square footage)

12,570 sq ft total

Scalewater Sci
SCALE: NORTH ARROW



1 in = 132 feet
MAP LOCATION

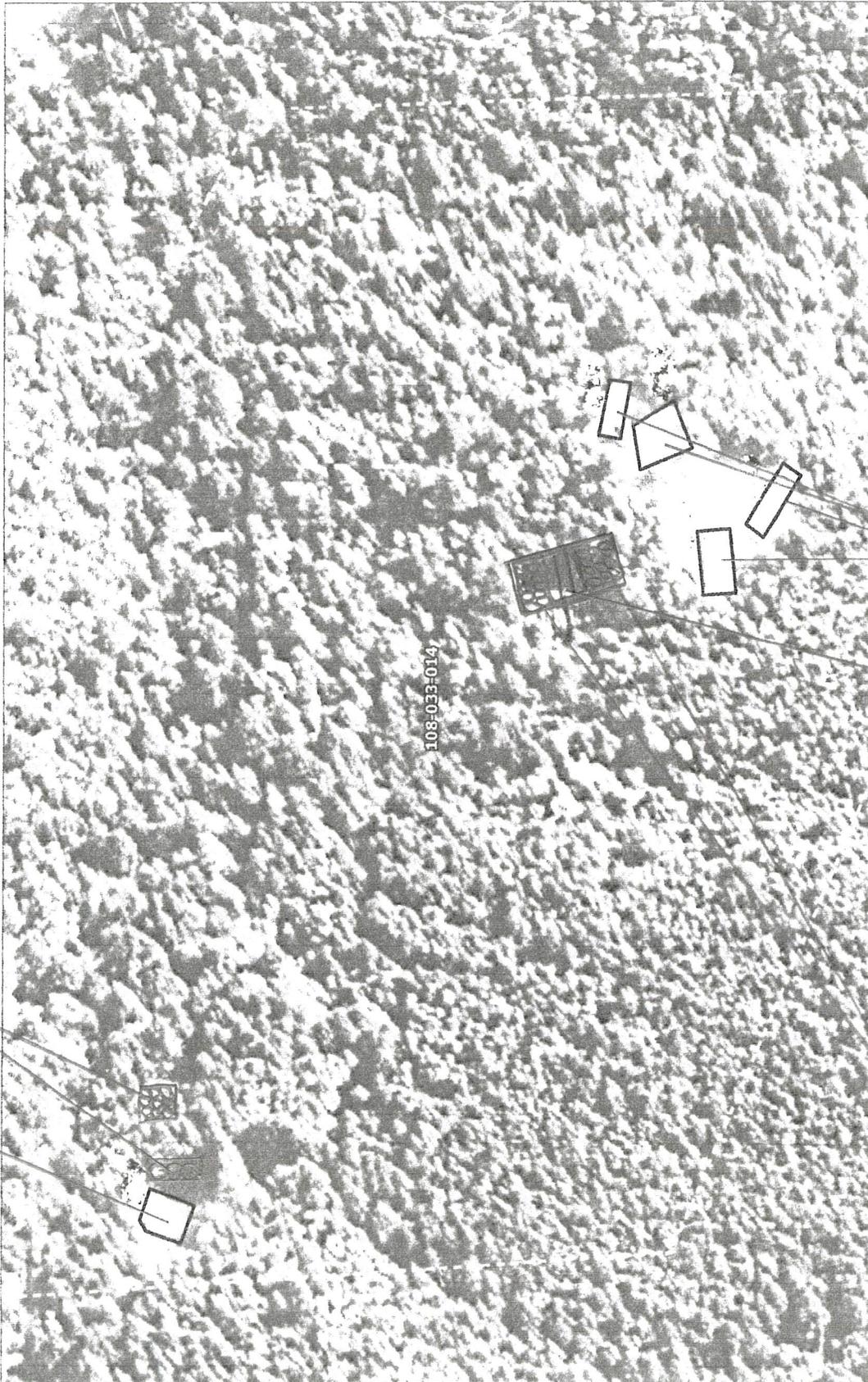


RECEIVED

NOV 13 2019

Humboldt County
Cannabis Svcs.

Existing 960 S.F. NURSERY
Proposed water storage area



EXISTING 7910 S.F.

Proposed water storage area

Proposed 2090 S.F. cultivation area

= 10,000 S.F.

DATA SOURCE:
Aerial Composite 2018-2019
MapInfo, MapInfo, 1:25,000

MAP DATA:
MapInfo 2018/2019
Aerial Composite

Parcel



Cultivation Areas
(labeled with square foot
12,570 sq ft total)

12,570 sq ft total

1:1,000

Orick

Arcata

Garberville

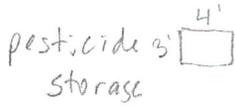
Amaranth Farms

108-033-014

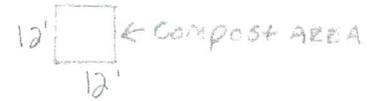
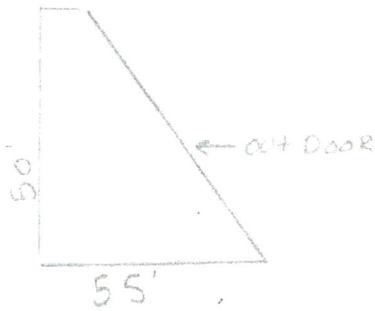
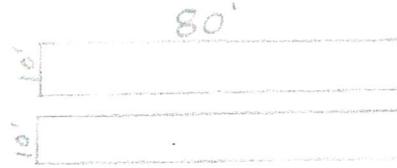
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Premises diagram
Cultivation area

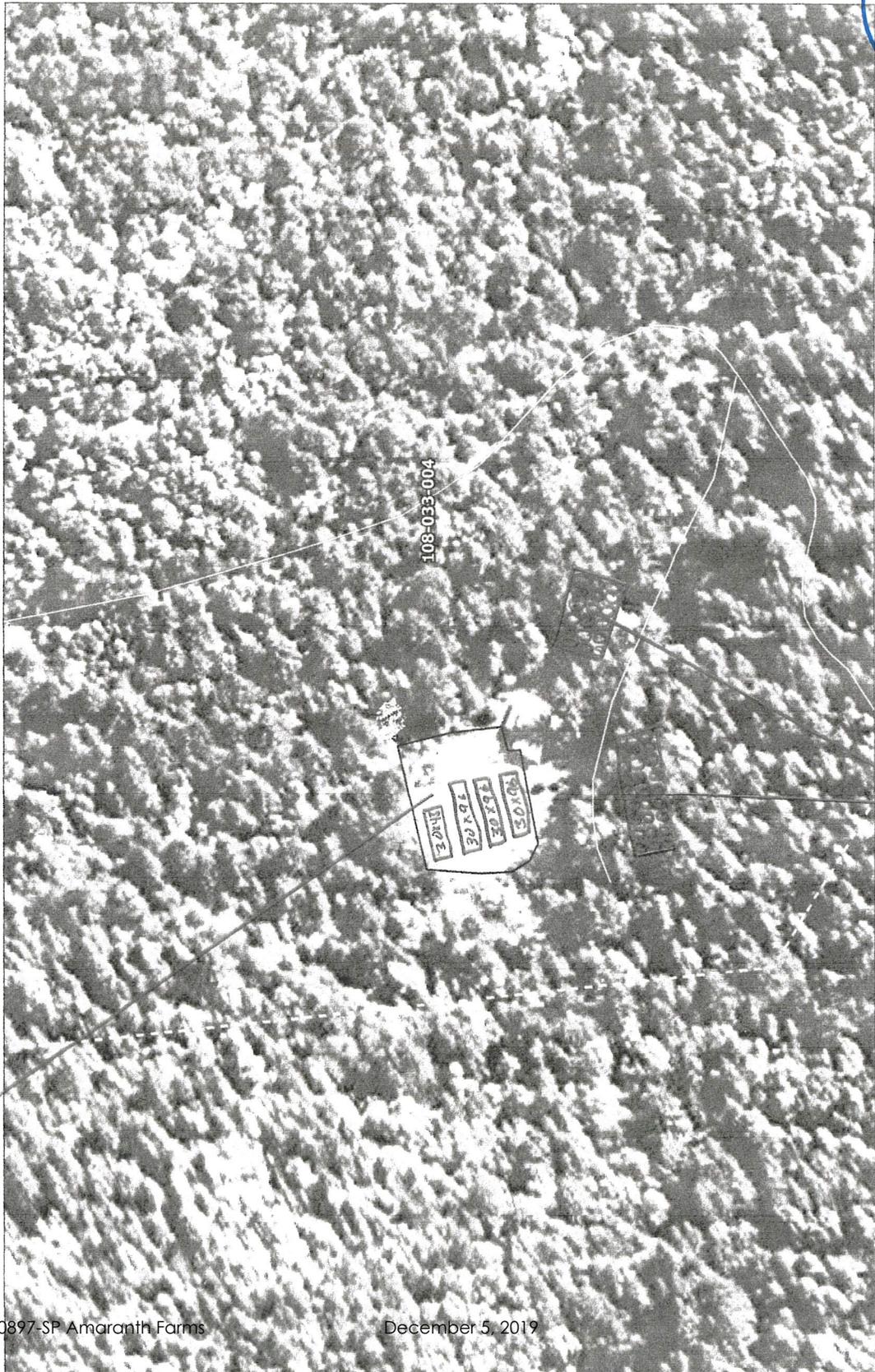


drying and storage cabin



Total Square Foot 7,910

Proposed 1-30x45 Greenhouse
Proposed 3-30x96 Greenhouses all within existing area



APN 108-033-004
Cultivation Documentation
Date of Sale: 10/27/2014
Parcel: 108-033-004
Block: 108-033-004
Map: 108-033-004
Map Projection:
NAD 1983 UTM Zone 10N
Datum: North American Datum 1983
Legend

Parcel
Cultivation Areas
(labeled with square footage)
14,629 sq ft total

Scale & North Arrow
1 in = 109 feet
1:1,210
MAP LOCATION
Orick
Arcata
Garberville

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NOV 13 2019
Humboldt County
Cannabis Svcs

Proposed water storage area

ATTACHMENT 1
Recommended Conditions of Approval

APPROVAL OF THE SPECIAL PERMIT IS CONDITIONED ON THE FOLLOWING TERMS AND REQUIREMENTS WHICH MUST BE SATISFIED BEFORE THE PROVISIONAL CANNABIS CULTIVATION PERMIT CAN BE FINALIZED.

1. The applicant shall execute a Compliance Agreement with the Humboldt County Planning Department detailing all necessary permits and infrastructure improvements described under Conditions of Approval #5 – 21. The agreement shall provide a timeline for completing all outstanding items. All activities detailed under the agreement must be completed to the satisfaction of the Planning and Building Department before the permit may be finalized and no longer considered provisional.
2. The applicant shall provide receipts of the use of portable toilets and handwashing stations for cultivation staff. No processing can occur onsite until an on-site waste water disposal system (OWTS) has been permitted for a commercial processing facility. A letter from the Division of Environmental Health (DEH) indicating approval has been issued will satisfy this condition.
3. All mixed light cultivation used in the appurtenant nursery shall comply with International Dark Sky Association standards for Lighting Zone 0 and Lighting Zone 1 and be designed to regulate light spillage onto neighboring properties resulting from backlight, up light, or glare (BUG). International Dark Sky Association standards exceed the requirements of Scenic Resources Standard SR-S4, Light and Glare, that lighting be fully shielded, and designed and installed to minimize off-site lighting and direct light within the property boundaries. Should the Humboldt County Planning Division receive complaints that the lighting is out of alignment or not complying with these standards, within ten (10) working days of receiving written notification that a complaint has been filed, the applicant shall submit written verification that the lights' shielding and alignment has been repaired, inspected, and corrected as necessary. No mixed-light in the appurtenant nursery is authorized by this permit until the structures and greenhouses can be demonstrated to comply with these standards.
4. Noise generated from generators shall not exceed 50db at 100 feet from the generator or at the edge of the nearest forest habitat, whichever is closer, as required by Section 314-55.4.11(o) Humboldt County Code. No mixed-light in the appurtenant nursery is authorized by this permit until the structures and greenhouses can be demonstrated to comply with these standards.
5. The applicant shall obtain all necessary building permits and grading permits from the Building Inspection Division (BID) for all structures related to the commercial cannabis cultivation operation, including all greenhouses, agricultural buildings, sheds, barns, and the rainwater catchment pond used in cultivation. The applicant shall submit floor plans including dimensions with electrical, mechanical and plumbing details for all existing Agriculture Exempt Structures and an Agriculture Exempt letter of intent for each. The applicant shall submit two complete sets of construction plans developed by a California-licensed engineer for the building permits. All building plans submitted for approval shall be consistent with those approved by the Zoning Administrator.
6. The applicant shall be compliant with the County of Humboldt's Certified Unified Program Agency (CUPA) requirements regarding any hazardous materials. A written verification of compliance shall be required before any provisional permits may be finalized. Ongoing proof of compliance with this condition shall be required at each annual inspection in order to keep

the permit valid.

7. The applicant shall implement all corrective actions detailed within the Water Resource Protection Plan developed for the parcel, prepared pursuant to Tier 2 enrollment under the North Coast Regional Water Quality Control Board Cannabis Waste Discharge Regulatory Program, including those measures later determined necessary during annual and periodic site inspections in accordance with the monitoring element until the Applicant has demonstrated enrollment in the State Cannabis Cultivation Discharge Program as described by Condition of Approval #8.
8. The applicant is to submit evidence of enrollment into the State Cannabis Cultivation Discharge program by submitting copies of all documents filed with the State Water Resources Control Board, including, but not limited to, a Notice of Applicability and a Site Management Plan. The applicant is required to adhere to and implement the requirements contained in the SWRCB's Cannabis Cultivation Policy, the General Order and the Notice of Applicability. A copy of the reporting form portion of the Mitigation and Reporting Program (MRP) shall be submitted annually to the Planning and Building Department concurrent with the submittal to the SWRCB.
9. Should the Fully Contained Spring Exemption be granted on the adjacent parcel 108-033-004 in an amount sufficient to meet the irrigation needs of both operations, the applicant shall cause to be recorded a contingent easement for access to the water source.
10. Water meters shall be installed to measure water usage for irrigation.
11. The use of water bladders shall be discontinued.
12. The access road shall be paved for a minimum width of 20 feet and a length of 50 feet where it intersects Wilder Ridge Road. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way.
13. All private road intersections onto the County Road shall be maintained in accordance with County Code Section 341-1 (Sight Visibility Ordinance). This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.
14. Applicant shall meet all State Responsibility Area (SRA) requirements, including installation of a turnaround for emergency vehicles, maintenance of defensible space, and installation of a 2,500-gallon water tank near the residence.
15. The applicant shall adhere to all terms and reporting requirements of the Final Lake and Streambed Alteration Agreement signed with the California Department of Fish and Wildlife. (1600-2016-0487-R1).
16. The applicant is to notify the California Department of Fish and Wildlife (CDFW) to determine if improvements are required to ensure the pond is hydrologically disconnected to surface waters and there is a spillway that can handle a 100-year storm event, minimize wildlife entrapment and draft and implement a bullfrog management plan. The applicant shall adhere to all terms and conditions of the Final Streambed Alteration Agreement if CDFW determines the pond is jurisdictional to that agency. A copy of the Final Streambed Alteration

Agreement or letter from CDFW stating an agreement is not required will satisfy this condition.

17. The applicant is to comply with the Bullfrog Management Plan.
18. The applicant shall submit a Timber Conversion Evaluation Report prepared by a Registered Professional Forester (RPF) evaluating the timber conversion history on the parcel and compliance with Forest Practice Rules. The applicant shall implement the recommendations in the report.
19. The applicant shall submit a restocking plan for replanting of trees at a ratio of 3:1 should the up to five (5) Douglas-fir trees be removed as a result of the proposed pond expansion. The plan is subject to approval by the Planning Director in consultation with CDFW. Replanting shall be monitored for a period of three to five years and achieve 80% survival rate.
20. The applicant is to contact the local fire service provider [Telegraph Ridge Fire Protection District] and furnish written documentation from that agency of the available emergency response and fire suppression services and any recommended project mitigation measures. If emergency response and fire suppression services are not provided, the applicant shall cause to be recorded an "ACKNOWLEDGMENT OF NO AVAILABLE EMERGENCY RESPONSE AND FIRE SUPPRESSION SERVICES" for the parcel(s) on a form provided by the Humboldt County Planning Division.
21. The applicant shall execute and file with the Planning Division the statement titled, "Notice and Acknowledgment regarding Agricultural Activities in Humboldt County," ("Right to Farm" ordinance) as required by the HCC and available at the Planning Division.
22. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will provide a bill to the applicant after the decision. Any and all outstanding Planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

Ongoing Requirements/Development Restrictions Which Must be Satisfied for the Life of the Project:

1. All components of project shall be developed, operated, and maintained in conformance with the Project Description, the approved Site Plan, the Plan of Operations, and these conditions of approval. Changes shall require modification of this permit except where consistent with Humboldt County Code Section 312-11.1, Minor Deviations to Approved Plot Plan.
2. If offsite processing is chosen to be the preferred method of processing, this permit shall be modified to identify the offsite licensed facility.
3. Cannabis cultivation and other commercial cannabis activity shall be conducted in compliance with all laws and regulations as set forth in the CMMLUO and MAUCRSA, as applicable to the permit type.
4. If operating pursuant to a written approved compliance agreement, permittee shall abate or cure violations at the earliest feasible date, but in no event no more than two (2) years from the date of issuance of a provisional clearance or permit. Permittee shall provide plans for curing such violations to the Planning and Building Department within one (1) year of issuance of the provisional clearance or permit. If good faith effort towards compliance can be shown

within the two years following the issuance of the provisional clearance or permit, The Planning Department may, at the discretion of the Director, provide for extensions of the provisional permit to allow for additional time to meet the outstanding requirements.

5. Possession of a current, valid required license, or licenses, issued by any agency of the State of California in accordance with the MAUCRSA, and regulations promulgated thereunder, as soon as such licenses become available.
6. Compliance with all statutes, regulations and requirements of the California State Water Resources Control Board and the Division of Water Rights, at a minimum to include a statement of diversion of surface water from a stream, river, underground stream, or other watercourse required by Water Code Section 5101, or other applicable permit, license, or registration, as applicable.
7. Confinement of the area of cannabis cultivation, processing, manufacture or distribution to the locations depicted on the approved site plan. The commercial cannabis activity shall be set back at least 30 feet from any property line, and 600 feet from any School, School Bus Stop, Church or other Place of Religious Worship, or Tribal Cultural Resources, except where a reduction to this setback has been approved pursuant to County Code Section 55.4.11(d).
8. Maintain enrollment in Tier 1, 2 or 3, certification with the NCRWQCB Order No. R1-2015-0023, if applicable, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency.
9. For cultivation area(s) for which no enrollment pursuant to RWQB Order No. R1-2015-0023 is required by that Order, comply with the standard conditions applicable to all Tier 1 dischargers.
10. Consent to an annual on-site compliance inspection, with at least 24 hours prior notice, to be conducted by appropriate County officials during regular business hours (Monday – Friday, 9:00 am – 5:00 pm, excluding holidays).
11. Refrain from the improper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide.
12. Pay all applicable application, review for conformance with conditions and annual inspection fees.
13. Power is supplied by a generator for cannabis operations. The noise from the generator or fans shall not be audible by humans from neighboring residences. The decibel level for generators measured at the property line shall be no more than 60 decibels. Where applicable, sound levels must also show that they will not result in the harassment of Marbled Murrelet or Spotted Owl species. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service, and further consultation where necessary. Under these guidelines, generator noise may not exceed 50 decibels as measured at 100 feet from the generator or at the edge of the nearest Marbled Murrelet or Spotted Owl habitat, whichever is closer.
14. Storage of Fuel - Fuel shall be stored and handled in compliance with applicable state and local laws and regulations, including the County of Humboldt's CUPA program, and in such a way that no spillage occurs.

15. The Master Log Books maintained by the applicant to track production and sales shall be maintained for inspection by the County.
16. Pay all applicable taxes as required by the Humboldt County Commercial Marijuana Cultivation Tax Ordinance (Section 719-1 et seq.).
17. Participate in and bear costs for permittee's participation in the Cannabis Track and Trace Program administered by the Humboldt County Agricultural Commissioner.
18. The use of monofilament netting for all uses, including but not limited for erosion control, shall be prohibited. Geotextiles, fiber rolls, and other erosion control measure materials shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves to minimize the risk of ensnaring and strangling wildlife.
19. Leave wildlife unharmed. If any wildlife is encountered during the Authorized Activity, Permittee shall not disturb the wildlife and shall allow wildlife to leave the work site unharmed.
20. The environmental impacts of improper waste disposal are significant and well documented. All refuse shall be contained in wildlife proof storage containers, at all times, and disposed of at an authorized waste management facility.
21. Artificial light used in cultivation and clone/start propagation operations will adhere to shielding and International Dark Sky Association standards as set forth in the CMMLUO.
22. Pursuant to the MAUCRSA, Health and Safety Code Section 19322(a)(9), an applicant seeking a cultivation license shall "provide a statement declaring the applicant is an 'agricultural employer,' as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 commencing with Section 1140) of Division 2 of the Labor Code), to the extent not prohibited by law."
23. Cultivators shall comply with all applicable federal, state, and local laws and regulations governing California Agricultural Employers, which may include: federal and state wage and hour laws, CAL/OSHA, OSHA, California Agricultural Labor Relations Act, and the Humboldt County Code (including the Building Code).
24. Cultivators engaged in processing shall comply with the following Processing Practices:
 - I. Processing operations must be maintained in a clean and sanitary condition including all work surfaces and equipment.
 - II. Processing operations must implement protocols which prevent processing contamination and mold and mildew growth on cannabis.
 - III. Employees handling cannabis in processing operations must have access to facemasks and gloves in good operable condition as applicable to their job function.
 - IV. Employees must wash hands sufficiently when handling cannabis or use gloves.
25. All persons hiring employees to engage in commercial cannabis cultivation and processing shall comply with the following Employee Safety Practices:
 - i. Cultivation operations and processing operations must implement safety protocols and provide all employees with adequate safety training relevant to their specific job functions, which may include:
 - 1) Emergency action response planning as necessary;
 - 2) Employee accident reporting and investigation policies;
 - 3) Fire prevention;

- 4) Hazard communication policies, including maintenance of material safety data sheets (MSDS);
 - 5) Materials handling policies;
 - 6) Job hazard analyses; and
 - 7) Personal protective equipment policies, including respiratory protection.
- ii. Cultivation operations and processing operations must visibly post and maintain an emergency contact list which includes at a minimum:
 - 8) Operation manager contacts;
 - 9) Emergency responder contacts;
 - 10) Poison control contacts.
 - iii. At all times, employees shall have access to safe drinking water and toilets and handwashing facilities that comply with applicable federal, state, and local laws and regulations. Plumbing facilities and water source must be capable of handling increased usage without adverse consequences to neighboring properties or the environment.
 - iv. On site-housing provided to employees shall comply with all applicable federal, state, and local laws and regulations.
26. All cultivators shall comply with the approved Processing Plan as to the following:
- i. Processing Practices.
 - ii. Location where processing will occur.
 - iii. Number of employees, if any.
 - iv. Employee Safety Practices.
 - v. Toilet and handwashing facilities.
 - vi. Plumbing and/or septic system and whether or not the system is capable of handling increased usage.
 - vii. Drinking water for employees.
 - viii. Plan to minimize impact from increased road use resulting from processing.
 - ix. On-site housing, if any.

27. Term of Commercial Cannabis Activity Special Permit. Any Commercial Cannabis Cultivation Special Permit issued pursuant to the CMMLUO shall expire after one (1) year after date of issuance, and on the anniversary date of such issuance each year thereafter, unless an annual compliance inspection has been conducted and the permittees and the permitted site have been found to comply with all conditions of approval.

If the inspector or other County official determines that the permittees or site do not comply with the conditions of approval, the inspector shall serve the Special Permit or permit holder with a written statement identifying the items not in compliance, and the action that the permit holder may take to cure the non-compliance, or file an appeal within ten (10) days of the date that the written statement is delivered to the permit holder. Personal delivery or mailing the written statement to the mailing address listed on the application by regular mail, plus three (3) days after date of mailing, shall constitute delivery. The permit holder may request a reinspection to determine whether or not the permit holder has cured all issues of non-compliance. Failure to request reinspection or to cure any items of non-compliance shall terminate the Special Permit, immediately upon the expiration of any appeal period, or final determination of the appeal if an appeal has been timely filed pursuant to Section 55.4.13 of the CMMLUO.

28. Acknowledgements to Remain in Full Force and Effect. Permittee acknowledges that the

County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed in which the cultivation area is located will not support diversions for irrigation.

Permittee further acknowledges and declares that:

- (1) All commercial cannabis activity that I, my agents, or employees conduct pursuant to a permit from the County of Humboldt for commercial cultivation, processing, manufacturing, and distribution of cannabis for adult use or medicinal use within the inland area of the County of Humboldt, shall at all times be conducted consistent with the provisions of the approved County permit; and
- (2) All cannabis or cannabis products under my control, or the control of my agents or employees, and cultivated or manufactured pursuant to local Ordinance and the State of California Medicinal and Adult Use Cannabis Regulation and Safety Act ("MAUCRSA") (SB 94), will be distributed within the State of California; and
- (3) All commercial cannabis activity conducted by me, or my agents or employees pursuant to a permit from the County of Humboldt will be conducted in compliance with the State of California MAUCRSA.

29. Transfers. Transfer of any leases or permits approved by this project is subject to the review and approval of the Planning Director for conformance with CMMLUO eligibility requirements, and agreement to permit terms and acknowledgments. The fee for required permit transfer review shall accompany the request. The request shall include the following information:

- (1) Identifying information for the new Owner(s) and management as required in an initial permit application;
- (2) A written acknowledgment by the new Owner in accordance as required for the initial Permit application;
- (3) The specific date on which the transfer is to occur; and
- (4) Acknowledgement of full responsibility for complying with the existing permit; and
- (5) Execution of an Affidavit of Non-diversion of Commercial Cannabis.

30. Inspections. The permit holder and subject property owner are to permit the County or representative(s) or designee(s) to make inspections at any reasonable time deemed necessary to assure that the activities being performed under the authority of this permit are in accordance with the terms and conditions prescribed herein.

Informational Notes:

1. Pursuant to Section 314-55.4.11 (a) of the CMMLUO, if upon inspection for the initial application, violations of any building or other health, safety, or other state of county statute, ordinance, or regulation are discovered, the Planning and Building Department may issue a provisional clearance or permit with a written approved Compliance Agreement. By signing the agreement, the permittee agrees to abate or cure the violations at the earliest opportunity but in no event more than two (2) years of the date of issuance of the provisional clearance or permit. Plans for curing the violations shall be submitted to the Planning and Building Department by the Permittee within one (1) year of the issuance of the provisional certificate or permit. The terms of the compliance agreement may be appealed pursuant to section 314-55.4.13 of the CMMLUO.

2. This provisional permit approval shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date"); except where the Compliance Agreement per Condition of Approval #1 has been executed and the corrective actions pursuant to the agreement are being undertaken. Once building permits have been

secured and/or the use initiated pursuant to the terms of the agreement, the use is subject to the Permit Duration and Renewal provisions set forth in Conditions of Approval #27 of the On-Going Requirements /Development Restrictions, above.

3. If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist as well as the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code Section 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the Native American Heritage Commission will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to Public Resources Code Section 5097.98. Violators shall be prosecuted in accordance with Public Resources Code Section 5097.99.

4. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will provide a bill to the applicant after the decision. Any and all outstanding Planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

5. The Applicant is responsible for costs for post-approval review for determining project conformance with conditions on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will send a bill to the Applicant for all staff costs incurred for review of the project for conformance with the conditions of approval. All Planning fees for this service shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

6. A Notice of Determination (NOD) will be prepared and filed with the County Clerk for this project in accordance with the State CEQA Guidelines. Within three days of the effective date of permit approval, it is requested that the applicant submit a check or money order for the required filing fee in the amount of \$50 payable to the Humboldt County Clerk/Recorder. If this payment is not received within this time period, the Department will file the NOD and will charge this cost to the project.

7. The Applicant is responsible for costs for post-approval review for determining project conformance with conditions prior to release of building permit or initiation of use and at time of annual inspection. In order to demonstrate that all conditions have been satisfied, applicant is required to pay the conformance review deposit as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors (currently \$750) within sixty (60) days of the effective date of the permit or upon filing of the Compliance Agreement (where applicable), whichever occurs first. Payment shall be made to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

ATTACHMENT 2

Required Findings for Approval

Required Findings: To approve this project, the Hearing Officer must determine that the applicant has submitted evidence in support of making **all** of the following required findings.

The County Zoning Ordinance, Sections 312-1.1.2 and 312-17.1 of the Humboldt County Code (Required Findings for All Discretionary Permits) specifies the findings that are required to grant a Special Permit:

1. The proposed development is in conformance with the Humboldt County General Plan, the Open Space Plan, and the Open Space Action Plan;
2. The proposed development is consistent with the purposes of the existing zone in which the site is located;
3. The proposed development conforms with all applicable standards and requirements of these regulations; and
4. The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare; or materially injurious to property or improvements in the vicinity.
5. The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law (the midpoint of the density range specified in the plan designation) unless the following written findings are made supported by substantial evidence: 1) the reduction is consistent with the adopted general plan including the housing element; and 2) the remaining sites identified in the housing element are adequate to accommodate the County share of the regional housing need; and 3) the property contains insurmountable physical or environmental limitations and clustering of residential units on the developable portions of the site has been maximized.
6. In addition, the California Environmental Quality Act (CEQA) states that one of the following findings must be made prior to approval of any development which is subject to the regulations of CEQA. The project either:
 - a. Is categorically or statutorily exempt; or
 - b. Has no substantial evidence that the project will have a significant effect on the environment and a negative declaration has been prepared; or
 - c. Has had an environmental impact report (EIR) prepared and all significant environmental effects have been eliminated or substantially lessened, or the required findings in Section 15091 of the CEQA Guidelines have been made.

1. The proposed development must be consistent with the General Plan. The following table identifies the substantial evidence which supports finding that the proposed development is in conformance with all applicable policies and standards of the Humboldt County General Plan (GP), the Open Space Plan, and the Open Space Action Plan.

Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Land Use Chapter 4</p> <p>Land Use Designations Section 4.8</p>	<p>Residential Agriculture (RA40): This designation applies to large lot residential uses that typically rely upon on-site water and wastewater systems.</p> <p>Density range is 40 -160 acres/unit.</p>	<p>The proposed project includes approximately 10,000 square feet of outdoor cannabis cultivation on lands designated as Residential Agriculture. General agriculture is an allowable use type for this designation.</p>
<p>Circulation Chapter 7</p>	<p>Goals and policies contained in this Chapter relate to a balanced, safe, efficient, accessible and convenient circulation system that is appropriate for each type of unincorporated community (C-G1,C-G2); coordinated planning design, development, operations, and maintenance between the County and other transportation system service providers (C-G3); and access for all transportation mode types with improved opportunities to move goods within, into and out of Humboldt County. (C-G4, C-G5)</p> <p>Related policies: C-P3. Consideration of Transportation Impacts in Land Use Decision Making.</p>	<p>Access to the site is a 0.5-mile segment of Windy Ridge Lane where it intersects Wilder Ridge Road, and a 0.75-mile private drive that accesses the subject parcel. The applicant has provided a Road Evaluation Report for the roads self-certifying that the roads meet the functional equivalence of a Category 4 road. Pictures taken at ¼ mile intervals were provided to supplement the road evaluation. There will be up to three (3) employees on site. Public Works commented and requested the intersection of Windy Ridge Lane and the County Road be paved for a width of 20 feet and length of 50 feet to meet commercial standards and sight visibility standards. The applicant is required to obtain an encroachment permit before starting any work. These items are included as conditions of approval.</p>
<p>Housing Chapter 8</p>	<p>Goals and policies contained in this Element seek to identify existing and projected housing needs and establish goals, policies, standards and measures for the preservation, improvement, and development of housing.</p>	<p>The project does not involve residential development, nor is the project site part of the Housing Element Residential Land Inventory.</p>

Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Conservation and Open Space Chapter 10</p> <p>Open Space Section 10.2</p> <p>Public Lands Chapter 4.7</p>	<p>Goals and policies contained in this Chapter relate to an Open Space and Conservation Program that is complimentary to other agencies' plans and that preserves the county's unique open spaces (CO-G1, CO-G3)</p> <p>Related policies: CO-P1, Conservation and Open Space Program; CO-P12, Development Review, CO-S1. Identification of Local Open Space Plan, and CO-S2. Identification of the Open Space Action Program</p> <p>Public lands policy PL-P6 requires that discretionary review of permit applications adjacent to public lands shall consider impacts to public lands and consistency with applicable management plans.</p>	<p>The proposed project is included in the Open Space Land Plan because the project site is designated Residential Agriculture (RA). Cannabis cultivation is an agricultural activity and an allowable use type in this designation, consistent with this policy.</p> <p>The project is located adjacent to the King Range National Conservation Area managed by the Bureau of Land Management (BLM). The adjacent public lands are subject to the 2005 <i>King Range National Conservation Area Resource Management Plan (RMP)</i>. The lands adjacent to the project site are designated Frontcountry Zone in the RMP, and management activities in that zone include forest stand management, fuel reduction, fire break construction, and watershed restoration. The project is consistent with the RMP because the cultivation activities will protect fisheries and aquatic habitat on forest lands by maintaining buffers from streams and by placing controls on the storage and use of pesticides, rodenticides and fertilizers, and will minimize risk from wildfire by adhering to the County's Fire Safe Regulations and the requiring adequate road access. The RMP's provisions for protection of heritage resources will be met through the project consultation with Tribal Historic Preservation Officers and avoidance of sensitive tribal cultural resources. The project is consistent with recreational use on public lands by maintaining a minimum 600 buffer separation from developed campgrounds and trails.</p> <p>See Section 10.3 <i>Biological Resources</i> for additional information.</p>

<p>Conservation and Open Space</p> <p>Chapter 10</p> <p>Biological Resources</p> <p>Section 10.3</p>	<p>Goals and policies contained in this Chapter relate to mapped sensitive habitat areas where policies are applied to protect fish and wildlife and facilitate the recovery of endangered species (BR-G1, Threatened and Endangered Species, BR-G2, Sensitive and Critical Habitat, BR-G3, Benefits of Biological Resources)</p> <p>Related policies: BR-P1. Compatible Land Uses, BR-P5. Streamside Management Areas.</p>	<p>The project is for 10,000 square feet of existing outdoor cannabis cultivation. There are no mapped special status species on the subject parcel upon review of the California Natural Diversity Database (CNDDDB). The nearest mapped Marbled murrelet habitat is approximately 0.17 miles to the west on land managed by the Bureau of Land Management. According to an analysis by Dennis Halligan, Senior Fisheries Biologist of Stillwater Sciences, the nearest suitable habitat for Marbled Murrelet is 2,800 feet to the north (see Attachment 4). The Nearest Northern Spotted Owl activity center is located 1.48 miles northwest of the cultivation area. The primary power source on the property is a generator. The applicant proposes a solar panel array as an additional power source. Because the project is with an area that requires noise and light attenuation, ongoing conditions of approval require the maximum allowable generator noise exposure level is 50 dB when measured from the generator at a distance of 100 feet or at the edge of habitat, whichever is closer. These noise thresholds meet or exceed those recommended from CDFW to protect NSO habitat. Additionally, the applicant is required to ensure that no artificial light can escape from one hour before sunset and after sunrise to minimize impacts to nearby habitat.</p> <p>There is an unnamed Class III stream on the parcel that is tributary to East Fork Honeydew Creek, a Class II creek that flows across the northern portion of the parcel. The Point of Diversion used for irrigation is a spring that flows into the Class III and is within the Streamside Management Area (SMA). A Special Permit is included in this application to retroactively permit the work associated with the agricultural diversion. An existing cultivation area was located within the 50 foot setback of the Class III stream. The applicant has decommissioned this cultivation area. All development related to the cannabis cultivation is located outside of the SMA and Water Board setback requirements.</p>
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Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
		<p>Annual water use for irrigation is 110,393 gallons. Water for irrigation is provided by a Point of Diversion from an onsite spring that flows into East Fork Honeydew Creek. A Special Permit is included to retroactively permit the diversion work. Water storage totals 10,000 gallons in hard tanks and a water bladder. An existing pond is proposed to be enlarged to hold a capacity of 180,000 gallons. Water from the spring would be stored in the pond and used for irrigation. A condition is included requiring the use of the water bladder be discontinued.</p> <p>The applicant has a Final Lake or Streambed Alteration Agreement with the California Department of Fish and Wildlife (1600-2016-0487-R1) that includes two PODs, a pond, and seven crossings. Conditions of approval require the applicant to adhere to and implement all terms and conditions of the Final Streambed Alteration Agreement.</p> <p>The California Department of Fish and Wildlife responded with referral comments on November 7, 2019. CDFW requested an assessment of the access road leading to the project site to identify nonpoint source pollution prior to approval. However, this comment came after the project was already noticed for a public hearing. The applicant has demonstrated the road is functionally equivalent to a Category 4 road. Impacts from road use will not increase above baseline existing conditions and the conditions of approval include the requirement to implement road crossing improvements per the LSAA. By implementing the road crossing improvements of the LSA Agreement, the conditions on the property will be improved.</p>

Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Conservation and Open Space</p> <p>Chapter 10</p> <p>Cultural Resources</p> <p>Section 10.6</p>	<p>Goals and policies contained in this Chapter relate to the protection and enhancement of significant cultural resources, providing heritage, historic, scientific, educational, social and economic values to benefit present and future generations (CU-G1, Protection and Enhancement of Significant Cultural Resources)</p> <p>Related policies: CU-P1. Identification and Protection, CU-P2. Native American Tribal Consultation]</p>	<p>The project is located within the historical boundary of the Intertribal Sinkyone Wilderness Council and the Bear River Band of the Rohnerville Rancheria. The project was referred to the Northwest Information Center (NWIC), the Bear River Band of the Rohnerville Rancheria, and the Intertribal Sinkyone Wilderness Council. The NWIC recommended a cultural resource survey. The Bear River Band recommended standard inadvertent discovery protocols and the Sinkyone Council did not comment. Inadvertent discovery protocols are included as Informational Note #3.</p>
<p>Conservation and Open Space</p> <p>Chapter 10</p> <p>Scenic Resources</p> <p>Section 10.6</p>	<p>Goals and policies contained in this Chapter relate to the protection of scenic areas that contribute to the enjoyment of Humboldt County's beauty and abundant natural resources (SR-G1); and a system of scenic highways roadways that increase the enjoyment of, and opportunities for, recreational and cultural pursuits and tourism in the County. (SR-G2)</p> <p>Related policies: SR-S4. Light and Glare</p>	<p>The 960 square foot ancillary nursery will utilize artificial lighting. The CMMLUO requires that mixed-light cultivation comply with International Dark Sky Association standards for Lighting Zone 0 and Lighting Zone 1, and be designed to regulate light spillage onto neighboring properties resulting from backlight, uplight, or glare (BUG). International Dark Sky Association Standards exceed the requirements of Scenic Resources Standard SR-4, Light and Glare, that lighting be fully shielded, and designed and installed to minimize off-site lighting and direct light within the property boundaries. The project complies with International Dark Skies Association standards by covering greenhouses with lightproof covers during hours when supplemental lighting is applied.</p>

Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Water Resources</p> <p>Chapter 11</p> <p>Stormwater Drainage</p>	<p>Goals and policies contained in this Chapter relate to coordinated watershed planning and land use decision making to advance management priorities (WR-G3, WR-G4, WR-G5); watershed conservation and restoration efforts aimed at delisting water bodies and watersheds which are restored to meet all beneficial uses, including water use, salmon and steelhead recovery plans, recreational activities, and the economy (WR-G1, WR-G2, WR-G7, WR-G8, WR-G9); and</p> <p>Related policies: WR-P10. Erosion and Sediment Discharge; WR-P42. Erosion and Sediment Control Measures.</p>	<p>The applicant is enrolled with the North Coast Regional Water Quality Control Board Order No. R1-2015-0023 as a Tier 2 discharger. A Water Resources Protection Plan (WRPP) was prepared by Stillwater Sciences in December 2017 (see Attachment 4). No irrigation runoff was observed. Recommended remedial actions will be implemented as a condition of approval.</p> <p>The applicant was required to enroll in the State Cannabis Discharge program by July 2019. Conditions of approval require the applicant to submit evidence of enrollment into the State Cannabis Cultivation Discharge program by submitting copies of all documents filed with the State Water Resources Control Board, including, but not limited to, a Notice of Applicability and a Site Management Plan. The applicant is required to adhere to and implement the requirements contained in the SWRCB's Cannabis Cultivation Policy, the General Order and the Notice of Applicability. A copy of the reporting form portion of the Mitigation and Reporting Program (MRP) shall be submitted annually to the Planning and Building Department concurrent with the submittal to the SWRCB.</p>
<p>Water Resources</p> <p>Chapter 11</p> <p>Onsite Wastewater Systems</p>	<p>Goals and policies contained in this Chapter relate to adequate public water supply as well as onsite wastewater systems and natural and developed storm drainage systems that minimize interference with surface and groundwater flows and storm water pollution. (WR-G6, WR-G9, WR G10)</p> <p>Related policies: WR-IM7. Basin Plan Septic Requirements; and IS-P17. On-Site Sewage Disposal Requirements.</p>	<p>The site was previously developed with two outhouses. The Division of Environmental Health (DEH) commented on the project and requested the outhouses be removed under permit. The operator has provided receipts of the use of portable toilets for cultivation staff. A condition of approval requires the outhouses be removed and the applicant utilize portable toilets and handwashing stations for cultivation staff.</p>

Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Noise Chapter 13	<p>Goals and policies contained in this Chapter discourage incompatible uses within communities and reduce excessive noise through the application of standards (N-G1, N-G2)</p> <p>Related policies: N-P1, Minimize Noise from Stationary and Mobile Sources; N-P4, Protection from Excessive Noise</p>	<p>The proposed project is located in an area that requires noise attenuation measures. Electric power is supplied by a generator with a proposed solar array. The existing cultivation areas are outdoor. There is an on-site propagation area that utilizes supplemental lighting. The nearest Northern Spotted Owl (NSO) sighting is located approximately 1.05 miles to the west of the project site while the nearest NSO activity center is located 1.5 miles to the northwest. The nearest mapped Marbled murrelet habitat is located approximately 0.25 miles to the southwest of the project site. Conditions of approval require noise levels to be 50 dB at 100 feet or edge of habitat, whichever is closer when the generator is used. Conditions of approval require noise levels to be 50 dB at 100 feet or edge of habitat, whichever is closer when the generator is used.</p>

Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Safety Element Chapter 14</p> <p>Geologic & Seismic</p>	<p>Goals and policies contained in this Chapter relate to communities that are designed and built to minimize the potential for loss of life and property resulting from natural and manmade hazards; and to prevent unnecessary exposure to areas of geologic instability, floodplains, tsunami run-up areas, high risk wildland fire areas, and airport areas planned and conditioned to prevent unnecessary exposure of people and property to risks of damage or injury. (S-G1, S-G2)</p> <p>Related policies: S-P11, Site Suitability; and S-P7, Structural Hazards.</p>	<p>The project site is not located in a mapped Alquist-Priolo Fault Zone nor is it subject to liquefaction. The property is in an area rated as having high geologic instability. The existing cultivation area is on slopes between fifteen to thirty percent (15-30%). In addition, the Whale Gulch Bear Harbor fault zone runs through the parcel and the project is proximate to the King Range thrust. The southeast portion of the parcel is mapped with historic landslides. The existing operation does not expose the area to new geologic hazards, nor does it impact the level of existing geologic hazard. The existing pond proposed for expansion to 180,000 gallons is located on a natural flat. All grading will be done according to the engineered grading plans. As a condition of approval, the applicant will obtain all grading and building permits from the Building Inspection Division (BID) for greenhouses, buildings and pond construction with a nexus to cannabis. The existing uses, which are proposed to continue, are not expected to be affected by geologic instability. The project does not pose a threat to public safety related from exposure to natural or manmade hazards.</p>
<p>Safety Element Chapter 14</p> <p>Flooding</p>	<p>Goals and policies contained in this Chapter relate to the use of natural drainage channels and watersheds that are managed to minimize peak flows in order to reduce the severity and frequency of flooding. (S-G3)</p> <p>Related policies include: S-P12, Federal Flood Insurance Program; S-P13, Flood Plains; S-P15, Construction Within Special Flood Hazard Areas.</p>	<p>The site is outside any mapped flood hazard area. The project site is not within a mapped dam or levee inundation area and, at approximately 6.5 miles distance from the coast and is outside the areas subject to tsunami run-up.</p>

Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Safety Element</p> <p>Chapter 14</p> <p>Fire Hazards</p>	<p>Goals and policies of this Chapter encourage development designed to reduce the risk of structural and wildland fires supported by fire protection services that minimize the potential.</p> <p>Related policies: S-P19, Conformance with State Responsibility Areas (SRA) Fire Safe Regulations.</p>	<p>The subject property is located in an area designated as a high wildfire risk with a high fire hazard severity. The site is located within the State Responsibility Area and also within the Telegraph Ridge Fire Protection District response area. The Humboldt County Fire Safe Ordinance (Section 3111-1 <i>et seq.</i>) establishes development standards for minimizing wildfire danger in state responsibility designated areas. The site maintains defensible space, water storage for fire-fighting will be increased with construction of the pond, and vehicle turnarounds are available per the Fire Safe Regulations. There will be up to three (3) workers on site. The project was referred to CAL FIRE.</p>
<p>Community Infrastructure and Services Element, Chapter 5</p> <p>Implementation Action Plan</p>	<p>IS-S5 requires new industrial, commercial and residential development located outside of fire district boundaries to obtain written acknowledgment of available emergency response and fire suppression services from the local fire agency, including any recommended mitigation.</p>	<p>To implement this policy, conditions of approval for the proposed project required the applicant to contact the local fire service provider [Telegraph Ridge Fire Protection District] and furnish written documentation from that agency of the available emergency response and fire suppression services and any recommended project mitigation measures. If emergency response and fire suppression services are not provided, the applicant shall cause to be recorded an "ACKNOWLEDGMENT OF NO AVAILABLE EMERGENCY RESPONSE AND FIRE SUPPRESSION SERVICES" for the parcel(s) on a form provided by the Humboldt County Planning Division.</p>

Relevant Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Air Quality Chapter 15	Goals and policies contained in this Chapter relate to improved air quality to meet current and future state and federal standards, including attainment of particulate matter requirements (AQ-G1, AQ-G2, AQ-G3) and the successful reduction of greenhouse gas emissions to levels consistent with state and federal requirements (AQ-G4) Related policies: AQ-P4, Construction and Grading Dust Control; AQ-S1, Construction and Grading Dust Control; AQ-P7, Interagency Coordination.	No new development is proposed as part of the project. The existing cultivation area is not expected to contribute to an increase in air emissions above existing conditions. The applicant will be required to obtain grading permits from the Building Division prior to construction of the proposed pond.

2. **Zoning Compliance, and 3. Conforms with applicable standards and requirements of these regulations.** The following table identifies the evidence which supports finding that the proposed development is in conformance with all applicable policies and standards in the Humboldt County Zoning Regulations.

Zoning Section	Summary of Applicable Requirement	Evidence that Supports Zoning Finding
§312-1.1.2 Legal Lot Requirement	Development permits shall be issued only for a lot that was created in compliance with all applicable state and local subdivision regulations.	The parcel of land known as APN 108-033-014 is a legal lot created in compliance with all applicable state and local subdivision requirements (per the Creation Deed recorded September 30, 1968 in Vol. 976 Official Records Page 530. The subject parcel was lawfully created in its current configuration and the development permit can be issued as proposed.
§314-7.1 Unclassified	Unclassified (U): Principal permitted uses in the U zone include single-family dwellings, rooming/boarding of not more than 2 persons, and general agriculture; all other uses may be permitted with a use permit.	Special Permit to allow 10,000 square feet existing cannabis cultivation is specifically allowed in the U zone under Section 314-55.4.8.2.2 and a SP to relax the 600-foot setback of the existing cultivation area from the King Range National Conservation Area.
Minimum Lot Area:	0.14 acres (6,000 SF)	38.6 acres
Maximum Ground Coverage:	Forty percent (40%)	<40%

Minimum Lot Width:	50 feet	1,200 feet
Maximum Lot Depth:	Three times the width	1,428 feet
Minimum Yard Setbacks:	Front: 20 feet Rear: 10 feet Side: 5 feet SRA: 30 feet all sides	Front: 190 feet Rear: 178 feet Side: 486 feet
Maximum Building Height:	None specified	< 35 feet
§314-61.1 Streamside Management Area (SMA)	Purpose: To provide minimum standards pertaining to the use and development of land located within Streamside Management Areas (SMAs) and other wet areas (OWA) to implement the County's Open Space Element of the General Plan.	There is an unnamed Class III stream on the parcel that is tributary to East Fork Honeydew Creek, a Class II creek that flows across the northern portion of the parcel. The irrigation water source is a Point of Diversion from a spring that flows into the Class III and is within the Streamside Management Area (SMA). A Special Permit is included in this application to retroactively permit the work associated with the agricultural diversion. All development related to the cannabis cultivation is located outside of the SMA and Water Board setback requirements. The applicant has a Final Lake or Streambed Alteration Agreement with the California Department of Fish and Wildlife (see Attachment 4) that includes the Point of Diversion as well as maintenance of existing culverts.
§314-109.1 Off-Street Parking	Off Street Parking for Agricultural use*: Parking space per employee at peak shift. A minimum of two parking spaces are required. <i>*Use for this activity is not specified. Per Section 314-109.1.2.9, the Director may fix the required number of parking spaces based on standards for most comparable use.</i>	3 parking spaces

314-55.4 Commercial Cultivation, Processing, Manufacturing and Distribution of Cannabis for Medical Use Inland Land Use Regulation (CMMLUO)

Zoning Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
<p>§314-55.4.8.2 Timber Conversion</p>	<p>Commercial cannabis cultivation is allowed on parcels zoned U, that are one acre or larger and have been designated in the General Plan for agricultural development. In all zones where cultivation is allowed consisting of timberland, the commercial cultivation of cannabis for medical use shall only be permitted within a 3-acre conversion exemption area, or non-timberland open area.</p>	<p>The parcel is zoned Unclassified (U) and is mostly forested. The cultivation and cultivation related infrastructure occur in previously timbered areas of the subject parcel. A review of aerial imagery dating back to 1998 shows timber removal occurred between 2011 – 2014. The applicant is required to submit a Timber Conversion Evaluation Report prepared by a Registered Professional Forester. The report will evaluate the conversion history and recommend remedial measures. Conditions of approval require the applicant to submit the conversion evaluation report and to adhere to and implement the recommendations contained therein. Additionally, due to the possibility of the pond enlargement to require the removal of no more than 5 Douglas-fir trees, the applicant is required to restock at a 3:1 ration and provide a 3 year monitoring plan demonstrating at least 80% survival rate.</p>
<p>§314-55.4.8.2.2 Existing Cultivation</p>	<p>Existing outdoor cultivation areas up to one acre in size are allowed on parcels greater than one acre in size and zoned U – Unclassified, provided they were in existence prior to January 1, 2016.</p>	<p>This is a Special Permit for 10,000 square feet existing outdoor cultivation. Staff performed a Cultivation Area Verification on 11/9/2017 and identified existing cultivation based on TerraServer® imagery dated 9/18/2015. The cultivation area was in existence in 2011 in an area cleared of timber. The cultivation area has been reorganized within the existing footprint. The applicant is proposing to construct four hoop houses in place of an outdoor garden. The hoop houses will utilize light deprivation to achieve up to two harvests, and with timed drip irrigation on smaller plants will not increase water usage above baseline conditions.</p>
<p>§314-55.4.8.10 Permit Limit</p>	<p>No more than four commercial cannabis activity permits may be issued to a single person.</p>	<p>According to records maintained by the Department, the applicant has applied for two (2) other permits, and is entitled to four (4). This is an application for one (1) cannabis activity permit.</p>

314-55.4 Commercial Cultivation, Processing, Manufacturing and Distribution of Cannabis for Medical Use Inland Land Use Regulation (CMMLUO)

<p>§314-55.4.9.1 Accessory Processing</p>	<p>Processing for cultivation requiring a Special Permit or Use Permit will be considered in the Use Permit application.</p>	<p>The project includes no on-site processing. All processing would be off-site at a licensed 3rd party facility.</p>
<p>§314-55.4.9.4 Pre-Application Registration</p>	<p>Existing cultivation sites shall register with the County within 180 days of the effective date of this ordinance.</p>	<p>The applicant submitted the required registration form prior to August 23, 2016.</p>
<p>§314-55.4.10 Application Requirements</p>	<p>Identifies the Information Required for All Applications</p>	<p>The project file contains all the information required by the ordinance.</p>
<p>§314-55.4.11 Performance Standards</p>	<p>Identifies the Performance Standards for Cannabis Cultivation Activities</p>	<p>All the applicable performance standards are included as conditions of project approval. They are required to be met throughout the timeframe of the permit.</p>

314-55.4 Commercial Cultivation, Processing, Manufacturing and Distribution of Cannabis for Medical Use Inland Land Use Regulation (CMMLUO)

<p>§314-55.4.11.c Performance Standards-Water</p>	<p>Compliance with all statutes, regulations and requirements of the California State Water Resources Control Board, Division of Water Rights, at a minimum to include a statement of diversion of surface water from a stream, river, underground stream, or other watercourse required by Water Code Section 5101, or other applicable permit, license, or registration.</p>	<p>The irrigation water source is a Point of Diversion from an on-site spring. Water storage currently totals 7,000 gallons in hard tanks and a water bladder. The use of the bladder will be discontinued as a condition of approval. The applicant proposes to increase water storage by enlarging an existing pond to hold a capacity of 180,000 gallons. The applicant has a Right to Divert and Use Water (H100465) with the State Water Resources Control Board – Water Rights Division for the spring diversion. The water right allows for 42,000 gallons per day. Should the applicant secure a Fully Contained Spring Exemption on the adjacent parcel 108-033-004, Amaranth Farms will cause to be recorded a contingent easement to utilize the spring water for irrigation on the subject parcel, provided the spring exemption produces enough water flow to supply both parcels. The applicant has a Final Lake and Streambed Alteration Agreement. The maximum instantaneous rate of diversion shall not exceed 3 gallons per minute at any time. Conditions of approval require the applicant to obtain a grading permit from the Building Inspection Division for the proposed pond. In addition, the applicant is required to prepare and submit a Bullfrog Management Plan as described by Exhibit A attached to CDFW referral comments (see Attachment 5) to the Planning Department for review and approval by CDFW. Implementing the Bullfrog Management Plan is an ongoing condition of approval that is required for the life of the project. Based on the submitted evidence, the project complies with the referenced section.</p>
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314-55.4 Commercial Cultivation, Processing, Manufacturing and Distribution of Cannabis for Medical Use Inland Land Use Regulation (CMMLUO)

<p>§314-55.4.11.d Performance Standards-Setbacks</p>	<p>The area of cannabis cultivation and on-site processing shall be setback at least 30 feet from any property line, and 600 feet from any school, school bus stop, church or other place of religious worship, public park, or tribal cultural resources (TCRs).</p> <p>For publicly owned lands managed for open space and/or wildlife habitat purposes, a setback of less than 600 feet may be allowed with a special permit.</p>	<p>There are no parks as defined HCC Section 314-55.4.7, schools or school bus stops within 600 feet of the cultivation site based on a review of aerial imagery. Nor is there a place of religious worship within 600 feet. One outcome of the cultural resources study was that there are no TCRs present on the site.</p> <p>The parcel is adjacent to the King Range National Conservation Area managed by the Bureau of Land Management. The cultivation site would be approximately 100 feet from a parcel of land in the King Range National Conservation Area and therefore a Special Permit is requested. The adjacent King Range National Conservation Area land is not used as a developed and designated public park. See Section 10.2 Conservation and Open Space for additional information.</p>
<p>§314-55.4.11.o Performance Standards-Generator Noise</p>	<p>The noise produced by a generator used for cannabis cultivation shall not be audible by humans from neighboring residences. The combined decibel level for all noise sources, including generators, at the property line shall be no more than 60 decibels. Where applicable, sound levels must also show that they will not result in the harassment of Marbled Murrelet or Spotted Owl species, when generator use is to occur in the vicinity of potential habitat. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service.</p>	<p>The proposed project is located in an area that requires noise attenuation measures. Electric power is supplied by a generator, and will be supplemented by a proposed solar array. The existing cultivation areas are outdoor, and do not use electrical generators except for emergency backup power, so there will be minimal noise generated by the project. The nearest Northern Spotted Owl (NSO) sighting is located approximately 1.05 miles to the west of the project site while the nearest NSO activity center is located 1.5 miles to the northwest. The nearest mapped Marbled murrelet habitat is located approximately 0.25 miles to the southwest of the project site. Conditions of approval require noise levels to be 50 dB at 100 feet or edge of habitat, whichever is closer when the generator is used.</p>
<p>§314-55.4.17 Sunset Date</p>	<p>No application for any Use Permit pursuant to the CMMLUO shall be processed for issuance or approval that is received after December 31, 2016.</p>	<p>The applicant submitted the application on August 12, 2016.</p>

4. Public Health, Safety, and Welfare and 6. Environmental Impact: The following table identifies the evidence which supports finding that the proposed development will not be detrimental to the public health, safety and welfare, and will not adversely impact the environment.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
§312-17.1.4	The proposed development will not be detrimental to the public health, safety and welfare, and will not be materially injurious to properties or improvements in the vicinity.	The Department finds that the proposed project will not be detrimental to the public health, safety and welfare since all reviewing referral agencies have approved the proposed project design. The project as proposed and conditioned is consistent with the general plan and zoning ordinances; and the proposed project is not expected to cause any environmental damage. All commenting agencies have recommended approval or conditional approval of the project.

5. Residential Density Target: The following table identifies the evidence which supports finding that the proposed project will not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
312-17.1.5 Housing Element Densities	The proposed development shall not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.	The parcel was not included in the 2014 Housing Inventory as source of potential residential housing. The site is currently developed with a 2-story residence.

6. Environmental Impact: The following evidence supports finding that the proposed development will not adversely impact the environment.

As lead agency, the Department prepared an Addendum to the previously adopted Mitigated Negative Declaration (MND) (State Clearinghouse # 2015102005) prepared for the Commercial Medical Marijuana Land Use Ordinance (CMMLUO) and adopted by the County Board of Supervisors January 26, 2015. The MND prepared for the CMMLUO established that the environmental effects of existing cultivation operations would be reduced from the baseline impacts through the regulations applied by the CMMLUO. The proposed project is consistent with all regulations within the CMMLUO and all mitigation measures of the MND. The project is for the approval of an existing 10,000 square foot outdoor cultivation operation irrigated by a surface water diversion, authorization of a setback reduction to public lands, and off-site processing activities. The environmental document on file include detailed discussions of all the relevant environmental issues.

ATTACHMENT 3
CEQA Addendum

**CEQA ADDENDUM TO THE
MITIGATED NEGATIVE DECLARATION FOR THE COMMERCIAL MEDICAL MARIJUANA LAND USE
ORDINANCE**

*Commercial Medical Marijuana Land Use Ordinance Mitigated Negative Declaration (MND)
(State Clearinghouse # 2015102005), January 2016*

APN 108-033-014, 1020 Windy Ridge Lane, Honeydew, County of Humboldt

**Prepared By
Humboldt County Planning and Building Department
3015 H Street, Eureka, CA 95501**

November 2019

Background

Modified Project Description and Project History - The Commercial Medical Marijuana Land Use Ordinance (CMMLUO) established specific regulations for commercial cannabis operations in Humboldt County. These regulations were developed in concert with the Mitigated Negative Declaration (MND) that was adopted for the ordinance in order to implement the mitigation measures of the MND. The MND addressed the broad environmental impacts that could be expected to occur from the adoption and implementation of the ordinance. The MND specified that the regulations established in the CMMLUO would mitigate the impacts of existing cannabis operations by establishing regulations for an existing unregulated land use to help prevent and reduce environmental impacts that are known to result from unpermitted baseline cultivation operations. Commercial cannabis cultivation in existence as of December 31, 2015 was included in the environmental baseline for the MND and the MND states that "Bringing existing operations into compliance will help to attenuate potential environmental effects from existing cultivation activities, including aesthetic impacts resulting from improper operation or poor siting." The current project was contemplated by the MND and compliance with the provisions of the CMMLUO will fully mitigate all environmental impacts of the project to a less than significant level.

The modified project involves a Special Permit for an existing 10,000-square-foot outdoor commercial cannabis operation. A 960 square foot propagation nursery is on the parcel. The estimated annual water use for irrigation is 110,393 gallons. The irrigation water source is a point of diversion. There is currently 10,000 gallons of water storage in tanks. Processing will occur off-site at a licensed facility. The primary power source for the operation is a generator, with a proposed solar array as backup.

The modified project is consistent with the adopted MND for the CMMLUO because it complies with all standards of the CMMLUO which were intended to mitigate for impacts associated with existing cultivation sites. These include development away from sensitive riparian areas on steep or unstable slopes, and proper storage of fertilizers and soil amendments. Noise and light used for mixed light nursery greenhouses will be regulated to keep noise at 50 db at 100 feet from the source and not allow artificial lighting to escape between sunset and sunrise, thus resulting in an improvement from baseline conditions.

Purpose - Section 15164 of the California Environmental Quality Act (CEQA) provides that the lead agency shall prepare an addendum to a previously certified Mitigated Negative Declaration (MND) if some changes or additions are necessary but none of the conditions described in Section 15162 calling for a subsequent EIR or Negative Declaration have occurred. Section 15162 states that when an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
or
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous MND was certified

as complete, shows any of the following: A) the project will have one or more significant effects not discussed in the previous MND; B) significant effect previously examined will be substantially more severe than shown in the previous MND; C) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or D) mitigation measures or alternatives which are considerably different from those analyzed in the previous MND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Summary of Significant Project Effects and Mitigation Recommended

No changes are proposed for the original MND recommended mitigations. The proposal to authorize the operation of a 10,000 square foot commercial cannabis farm is fully consistent with the impacts identified and adequately mitigated in the original MND. The project as conditioned to implement responsible agency recommendations, results in no significantly adverse environmental effects beyond those identified in the MND. Compliance with the CMMLUO ensures consistency with the adopted MND and provides for mitigation of all project related impacts to a less than significant level.

In reviewing the application for consistency with the adopted MND, the County considered the following information and studies, among other documents (see Attachment 4 for a complete listing of information and studies):

- Cultivation and Operations Plan
- Water Resource Protection Plan, prepared by Stillwater Sciences December 2017
- Road Evaluation Report prepared by applicant.
- Right to Divert and Use Water
- Final Lake and Streambed Alteration Agreement (1600-2016-0487-R1)
- Notice of Applicability from North Coast Regional Water Quality Control Board

Other CEQA Considerations

Staff suggests no changes for the revised project.

EXPLANATION OF DECISION NOT TO PREPARE A SUPPLEMENTAL MITIGATED NEGATIVE DECLARATION OR ENVIRONMENTAL IMPACT REPORT

See Purpose statement above.

In every impact category analyzed in this review, the projected consequences of the current project proposal are either the same or less than significantly increased than the initial project for which the MND was adopted. Based upon this review, the following findings are supported:

FINDINGS

1. The proposed project will permit an existing cannabis operation on a site that is fully in compliance with county and state requirements intended to adequately mitigate environmental impacts.
2. The circumstances under which the project was approved have not changed

substantially. There are no new significant environmental effects and no substantial increases in the severity of previously identified effects.

3. For the current proposed project, there has been no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous MND was adopted as complete.

CONCLUSION

Based on these findings it is concluded that an Addendum to the certified MND is appropriate to address the requirements under CEQA for the current project proposal. All of the findings, mitigation requirements, and mitigation and monitoring program of the MND, remain in full force and effect on the original project.

ATTACHMENT 4

Applicant's Evidence in Support of the Required Findings

Attachment 4 includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division:

1. The name, contact address and phone number(s) of the applicant. (Application form on file)
2. If the applicant is not the record title owner of parcel, written consent of the owner for the application with original signature and notary acknowledgement. (Not Applicable)
3. Site plan showing the entire parcel, including easements, streams, springs, ponds and other surface water features, and the location and area for cultivation on the parcel with dimensions of the area for cultivation and setbacks from property lines. The site plan shall also include all areas of ground disturbance or surface water disturbance associated with cultivation activities, including: access roads, water diversions, culverts, ponds, dams, graded flats, and other related features. If the area for cultivation is within ¼ mile (1,320 ft.) of a school, school bus stop, church or other place of religious worship, public park, or Tribal Cultural Resource, the site plan shall include dimensions showing that the distance from the location of such features to the nearest point of the cultivation area is at least 600 feet. (Attached)
4. A cultivation and operations plan that meets or exceeds minimum legal standards for water storage, conservation and use; drainage, runoff and erosion control; watershed and habitat protection; and proper storage of fertilizers, pesticides, and other regulated products to be used on the parcel; and a description of cultivation activities (outdoor, indoor, mixed light), the approximate date(s) cannabis cultivation activities have been conducted on the parcel prior to the effective date of this ordinance, if applicable, and schedule of activities during each month of the growing and harvesting season. (Attached)
5. Copy of the statement of water diversion, or other permit, license or registration filed with the State Water Resources Control Board, Division of Water Rights, if applicable. (Attached)
6. Description of water source, storage, irrigation plan, and projected water usage. (On file)
7. Copy of Notice of Intent and Monitoring Self-Certification and other documents filed with the NCRWQCB demonstrating enrollment in Tier 1, 2 or 3, NCRWQCB Order No. 2015-0023, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency. (Attached- Water Resource Protection Plan prepared by Stillwater Sciences December 2017; On file- enrollment form)
8. If any on-site or off-site component of the cultivation facility, including access roads, water supply, grading or terracing impacts the bed or bank of any stream or other watercourse, a copy of the Streambed Alteration Permit obtained from the Department of Fish & Wildlife. (Attached)
9. If the source of water is a well, a copy of the County well permit, if available. (Not Applicable)
10. If the parcel is zoned FR, U or TPZ, or involves the conversion of timberland as defined under section 4526 of the Public Resources Code, a copy of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (CAL-FIRE). Alternately, for existing operations occupying sites created through prior unauthorized conversion of timberland, evidence may be provided showing that the

landowner has completed a civil or criminal process and/or entered into a negotiated settlement with CAL-FIRE. (Condition of Approval)

11. Consent for onsite inspection of the parcel by County officials at prearranged date and time in consultation with the applicant prior to issuance of any clearance or permit, and once annually thereafter. (On file)
12. For indoor cultivation facilities, identify the source of electrical power and how it will meet with the energy requirements in Section 55.4.8.2.3, and plan for compliance with applicable Building Codes. (Not Applicable)
13. Acknowledge that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed will not support diversions for irrigation. (On file)
14. Acknowledge that the County reserves the right to engage with local Tribes before consenting to the issuance of any clearance or permit, if cultivation operations occur within an Area of Traditional Tribal Cultural Affiliation, as defined herein. This process will follow current departmental referral protocol, including engagement with the Tribe(s) through coordination with their Tribal Historic Preservation Officer (THPO) or other tribal representatives. This procedure shall be conducted similar to the protocols outlined under SB 18 (Burton) and AB 52 (Gatto), which describe "government to government" consultation, through tribal and local government officials and their designees. During this process, the tribe may request that operations associated with the clearance or permit be designed to avoid, minimize or mitigate impacts to Tribal Cultural Resources, as defined herein. Examples include, but are not limited to: conducting a site visit with the THPO or their designee to the existing or proposed cultivation site, requiring that a professional cultural resources survey be performed, or requiring that a tribal cultural monitor be retained during project-related ground disturbance within areas of sensitivity or concern. The county shall request that a records search be performed through the California Historical Resources Information System (CHRIS). (On file)
15. Road Evaluation Report signed November 27, 2017. (Attached)
16. Division of Environmental Health Attachment for Commercial Medical Marijuana (CMM) Clearances/Permits. (On file)
17. Registered Professional Engineer's letter certifying property boundary prepared by Baird Engineering July 10, 2019. (Attached)
18. Email from Dennis Halligan on Marbled Murrelet habitat. (Attached)



OPERATIONS PLAN

This property will be used for cannabis cultivation.

At the proper time, the cannabis will be harvested and dried on -site, and placed in containers that will be weighed, numbered and documented. The product will then be transferred to a permitted facility in Arcata where it will be trimmed, processed, and sorted.

The flowers will be transferred to a licensed distributor for testing by an independent lab. Packaging will be done at a California State licensed and Humboldt County permitted site in Arcata. Some of the product will be sold in pound bulk form. Flowers will be packaged into child proof containers, holding 1/8th ounce, and labelled according to the state guidelines regarding testing results, weight and safety warnings. The smaller flowers will be made into "pre-rolls", and packaged in childproof containers, and labelled according to state guidelines. The trim will be sold to licensed oil producing companies who will do the testing and distribution.

No seasonal housing is provided. Our worker helps at his convenience, and brings his own trailer to the site.

Nursery lighting will comply with International Dark Sky Standards. There is a propagation greenhouse where seeds and clones will be started and grown until time to transplant outdoors. The plants are given additional artificial light for 4 hours. The plants are then transplanted to a "hoop house", and grown to maturity. No artificial light is used at this point. The daylight hours are regulated by using a tarp covering to encourage flowering.

The generators that will be used are a Honda 2000 watts, Honda 3000 watts, and Honda 7000 watts. The generators are available on-site and used according to the needs at the time. This property is managed by the same owner as 108-033-004, and the fuel for the generator and the waste oil are permitted on the other property.

Description of property, access, and land use:

This property is located at the end of Windy Ridge Lane, in Honeydew. It is approximately 40 acres. There is only one access road to this property, through property owned by the same owner, Nya Hessler. There is a locked gate that regulates access to both of the properties.

The cultivation area uses less than 8,000 square feet, and the remainder of the property is used as a natural species habitat preservation area. We have been given a permit from Humboldt County to cultivate 10,000 square feet.

Water Use Reporting 2018

This property is managed with the adjoining property 108-033-004, by the same owner. We also have another farm nearby that is licensed. We started the plants at the other location, until they are ready to plant outdoors. We only used water on this property from June to October. However, we do have a propagation greenhouse located here which we hope to be using by next year. This is the water use for 2018:

June	22830
July	24993
August	25860
September	25928
October	10782





A CALIFORNIA MEDICAL MARIJUANA COLLECTIVE

A NON PROFIT MUTUAL BENEFIT CORPORATION

ENTITY NUMBER C3842232

6191 DOODYVILLE ROAD ETTERSBURG, CA 95542

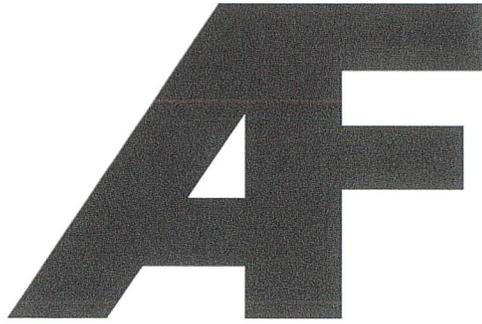
HUMBOLDT COUNTY, CA

CULTIVATION AND OPERATIONS PLAN

PROPOSED MEDICAL CANNABIS CULTIVATION FACILITY

APN: 108-033-014
APPLICATION NO. 10897

MAY 2017



AMARANTH FARMS, A NON PROFIT MUTUAL BENEFIT CORPORATION

6191 DOODYVILLE ROAD, ETTERSBURG, CA 95542

PRESIDENT/CEO	KAREN HESSLER	707-986-4002
CFO	ELAN PUNO	707-834-2956
SECRETARY	NYA HESSLER	707-599-4812

CULTIVATION AND OPERATIONS MANUAL
AF, A NON PROFIT MUTUAL BENEFIT CORPORATION

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Appendix A: Site Plan

Appendix B: Cultivation Activities Schedule

Appendix C: Water Resource Protection Plan

Appendix D: Regulated Products Resource List

Appendix E: References

1. PROJECT SUMMARY

1.1. PROJECT OBJECTIVE

AF, A Non Profit Mutual Benefit Corporation is proposing to permit existing medical cannabis cultivation activities in accordance with the County of Humboldt's *Commercial Medical Marijuana Land Use Ordinance* (CMMLUO). The project requires a Conditional Use Permit for approximately 10,000 square feet (sf) of medical cannabis cultivation. The project includes the permitting of existing cultivation and proposed facilities for drying, curing, trimming and storing of medical cannabis (at APN 108-033-004). The applicant aims to become fully compliant with State and Local cultivation regulations.

1.2. SITE DESCRIPTION

The Project is located at Windy Ridge Lane, Humboldt County, Ca (APN 108-033-014) South East of the community of Honeydew. The subject parcel is approximately 33.76 acres in size (per the County of Humboldt's WebGIS) The property is Vacant, Rural. It has a relatively diverse topography but the cultivation is on slopes of less than 15% gradient. The property is a mixture of fir and oak trees, with meadows scattered throughout the property. The cultivation site is located on a gentle northern exposure location.

See Appendix A: Site Plan

1.3 LAND USE

The subject property has a General Plan designation of AL160 (FRWK) as identified by the Northern Humboldt General Plan (NHGP) and is zoned U. The proposed cultivation area occupies less than .0068 percent (.0068%) of the total land area. Land uses surrounding the parcel are composed of rural residential, timber and agriculture. The surrounding parcels are similarly zoned.

1.4. STATE AND LOCAL COMPLIANCE

1.4.1. STATE OF CALIFORNIA COMMERCIAL CANNABIS ACTIVITY LICENSE

AF, A Non Profit Mutual Benefit Corporation will obtain a Commercial Medical Cannabis Activity License from the State of California at such time licenses become available.

1.4.2. STATE WATER RESOURCES CONTROL BOARD

Water for domestic and cultivation uses are provided by a spring and a proposed rainwater catchment pond. A diversion of water rights is on file with the State of California Water Resources Control Board Statement ID S025826.

Effective June 24, 2016 AF, LLC, Cooperative enrolled with the North Coast Regional Water Quality Control Board (NCRWQCB) for coverage under Tier 2 of Order No. R1 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. A Water Resources Protection Plan is in the process of being developed for the project by Stillwater Sciences.

1.4.3.HUMBOLDT COUNTY BUILDING DEPARTMENT

All necessary building permits will be obtained from the Humboldt County Building Department for all existing and proposed structures and supporting infrastructure upon approval of the Conditional Use Permit.

1.4.5.CAL FIRE

The subject property is located within a State Responsibility Area (SRA) for fire protection. Several improvements have been made in order to meet SRA requirements, including designating a fire turn-around and pull-out area for emergency vehicles, and management of trees and vegetation around existing structures to maintain the required 100-foot defensible space. All structures on the property meet the 30-foot SRA setback requirement from property lines.

If required by Cal Fire, a 2,500-gallon water tank with a riser to SRA specifications will be installed for fire protection. Site currently has tanks with 10,000 gallons available to use with connectors designed to attach to a fire hose for fire protection.

1.4.6.CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

An approved Lake and Stream-Bed Alteration Agreement (LSAA) from the Department of Fish and Wildlife (DFW) will be obtained for any work in any stream crossings or wetland areas.

1.4.7. CALIFORNIA DEPARTMENT OF AGRICULTURE

All applicable agricultural regulations will be adhered to. Pesticide, fungicide, rodenticide applications will follow DPR guidelines.

3. CULTIVATION AND PROCESSING

3.1.NURSERY PROPAGATION AND INITIAL TRANSPLANT

Juvenile plants are propagated at APN:108-033-004 from seeds, or clones are purchased. Strains that demonstrate the desired CBD/THC genetics are chosen. The seedlings or clones are placed in the proposed nursery greenhouse where we augment the daylight hours 4 hours a day. Once fully rooted they are transplanted directly into one (1) gallon or four inch plastic containers containing an organic growing medium.(see Appendix A for nursery location). The juvenile plants are irrigated using hand watering methods. Starts are kept in the nursery from March to June, when they are transplanted to outdoor hoop houses.

3.2.MIXED LIGHT CULTIVATION PLAN AND SCHEDULE

Nursery greenhouse will have mixed light use 4 hours per day (5:00 PM to 9:00 PM) from March to June. Located at APN: 108-033-004

3.3.INDOOR CULTIVATION PLAN AND SCHEDULE

No indoor cultivation currently proposed onsite.

3.4.IRRIGATION PLAN AND SCHEDULE

Irrigation and fertigation of plants occurs using top-feed drip irrigation and hand watering methods. AF, A Non Profit Mutual Benefit Corporation maintains that the irrigation and fertigation methods used are helpful and necessary in reducing water consumption. The

monthly Cultivation Schedule in Appendix B details the irrigation activities associated with all cultivation.

3.5.HARVESTING, DRYING, AND TRIMMING

Plants that are ready for harvest are cut at the base of the plant transported to contiguous parcel 108-033-004 to have their flowering branches removed, run through a trim machine then suspended in the drying room. The drying room is equipped with ventilation, fans, and heaters. The drying process takes approximately seven to ten days. At this time the branches with flowers on them are bucked into manageable sizes. The flowers are either sent to a processing center to be made into medicinal oil, or receive a finishing trim by hand or machine before being weighed, packaged, tracked, and sealed. The finished product is stored in a locked shipping container before being transported to a licensed distribution facility. The useable waste product, (leaf, shake or trim) is collected and placed into bins to be weighed, labeled, tracked, and sealed. Trim will be sold to a licensed distribution facility or transferred to an offsite, licensed manufacturing facility. The unusable waste (stem) is properly disposed of.

3.6.PROCESSING FACILITY

All cannabis processing will occur at a permitted processing facility or the proposed (108-033-004) facility when complete. The facility will incorporate all aspects of processing including trimming, weighing, packaging, labeling and tracking. The facility will include an ADA restroom for employees. The restroom will include a working flush toilet as well as a sink with cold and hot running water provided by a propane water heater. The proposed metal building will have an engineered concrete slab and will conform to commercial building standards per the 2017 California Building Code.

3.7.EMPLOYEE PLAN

AF, A Non Profit Mutual Benefit Corporation is an "agricultural employer" as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 (commencing with Section 1140) of Division 2 of the Labor Code), and complies with all applicable federal, state and local laws and regulations governing California Agricultural Employers.

3.7.1.JOB DESCRIPTIONS AND EMPLOYEE SUMMARY

- *CEO*: Responsible for business oversight and management of AF, A Non Profit Mutual Benefit Corporation, LLC. Responsibilities include, but are not limited to: inventory and tracking, personnel management, record keeping, budget, and liaison with State and County inspectors as needed. This is a full time position.
- *Cultivation Manager*: Oversight and management of the day to day cultivation of medical cannabis. Responsibilities include, but are not limited to: plant propagation and transplant, soil management, irrigation, fertilization, pesticide management, and harvest activities. This is a full-time- seasonal position.
- *Seasonal Laborer*: Provides cultivation, harvesting, and processing support. This is a part-time to full-time, seasonal position.
- *Cleaners/Trimmers*: Aids in the final step of trimming the waste (leaf, trim, shake) from the flower. Is responsible for packaging, labeling and providing tracking information to CEO or other board member. This is a full-time seasonal position.

3.7.2.STAFFING REQUIREMENTS

In addition to the *CEO and Cultivation Manager positions*, up to two (2) full-time seasonal labor positions are employed. The number of seasonal laborers varies based on the needs of the ranch during the cultivation, harvest and processing seasons. During the peak harvest and processing season, there are an estimated total of five (5) employees onsite along with the CEO of AF, A Non Profit Mutual Benefit Corporation and other board members.

3.7.3.EMPLOYEE TRAINING AND SAFETY

Onsite cultivation, harvesting, drying, and trimming is performed by employees trained on each aspect of the procedure including: cultivation and harvesting techniques and use of pruning tools, and trim machines; proper application and storage of pesticides and fertilizers; and correct hand trimming methods. All cultivation and processing staff are provided with proper hand, eye, body and respiratory Personal Protective Equipment (PPE). Access to the onsite cultivation, drying and processing facilities are limited to authorized and trained staff and board members.

All employees are trained on proper safety procedure including fire safety; use of rubber gloves and respirators; proper hand washing guidelines; and protocol in the event of an emergency. Contact information for the local fire department, CAL FIRE, Humboldt County Sheriff and Poison Control as well as the CEO will be posted at the employee restroom. Each employee is provided with a written copy of emergency procedures and contact information. The safety data sheets (SDS) are kept onsite and accessible to employees.

3.7.4.TOILET AND HAND WASHING FACILITIES

The proposed drying and processing facility will include one (1) ADA-compliant restroom, including a working flush toilet as well as a sink with hot and cold running water. Hand soap and paper hand towels will be made available. Employees will work at a distance typically no greater than 250 feet from the restroom facility. One ADA portable toilet will be utilized for the 2017 season or until the facility is approved, permitted and completed.

3.7.5.ON-SITE HOUSING

Seasonal onsite housing will be located in the existing cabin located on parcel 108-033-004, when necessary.

3.8.SECURITY PLAN AND HOURS OF OPERATION

3.8.1.FACILITY SECURITY

The cultivation facilities, including greenhouses, hoop houses, processing buildings, and storage buildings are located behind a locked gate, fence or within a secure and locked building. An entry gate is located at the East perimeter of the property. The entry gate remains locked at all times and access to the cultivation and processing areas are limited exclusively to authorized personnel. Restricted access signs are posted conspicuously at the entry gates. The cultivation and processing facility area will have low intensity exterior lighting to illuminate the entrances, and will include a small number of motion activated security lights. All lighting will be designed and located so that direct rays are confined to the property. Security cameras and sensors are installed at the main access gate, cultivation sites, storage facility, and at the entrance to the proposed processing facility.

3.8.2.HOURS OF OPERATION

Activities associated with cultivation (watering, transplanting, and harvesting) generally occur during daylight hours. All other activities such as processing typically occur no earlier than 8am and extend no later than 8pm.

4.ENVIRONMENT

4.1.WATER SOURCE AND PROJECTED WATER USE

Water for domestic and cultivation uses are provided by one spring and one proposed rain catchment pond. The water is gravity fed to the pond then pumped to water tanks that gravity feed to cultivation sites. AF, A Non Profit Mutual Benefit Corporation utilizes water management strategies to conserve and reuse onsite water and fertilizers to achieve net zero discharge. (Refer to section 3.4 for a summary of irrigation practices, and Appendix B for the monthly irrigation schedule)

The table below outlines the estimated irrigation water usage for cultivation during a typical year. Variables such as weather conditions and specific cannabis strains will have a slight effect on water use.

Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
0	0	0	0	30,000	30,000	60,000	60,000	60,000	30,000	0	0

4.2.WATER STORAGE

Water for both domestic and irrigation use is provided by 1 spring and 1 proposed rain water catchment pond that will hold 200,000 gallons of water and tanks consisting of 10,000 gallons of water storage. If required by Cal-Fire, an additional 2,500-gallon water tank may be installed in order to comply with SRA fire protection requirements.

4.3. DRAINAGE, RUNOFF, AND EROSION CONTROL

AF, A Non Profit Mutual Benefit Corporation is enrolled with the North Coast Regional Water Quality Control Board (NCRWQCB) for Tier 2 coverage, and a Water Resources Protection Plan (WRPP) has been developed utilizing best management practices (BMP's) in accordance with the NCRWQCB's recommendations.

4.3.1.SITE DRAINAGE AND RUNOFF

The sites are gently sloping or terraced, with surface flow in the wet season generally draining from the South to the North. The edges of the sites are ditched and have either a waddle like hay absorbing element or is further directed to a catchment zone that has a series of waddle filter zones to capture any runoff. All other sites, roads, driveways, parking areas, and turn arounds have drainage that is designed to code. The existing cultivation sites, hoop house, and greenhouse are located away from riparian zones. Fertilizers and pesticides

are currently stored in a locked shipping container with secondary containment to prevent contamination with runoff located at APN 108-033-004. Sites have been identified for storage/disposal of spoils and cultivation waste.

Site investigation for the development of the Water Resources Protection Plan (WRPP) showed no evidence of surface runoff with associated with the cultivation. The cultivation structures are located approximately 50 feet from the nearest watercourse, providing a sufficient buffer to prevent sediment and nutrient delivery. To further prevent runoff to riparian areas, water conservation and containment measures will be implemented including the use of hand irrigation to prevent excessive water use, and the maintenance of a stable berm, along with a vegetated buffer between the cultivation area and riparian zone.

4.3.2. Erosion Control

The Water Resource Protection Plan (WRPP) includes erosion and sediment control BMP's designed to prevent, contain, and reduce sources of sediment. The WRPP also includes corrective actions to reduce sediment delivery. Additionally, the WRPP requires mulch piles and spoils from any grading to be stored in a designated location away from watercourse.

4.4. WATERSHED AND HABITAT PROTECTION

Adherence to the Water Resource Protection Plan (WRPP) ensures that the watershed and surrounding habitat are protected. The cultivation activities and associated structures are 50 feet from the nearest watercourse, providing a suitable buffer between the cultivation operation and habitat. Additionally, site development and maintenance activities utilize BMP's in accordance with the NCRWQCB's recommendations. Any grading and earthwork activities will be conducted by a licensed contractor or property owner in accordance with approved grading permits and the WRPP.

4.5. MONITORING AND REPORTING

Monitoring will be conducted to confirm the effectiveness of corrected measures listed in the Water Resource Protection Plan (WRPP) and determine if the site meets all Standard Conditions. Inspections will include photographic documentation of any controllable sediment discharge sites as identified on the site map. Visual inspection will occur at those locations on the site where pollutants or wastes, if not contained, could be transported into receiving waters, and those locations where runoff from roads or developed areas drains into or towards surface water. The inspection will also document the progress of any plan element subject to a time schedule, or in the process of being implemented. A monitoring plan is included in the WRPP with photo points identified on WRPP map.

Onsite monitoring shall occur:

- Site shall be inspected on a quarterly basis.
- Before and after any significant alteration or upgrade to a given stream crossing, road segment, or other controllable sediment discharge site. Inspection should include photographic documentation, with photo records to be kept onsite.
- Prior to October 15 and December 15 to evaluate site preparedness for storm events and stormwater runoff.

- Following any rainfall event with an intensity of 3 inches precipitation in 24 hours. Precipitation data can be obtained from the National Weather Service by entering the site zip code at <http://www.srh.noaa.gov/forecast>.

A Monitoring and Reporting Form (Order No. 2015-0023) was submitted upon initial enrollment in the Order (NOI) and then annually thereafter, by March 31 to the Regional Water Board. The annual report will include data from the monitoring reports.

4.6. ENERGY AND GENERATOR USE

Off grid electricity is provided by a gas generator and proposed solar system for all cultivation and domestic uses. Electricity for cultivation operations including lighting, ventilation, and heating and will be sourced primarily by renewable energy. Use of the on-site generator is limited to domestic use, and only if the solar system is compromised, by undetermined weather. Guidelines set by Humboldt County and the State of California are followed. The generator is located away from the property line to ensure the noise level does not exceed 60 decibels at the property line. The generator is located in a shed with a containment cement floor and proper ventilation. Gas fuel is stored in the generator shed with double containment.

4.7. BEST MANAGEMENT PRACTICES

Best Management Practices (BMP's) are employed when storing, handling, mixing, and application of all fertilizers, pesticides and fungicides. All nutrients, pesticides, and fungicides are located in a locked storage room, and contained within water tight, locked and labeled containers in accordance with manufactures instruction. Application rates will be tracked and reported with the end of the year monitoring report required in the Water Resources Protection Plan (WRPP). Employees responsible for application are trained to handle, mix, apply or dispose of pesticides/fungicides with proper hand, eye, body and respiratory protection in accordance with the manufacturer's recommendations.

See Appendix D - Regulated Products Resource List for product details

4.8. WASTE MANAGEMENT PLAN

4.8.1. SOLID WASTE MANAGEMENT

Trash and recycling containers are located in a secure area. The containers are situated in a shed to prevent storm water contamination and leachate from entering or percolating to receiving waters. The trash containers are in an enclosed area to prevent animal intrusion. Solid waste and recycling is hauled off-site to Eel River Disposal, as needed.

4.8.2. CULTIVATION WASTE AND SOIL MANAGEMENT

Cultivation vegetative matter such as root balls, branches, and leaves are composted at a designated area. Spent potting soil is kept in designated contained covered areas. Soil. The soils are analyzed yearly, and are amended and reused. Used pots will be collected, cleaned and stored for the winter. All packaging from soil amendments and fertilizers will be collected and disposed at an appropriate facility.

4.8.3.WASTEWATER MANAGEMENT

The water management plan aims to achieve a low evaporation, properly absorbing irrigation and nutrient system. Drip system and hand watering methods minimize the over-irrigation of plants and subsequent runoff.

5.PRODUCT MANAGEMENT

5.1.PRODUCT TESTING AND LABELING

Samples are selected from individual harvested cannabis strains and are tested by a licensed third-party lab in accordance with State and local standards. The finished product will include tracking ID's provided by the County of Humboldt and/or Statewide tracking systems when they become available, until that time an internal tracking system will be used.

5.2.PRODUCT INVENTORY AND TRACKING

Until such time as either a County or Statewide cannabis product and inventory tracking system becomes available, an internally developed system of inventory and tracking is utilized. The CEO ensures all medical cannabis from seed or clone to packaged product is tracked, accounted for and inventoried. Records are kept at each phase of the harvest and processing operation for reporting and compliance with State and Local regulations. The information recorded for each harvest includes but not limited to:

- Cultivation canopy area
- Weight of flowers, by-product, and trim waste after drying and separation
- Weight of flowers after trimming
- Product ID numbers and product weight
- Staff identification (at each step)
- Physical location of the plant material at all times

5.3.TRANSPORTATION AND DISTRIBUTION

Transportation will be handled in accordance with State and Local regulations. All merchantable product will be distributed through licensed medical cannabis dispensaries. Prior to moving packages from the on-site holding facility to another physical location, a transport manifest will be created by the distributor/transporter and will include:

- Product ID numbers and product weight
- Route to be travelled
- Origin and destination addresses
- Time of departure
- Time of arrival

The *CEO* or the *Secretary* are responsible for performing a physical inventory of all packages being transported, and ensuring that the physical inventory coincides with the transport manifest.



STATE OF CALIFORNIA
 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
 STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

RIGHT TO DIVERT AND USE WATER

REGISTRATION H505836

CERTIFICATE H100465

Right Holder: *Karen Hessler*
Windy Ridge Lane
Honeydew, CA 95545

The State Water Resources Control Board (State Water Board) authorizes the diversion and use of water by the right holder in accordance with the limitations and conditions herein SUBJECT TO PRIOR RIGHTS. The priority of this right dates from 04/12/2019. This right is issued in accordance with the State Water Board delegation of authority to the Deputy Director for Water Rights (Resolution 2012-0029) and the Deputy Director for Water Rights redelegation of authority dated October 19, 2017.

The Deputy Director for Water Rights finds that this registration meets the requirements for registration of small irrigation use appropriation. (Wat. Code, § 1228 et seq.)

Right holder is hereby granted a right to divert and use water as follows:

1. Location of point(s) of diversion (**Coordinates in WGS 84**)

Name of Diversion	Source	Tributary To:	Thence	Latitude	Longitude	County	Assessor's Parcel Numbers (APN)
Primary POD	Unnamed Spring	Unnamed Stream	East Fork Honeydew Creek	40.162053	-124.094345	Humboldt	108-033-004
Spring	Unnamed Spring	Unnamed Stream	East Fork Honeydew Creek	40.163815	-124.089891	Humboldt	108-033-014

2. Purpose of Use and 3. Place of Use

2. Purpose of Use	3. Place of Use		
	County	Assessor's Parcel Numbers (APN)	Acres
Irrigation, Fire Protection	Humboldt	108-033-004	0.18365
Irrigation, Fire Protection	Humboldt	108-033-014	0.18365

Note: Assessor's Parcel Numbers provided are based on the user's entries in this portal on 03/26/2019. The place of use is shown on the map filed on 03/26/2019 with the State Water Board.

4. Quantity and Season:

The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 0.96 acre-feet per year to be collected from 01/01 to 12/31 and as permitted in the diversion season specified in the current version of the State Water Board's Cannabis Policy, whichever is more restrictive. The total storage capacity shall not exceed 1.86 acre-feet. The rate of diversion to storage shall not exceed 42,000 gallons per day (gpd) or the diversion rate specified in the current version of the State Water Board's Cannabis Policy, whichever is more restrictive.

5. No water shall be diverted or used under this right unless the water right holder is in compliance with all applicable conditions, including the numeric and narrative instream flow requirements, of the current version of the State Water Board's Cannabis Policy, except as follows:

Right holders enrolled under Regional Water Quality Control Board Order R1-2015-0023 or Order R5-2015-0113 shall comply at all times with requirements related to flow, diversion, storage, and similar requirements of Attachment A of the Cannabis Policy identified by the Division of Water Rights below in this condition. This condition remains in effect until July 1, 2019, or when the right holder enrolls under the statewide Cannabis General Order, whichever comes first, at which time right holders shall comply with all applicable conditions and requirements of Attachment A of the Cannabis Policy.

- Section 1 – Term Numbers 4, 15, 17, 24, 26, and 36.
- Section 2 – Term Numbers 23, 63, 64, 66, 69 – 78, 82 – 94, 96, and 98 – 103.
- Section 3 – All Instream Flow Requirements for Surface Water Diversions (Requirements 1 – 7) and the Gage Installation, Maintenance, and Operation Requirements.
- Section 4 – All requirements and conditions.

The current version of the State Water Board's *Cannabis Policy* is available online at:
https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/policy.pdf.

6. No water shall be diverted or used under this right, and no construction related to such diversion shall commence, unless right holder has obtained and is in compliance with all necessary permits or other approvals required by other agencies.
7. Diversion works shall be constructed and water applied to beneficial use with due diligence.
8. No water shall be diverted under this right unless right holder complies with all lawful conditions required by the California Department of Fish and Wildlife. (Wat. Code, § 1228.6, subd. (a)(2).)
9. No water shall be diverted under this right unless it is diverted in accordance with the information set forth in the completed registration form as to source, location of point of diversion, purpose of use, place of use, quantity, and season of diversion. This information is reproduced as conditions 1 through 4 of this certificate.
10. No water shall be diverted under this right unless right holder complies with all applicable state, city, county, and local laws, regulations, ordinances, permits, and license requirements including, but not limited to those for cannabis cultivation, grading, construction, and building.
11. Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this right, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.
12. The State Water Board reserves jurisdiction over this registration to change the season of diversion and rate of diversion based on later findings of the State Water Board concerning availability of water and the protection of beneficial uses. Any action to change the authorized season of diversion and rate of diversion will be taken only after notice to interested parties and opportunity for hearing.
13. Right holder shall grant, or secure authorization through right holder's right of access to property owned by another party, the staff of the State Water Board, and any other authorized representatives of the State Water Board the following:
- a. Entry upon property where water is being diverted, stored, or used under a right issued by the State Water Board or where monitoring, samples and/or records must be collected under the conditions of this right;
 - b. Access to copy any records at reasonable times that are kept under the terms and conditions of a right or other order issued by the State Water Board;
 - c. Access to inspect at reasonable times any project covered by a right issued by the State Water Board, equipment (including monitoring and control equipment), practices, or operations regulated by or required under this right; and,
 - d. Access to photograph, sample, measure, and monitor at reasonable times for the purpose of ensuring compliance with a right or other order issued by the State Water Board, or as otherwise authorized by the Water Code.
14. Diversion of water under this right is subject to prior rights. Right holder may be required to curtail diversion or release water stored during the most recent collection season should diversion under this right result in injury to holders of legal downstream senior rights. If a reservoir is involved, right holder may be required to bypass or release water through, over, or around the dam. If release of stored water would not effectively satisfy downstream prior storage rights, right holder may be required to otherwise compensate the holders of such rights for injury caused.

15. This right shall not be construed as conferring right of access to any lands or facilities not owned by right holder.
16. All rights are issued subject to available flows. Inasmuch as the source contains treated wastewater, imported water from another stream system, or return flow from other projects, there is no guarantee that such supply will continue.
17. If storage or diversion of water under this right is by means of a dam, right holder shall allow sufficient water at all times to pass through a fishway or, in the absence of a fishway, allow sufficient water to pass over, around, or through the dam to keep in good condition any fish that may be planted or exist below the dam; provided that, during a period of low flow in the stream, upon approval of the California Department of Fish and Wildlife, this requirement will be satisfied if sufficient water is passed through a culvert, waste gate, or over or around the dam to keep in good condition any fish that may be planted or exist below the dam if it is impracticable or detrimental to pass the water through a fishway. In the case of a reservoir, this provision shall not require the passage or release of water at a greater rate than the unimpaired natural inflow into the reservoir. (Fish & G. Code, § 5937.)
18. The facilities for diversion under this right shall include satisfactory means of measuring and bypassing sufficient water to satisfy downstream prior rights and any requirements of the California Department of Fish and Wildlife and the State Water Board's Cannabis Policy.
19. This right does not authorize any act which results in the taking of a threatened, endangered, or candidate species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code section 2050 et seq.) or the federal Endangered Species Act (16 U.S.C.A. section 1531 et seq.). If a "take" will result from any act authorized under this water right, the right holder shall obtain authorization for an incidental take prior to construction or operation of the project. Right holder shall be responsible for meeting all requirements of the state and Federal Endangered Species Acts for the project authorized under this right.
20. This right is subject to the submittal of an annual report of water use and satisfactory renewal, on forms to be furnished by the State Water Board, including payment of the then-current annual renewal fees. (Wat. Code, § 1228.5.)
21. This right shall be totally or partially forfeited for nonuse if the diversion is abandoned or if all or any part of the diversion is not beneficially used for a continuous period of five years.
22. This right is subject to enforcement, including but not limited to revocation, by the State Water Board if 1) the State Water Board finds that the right holder knowingly made any false statement, or knowingly concealed any material fact, in the right; 2) the right is not renewed as required by the conditions of this certificate; or 3) the State Water Board finds that the right holder is in violation of the conditions of this right. (Wat. Code, § 1228.4 et seq.)
23. The State Water Board intends to develop and implement a basin-wide program for real-time electronic monitoring and reporting of diversions, withdrawals, releases, and streamflow in a standardized format if and when resources become available. Such real-time reporting will be required upon a showing by the State Water Board that the program and the infrastructure are in place to accept real-time electronic reports. Implementation of the reporting requirements shall not necessitate amendment to this right.

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

This certificate was issued automatically as a result of the registrant self-certifying submittal of a water right registration filing in substantial compliance with Water Code §1228.3.

Dated: 03/26/2019 13:46:35

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North Coast Regional Water Quality Control Board

September 20, 2019

Amaranth Farms
PO Box 907
Redway, CA 95560
amaranthfarms@gmail.com

Dear Amaranth Farms:

Subject: Water Quality Certification Notice of Applicability (NOA) for Coverage under the State Water Resources Control Board Cannabis Cultivation Policy, and Order No. WQ 2019-0001-DWQ (the Cannabis General Order)

File: Amaranth Farms Property Water Quality Certification for Humboldt County APN(s) 108-033-004-000 and 108-033-014-000; WDID No. 1B190147CHUM, CIWQS Place: 828618

This letter certifies conditional coverage of the proposed instream work project (Project) as described in *Appendix D for Amaranth Farms Humboldt County APN 108-033-004-000 and 108-033-014-000* (Application) by Amaranth Farms (Applicant) prepared by Stillwater Sciences, under Order No. WQ 2019-0001-DWQ General Waste Discharge Requirements and Waiver of Waste Discharge Requirements (the Order) and in compliance with the State Water Resources Control Board Cannabis Cultivation Policy (Policy). To comply with the Order, the Applicant must comply with all conditions of this NOA and documents referenced herein.

Background

On June 19, 2019, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application for enrollment from Amaranth Farms to comply with the terms of, and obtain coverage under the Order for discharges of waste associated with cultivation and proposed work outside of waters of the State at Humboldt County assessor parcel number (APN) 108-033-004-000 and 108-033-014-000. To conduct the work proposed in the Application and comply with the Order, the Applicant requires additional coverage under the General Water Quality Certification section of the Order for proposed instream compliance work. On July 5, 2016, the Regional Water Board received a Notice of Intent and enrollment fee under Order R1-

VALERIE L. QUINTO, CHAIR | MATTHIAS ST. JOHN, EXECUTIVE OFFICER

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2015-0023 (the Regional Cannabis Waiver). On December 1, 2017, the Regional Water Board received an Instream Workplan completing the Application, which contains Project details and requests water quality certification for the Project. The Application provides information related to the Project location, description, environmental need, design criteria, assessment of Project area flora and fauna, monitoring and reporting plans, and environmental protection measures. The Project activities, environmental protection measures included therein, and Best Practicable Treatment and Control (BPTC) measures included in Attachment A of the Order, are considered enforceable components of this NOA of enrollment under the Order. Enrollment under this General Water Quality Certification requires an annual fee to be paid until the instream work and associated monitoring has been completed and the Regional Water Board has been notified as such.

Project Description and Project Scope

This NOA covers only the work described in the original Application received on December 1, 2017. Any additional instream work must have a new application submitted and approved by the Regional Water Board per the requirements of the Order. The proposed project scope does not exceed what is allowed for coverage under the Order and is in compliance with one or more of the following categorical exemptions of the California Environmental Quality Act (CEQA): California Code of Regulations, title 14, section 15308 (regulatory actions for environmental protections); section 15301 (ongoing or existing projects).

Required Mitigation

Specific mitigation measures shall be completed as described in the Application and this NOA. Areas with temporary impacts outside of the existing project footprint shall be mitigated at a 1:1 ratio through enhancement, remediation, or restoration of riparian areas. Areas with permanent impacts outside of the existing project footprint, such as those caused by the placement of armoring around culverts, increased length of culverts outside of road prism, pond removal, etc.; shall be mitigated at a 3:1 ratio through enhancement, remediation, or restoration of riparian areas. Mitigation through enhancement consists of activities that enhance the existing riparian area through minor modifications, i.e. removal of non-native species or planting of native species over a small surface area (approximately 100 square feet). Mitigation through remediation consists of activities that remediate impacts to the riparian area, streambed, or streambank caused by recent impacts. Examples of remediation are replanting disturbed areas with native species, minor re-contouring of streambanks, etc. Mitigation through restoration consists of activities that restore previously existing features, such as fully restoring a previously existing stream channel (i.e. engineered streambed, streambank, and floodplain, and establishment of native plants in the restored area) after removal of an on-stream pond.

Monitoring Plan

Monitoring of physical stream parameters (e.g. vegetation, signs of erosion or sedimentation, stream stability, and stream flow capacity) will be conducted both before and after Project implementation. Pre-Project monitoring was conducted by the Applicant. Post-Project monitoring shall occur annually and shall be submitted annually to the Regional Water Board by January 31. Monitoring will be conducted and recorded

by the landowner and shall include photo documentation of each instream work location with associated notes on plant survival and vigor, stream and pond stability, and signs of bed and bank erosion. At least five years of post-Project monitoring shall be provided until a minimum of 85 percent survival rate is achieved. Compensatory Mitigation shall be revegetation of eroded/denuded stream banks, as described in the Application and prescribed in the Required Mitigation section above.

Following the completion of each seasonal work period, an annual report shall be submitted to all appropriate agencies (Humboldt County, Army Corps of Engineers, Regional Water Board, and California Department of Fish and Wildlife). This annual report shall include findings that result from pre- and post-Project monitoring. These findings shall indicate the achievement of performance standards and include the following information:

- Summary of findings
- Identification and discussion of problems with achieving performance standards
- Proposed corrective measures as needed (requires Regional Water Board approval prior to implementation)

All other monitoring requirements, pursuant to Order WQ 2019-0001-DWQ and proposed in the Project Application shall be followed in addition to the requirements listed above.

Notice of Applicability & Project Determination

Regional Water Board staff has determined that the proposed activities as described in the Application may proceed under the General Water Quality Certification of the Order so long as the Applicant complies with the conditions prescribed in this NOA, the Order, the Policy, and the Site Management Plan associated with this property.

Project Reporting

Monitoring reports shall be submitted at a minimum annually by January 31st of each year, documenting the achievement of performance standards and project goals.

In addition, a Notice of Completion (NOC) shall be submitted by the applicant no later than 30 days after the Project has been completed. A complete NOC must include, at a minimum: photographs with a descriptive title, the date each photograph was taken, the name of the photographic site, the WDID number indicated above, and success criteria for the project. The NOC shall demonstrate that the Project has been carried out in accordance with the Project description as provided in the Applicant's Project Application and this NOA. Please note that the Applicant will continue to get billed an annual fee until an NOC has been submitted and approved

Please include the Project name and WDID number with all future inquiries and document submittals. Document submittals shall be made electronically to:
NorthCoast.Cannabis@waterboards.ca.gov.

Please contact staff at 707 576-2676 or NorthCoast.Cannabis@waterboards.ca.gov if you have any questions.

Sincerely,

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Date: 2019.09.20
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Matthias St. John
Executive Officer

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DECEMBER 2017

Water Resource Protection Plan for APNs 108-033-014 and 108-033-004



PREPARED FOR

California Regional Water Quality Control Board
North Coast Region
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Suggested citation:

Stillwater Sciences. 2017. Water Resource Protection Plan for APNs 103-033-014 and 103-033-004. Prepared by Stillwater Sciences, Arcata, California for California Regional Water Quality Control Board, North Coast Region, Santa Rosa, California.

Cover photo: Pond 2 – sediment trap location.

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1 PURPOSE

This document serves as the Water Resource Protection Plan on behalf of the discharger, Nya Hessler, pursuant to Order No. R1-2015-0023 (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), of the California Water Code Section 13260(a).

California Water Code section 13260(a) requires that any person discharging waste or proposing to discharge waste within any region that could affect the quality of the waters of the state, other than into a community sewer system, shall file with the appropriate regional water board a Report of Waste Discharge (ROWD) containing such information and data as may be required by the Regional Water Board. The Regional Water Board may waive the requirements of Water Code section 13260 for specific types of discharges if the waiver is consistent with the Basin Plan and in the public interest. Any waiver is conditional and may be terminated at any time. A waiver should include monitoring requirements to verify the adequacy and effectiveness of the waiver's condition. Order No. R1-2015-0023 conditionally waives the requirement to file a ROWD for discharges and associated activities described in finding 4.

2 SCOPE OF REPORT

Under Order No. R1-2015-0023, any landowner or operator cultivating cannabis that results in a discharge of waste to an area that could affect waters of the State (including groundwater) will fall within one of three tiers depending on the nature of their operation and risk to water quality. Order No. R1-2015-0023 states that:

"Tier 2 Dischargers and Tier 3 Dischargers who intend to cultivate cannabis before, during, or following site cleanup activities shall develop and implement a Water Resource Protection Plan that contains the elements listed and addressed below. Dischargers must keep this plan on site, and produce it upon request by Regional Water Board staff. Management practices shall be properly designed and installed, and assessed periodically for effectiveness. If a management measure is found to be ineffective, the plan must be adapted and implemented to incorporate new or additional management practices to meet standard conditions. Dischargers shall certify annually to the Regional Water Board individually or through an approved third party program that the plan is being implemented and is effectively protecting water quality, and report on progress in implementing site improvements intended to bring the site into compliance with all conditions of this Order."

3 METHODS

3.1 Site Assessment

Stillwater Sciences' engineer/hydrologist (Joel Monschke) visited APN 108-033-004 and APN 108-033-014 on July 11, 2016 (Figure 1). During the site visit, a full property road assessment was conducted, including an inspection of seven crossings, three pond sites, and two points of diversion (POD). To provide a basis for determining the adequacy of each crossing site and pond

to handle 100-yr discharges, Stillwater staff analyzed the tributary drainage areas for each site crossing. Site locations are shown on Figure 2 and hydrologic/hydraulic calculations were conducted for each road/stream crossing. See Appendix A for photographs of all crossings.

3.2 Geology and Soils

The entire property and surrounding vicinity is underlain by Tertiary and Cretaceous marine sedimentary and metasedimentary lithologies (included by some in the Franciscan Complex) (McLaughlin et al. 2000). These rocks consist of sandstone, shale, and minor amounts of conglomerate.¹ The property is located in mountainous terrain with steep slopes supporting dense conifer and hardwood stands. Bedrock outcrops are limited and generally located along incised stream-banks. No evidence of large-scale mass wasting was observed on the property although there is a large landslide feature located to the south of property.

¹ California Department of Conservation, Geologic Map of California (2010), accessed online at: <http://maps.conservation.ca.gov/cgs/gmc/>

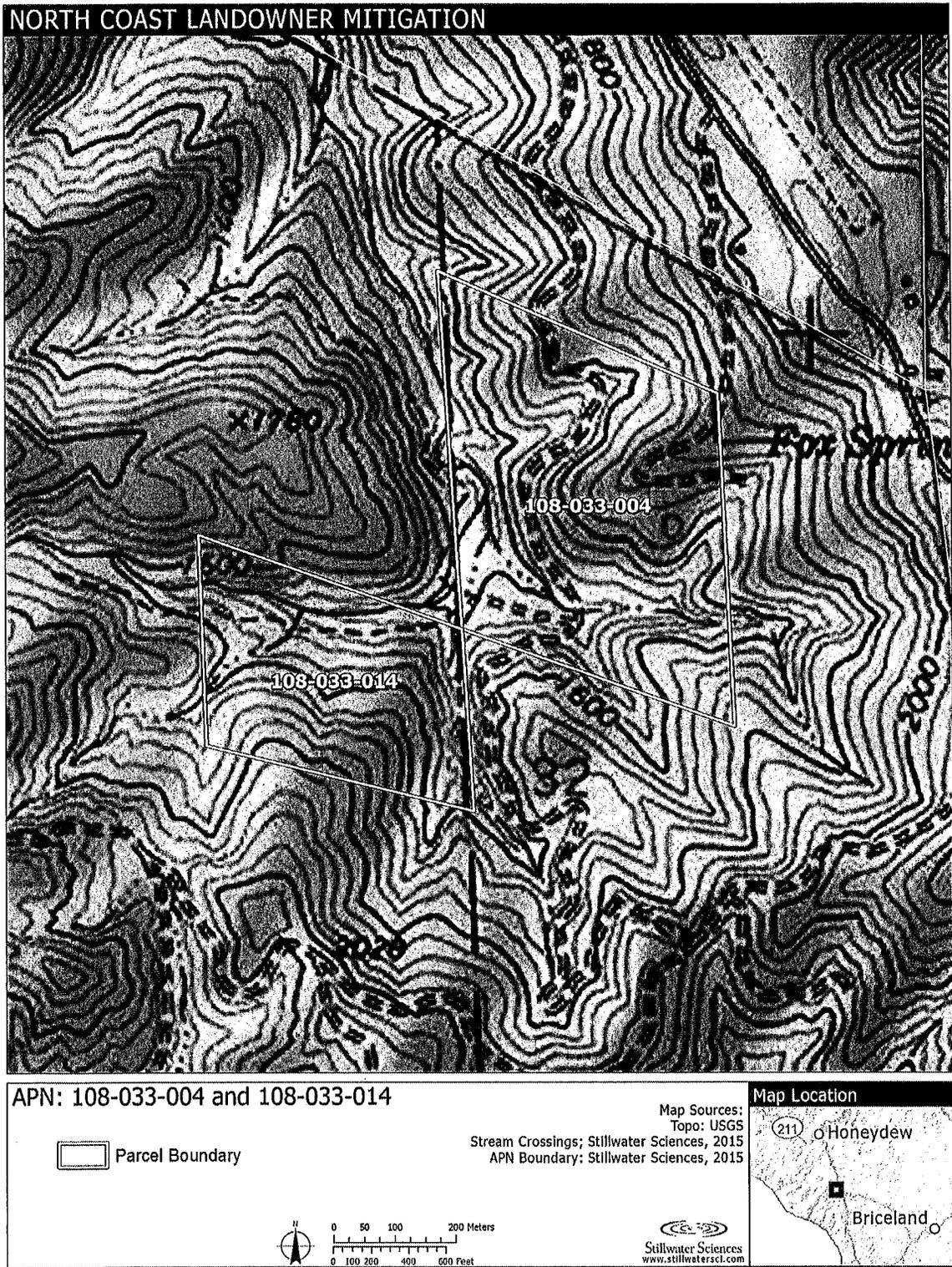


Figure 1. APN 108-033-004 and 108-033-014 location map.

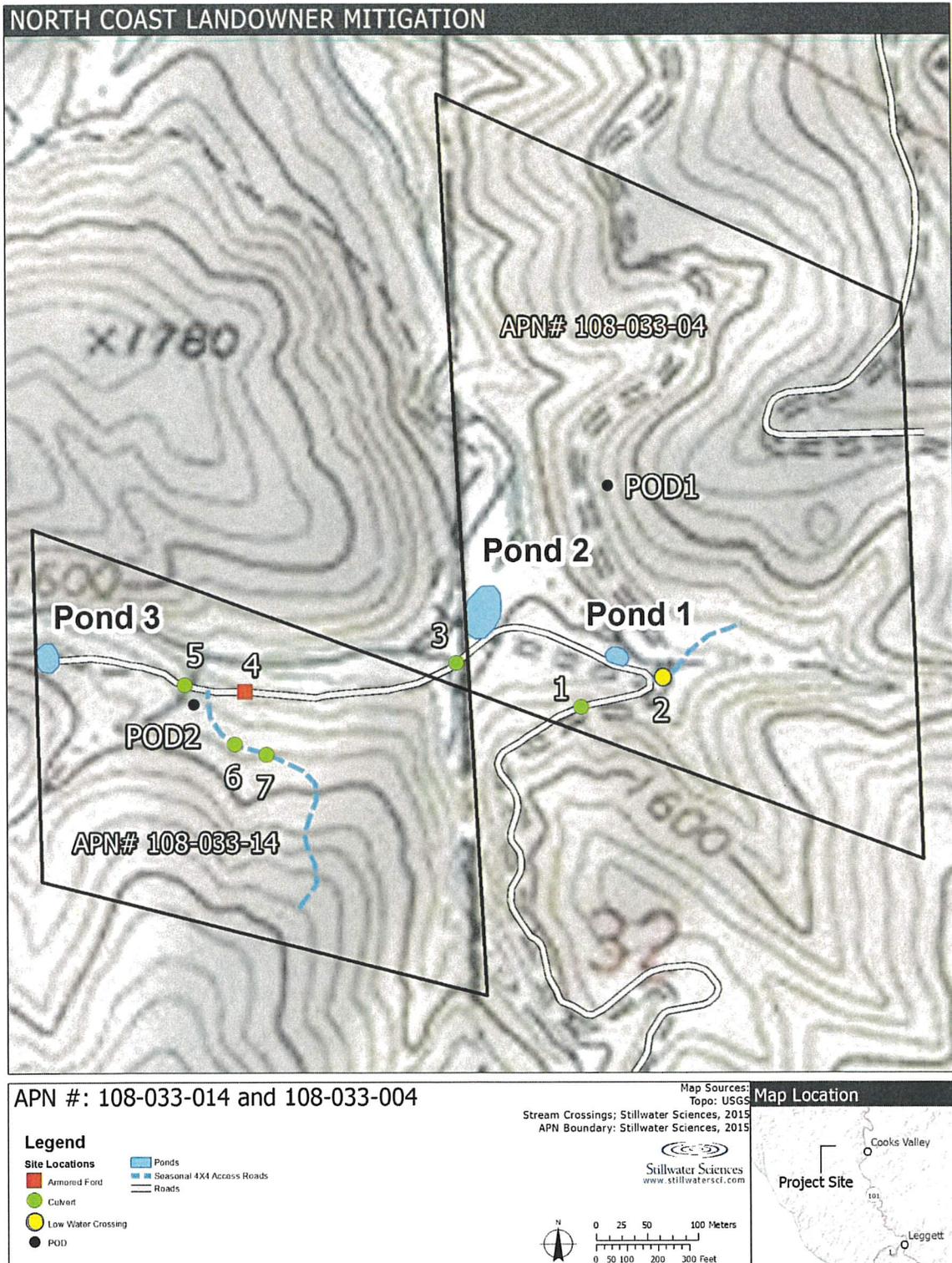


Figure 2. Potential sediment source locations on APN 108-033-004 and APN 108-033-014.

3.3 Hydrologic Analyses for Drainage Structure Design

To determine the appropriate sizing for each new crossing structure, the Rational Method (also known as the Rational Formula) was used to calculate the design flow for the 100-year storm event. This method is appropriate for determining flow rates for relatively small drainage areas of less than 200 acres according to Cafferata et. al. (2004). The Rational Formula incorporates a combination of rainfall intensity, drainage area and runoff coefficient to estimate maximum flows and is defined as follows:

$$Q = CIA$$

Where:

- Q = Flow Discharge
- C = Runoff Coefficient
- I = Rainfall Intensity
- A = Area

3.3.1 Determining storm duration

For the Rational Method analysis, the total drainage area, slope, and longest flow path were determined based on field observations and analyses of a USGS topographic map. Based on these values (summarized on Table 1), the “Time to Concentration” was estimated using the Airport Drainage Formula. The “Time to Concentration” is defined as the time it takes runoff to travel along the longest flow path within the contributing watershed and arrive at a site crossing. Per Cafferata et. al., the “Time to Concentration” can be found with the following Airport Drainage Formula²:

$$T_c = ((1.8)(1.1 - C)(D^{0.5})) / (S^{0.33})$$

² Note that two methods for determining Time to Concentration were described in Cafferata et. al. including (1) the Kirpich formula and (2) the Airport Drainage equation. The Kirpich Formula was developed in 1940 based on precipitation and runoff data from seven rural watersheds in Tennessee with average slopes ranging from 3% to 10%. We believe that the Kirpich Formula does not provide good estimates for Time to Concentrations on steeper northern California watersheds. Additionally, Yee (2004) recommends use of the Airport Drainage equation.

Where:

T_c=Time of Concentration (minutes)

C=Runoff Coefficient (dimensionless, 0<C<1.0)

D=Distance (in feet from the point of interest to the point in the watershed from which the time of flow is the greatest)

S = Slope (percent)

Table 1. Summary of time-to-concentration analyses.

Site number	Drainage area (ac)	Longest flow path (ft)	Maximum elevation change (ft)	Slope (%)	Time of Concentration (min)	100-year rainfall intensity (in/hr)
1	2.8	631	250	40	9	5.7
2	27.0	2244	700	31	19	3.8
3	73.4	2775	600	22	24	3.3
4	10.0	1210	480	40	13	4.8
5	36.6	2142	620	29	20	3.7
6	6.3	1061	400	38	11	5.3
7	2.8	838	320	38	11	5.3
Pond 2	5.3	1007	330	33	13	4.9

3.3.2 Precipitation data

The intensity-duration-frequency (IDF) curve used for the Rational Method analysis came from National Oceanic and Atmospheric Administration's National Weather Service Hydrometeorological Design Studies Center Precipitation Frequency Data Server (PFDS).³ Rainfall intensity was determined from the IDF curves for the 100-year recurrence interval for storm durations equivalent to the "Time to Concentration" for the project site. The 100-year rainfall intensity from the PFDS for each site is also shown on Table 1.

3.3.3 Runoff coefficients

Cafferata et. al. suggests a runoff coefficient ranging from 0.30 to 0.45, depending on the specific location of the crossing. Per Buxton et. al. (1996), as cited in Cafferata et. al., a runoff coefficient value of 0.4 is recommended for North Coast California specifically. Additionally, a runoff coefficient of 0.4 reflects woodland with heavy clay soil, soil with a shallow impeding horizon, or shallow soil over bedrock per Figure 3 taken from Appendix A, Table A-1 of *The Handbook for Forest, Ranch and Rural Roads* (Weaver et. al. 2015).

For this property, we have used a Runoff Coefficient of 0.4 for all crossings.

³ http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html

Soils	Land use or type	C value
Sandy and gravelly soils	Cultivated	0.20
	Pasture	0.15
	Woodland	0.10
Loams and similar soils without impeded horizons	Cultivated	0.40
	Pasture	0.35
	Woodland	0.30
Heavy clay soil or those with a shallow impeding horizon; shallow over bedrock	Cultivated	0.50
	Pasture	0.45
	Woodland	0.40

Figure 3. Runoff coefficients (adopted from Appendix A, Table A-1 of the *Handbook for Forest, Ranch and Rural Roads* (2015)).

3.3.4 Storm discharges and drainage structure sizing

Table 2 shows flow discharges from the Rational Method calculations for 100-year storm events along with the required culvert diameter at each culvert site. In turn, the calculated flow discharges for Sites 2 and 4 and Pond 2 can be found in Table 3. It is critical that all crossing sites are properly sized so that 100-year flows do not exceed the drainage structure capacity which could lead to erosion of the adjacent outboard edge of the road. In turn, it is critical to control runoff and direct flows to Pond 2 with a rock lined ditch designed to withstand 100-year flows.

Armored ford dimensions required to carry 100-year discharges were determined through hydraulic modeling using the U.S. Army Corps of Engineers' Hydrologic Engineering Center's River Analysis System (HEC-RAS). In turn, culvert crossings required to carry 100-year discharges were sized using the FHWA Culvert Capacity Inlet Control Nomograph (Figure A-1 of Weaver et. al. 2015) using an HW/D ratio of 1.0, as shown in Figure 3 below.

Specific upgrade recommendations for each ford and culvert crossing are described in Section 5.

Table 2. 100-year discharges and required diameter for culvert crossings.

Site number	100-year discharge (cfs)	Required culvert size (in)
1	6	18
3	106	60
5	63	48
6	9	24
7	7	24

Table 3. 100-year discharges for Pond 2 and Armored Ford crossings.

Site number	Site type	100-year discharge (cfs)
4	Armored Ford Crossing	19
Pond 2	Pond	10

4 RESULTS AND RECOMMENDED REMEDIATION TO PREVENT SEDIMENT DELIVERY

4.1 General Site Characteristics

The cultivation and shop areas on parcel 108-033-014 are situated on a moderately (30–35%) sloping hill with a northeast aspect (See Appendix B for a detailed map of the parcel features). Vegetation is a mix of hardwoods and conifers. There is a 1,750 square foot shop on the parcel. An outhouse is present on site. There are three cultivation areas (one outdoor and two greenhouses) that total approximately 10,000 ft². The cultivation areas are within 50 to 100 ft from the head of an intermittent Class III watercourse. Activities consist of full sun outdoor cultivation with greenhouses used to protect plants during early and late season. Artificial light may be used during early season to assist growth of non-commercial nursery starts and young plants.

The cultivation, sheds, and residence on parcel 108-033-004 are situated on a gently (10–15%) sloping ridge portion between the East Fork Honeydew Creek and a Class II watercourse. Vegetation is a mix of hardwoods and conifers (See Appendix B for a detailed map of the parcel features). There is a 1,750 square foot shop on the parcel. Two outhouses are present on site. There are three greenhouses that total approximately 10,000 ft² near the residence. Activities consist of full sun outdoor cultivation with greenhouses used to protect plants during early and late season. Artificial lite may be used during early season to assist growth of non-commercial nursery starts and young plants.

Electrical power to the property is supplied by solar powered system with generator backup.

Based on the results of the field assessment and H&H analyses, five crossings will be stormproofed to handle 100-year flows and debris. These actions will include culvert installation/replacement as well as placement of riprap rock armor as described in Table 4. The remediation actions required for these properties are described below and in the engineering designs presented in Appendix B.

4.2 Road Crossings

- Site 1- The 18" diameter pipe located at the swale is sized correctly and can remain in place. However, this site requires 10 cubic yards of rock armoring at the outlet.
- Site 3- The landowner is wishing to have all-season access along this road and wants to replace the existing ford crossing with a culvert. We recommend a 30' long, 72" diameter culvert (increased diameter 12' beyond 60" diameter required for hydraulic capacity to improve geomorphic function) with five cubic yards of rock armoring around the inlet and 10 cubic yards of rock armoring around the outlet. Embed culvert 1.5 feet minimum into channel. Note that there is existing rock in the channel at the outlet, so no additional in-channel
- Site 5- The existing 24" culvert should be upgraded to a 42" diameter culvert. Armor inlet and outlet with a total of 10 CY rock (available on site).
- Site 6- Install 24" diameter culvert at small natural drainage. Add 5 CY rock armoring at outlet
- Site 7- Install 24" diameter culvert at small natural drainage. Add 5 CY rock armoring at outlet

4.2.1 Sites 1, 3, 5, 6, and 7 – culvert upgrades

As described above, five existing culvert crossings will be upgraded with specifications for each new drainage structure described on Table 4.

Table 4. Site-specific culvert upgrade specifications.

Site Number	Required culvert Diameter (inches)	Culvert Length (ft)	Total rock volume (cubic yards)	Rock size range (ft)*
1	-	-	10	1-2
3	60**	30	15	1-3
5	42	30	10	1-3
6	24	30	5	1-2
7	24	30	5	1-2

* Approximate rock size to weight conversion:

- 2-3 ft rock = 1-2 ton
- 1.5-2 ft rock = ¼-½ ton

** Recommend 72" diameter culvert to improve geomorphic function

4.2.2 General culvert upgrade specifications

Typical culvert installation and rock armor placement is depicted on Figure 4. Additionally, the following specification should be followed when constructing the culverts:

- Remove existing culvert (if applicable) and excavate a trench at the original channel gradient to place the culvert. Note that on steep channels (as seen on this project) culverts may be installed at a more gentle slope with extensive rock armoring placed under the outlet for channel armoring and energy dissipation as shown on Figure 5.
- If extensive rock armoring is necessary downstream from the culvert, the rock should be placed prior to the installation of the culvert to allow for best equipment access. Begin to place rock from the downstream extent of the culverts spillway with the first row of rock firmly keyed in to the bench at the bottom of the spillway.
- Upon completion of the spillway near to the elevation of the culvert outlet, finalize the trench where the culvert shall be placed. The base of the trench shall be well compacted (minimum 90% RC) and shall be constructed at an even gradient with a minimum width of 4 feet greater than the culvert diameter to allow for compaction along the sides of the culvert.
- Place culvert (with dimensions shown on Table 4 in the trench. Compaction around the culvert should occur in 6-inch to 1-ft lifts using a Wacker or other approved method. Soils should be wetted or dried for maximum compaction (minimum 90% RC).
- After culvert is covered with fill, begin rebuilding road prism in 1-inch lifts. Compaction should occur with a Sheepsfoot or other approved method.
- Place final rock armoring around culvert outlet, culvert inlet, and upstream channel as described in Table 4 and in the site-specific specifications. A critical dip will be constructed over new fill. The dip will be constructed of rock armoring that extends from the top of the culvert to the road surface.
- Insure that road surface drainage is controlled with rolling dips upslope from the crossing and armored inboard ditches as necessary.
- Place a minimum of 6-inch road rock on all disturbed area adjacent to the crossing.
- All sites subject to changes based on field conditions and/or as directed by engineer or watershed scientist.

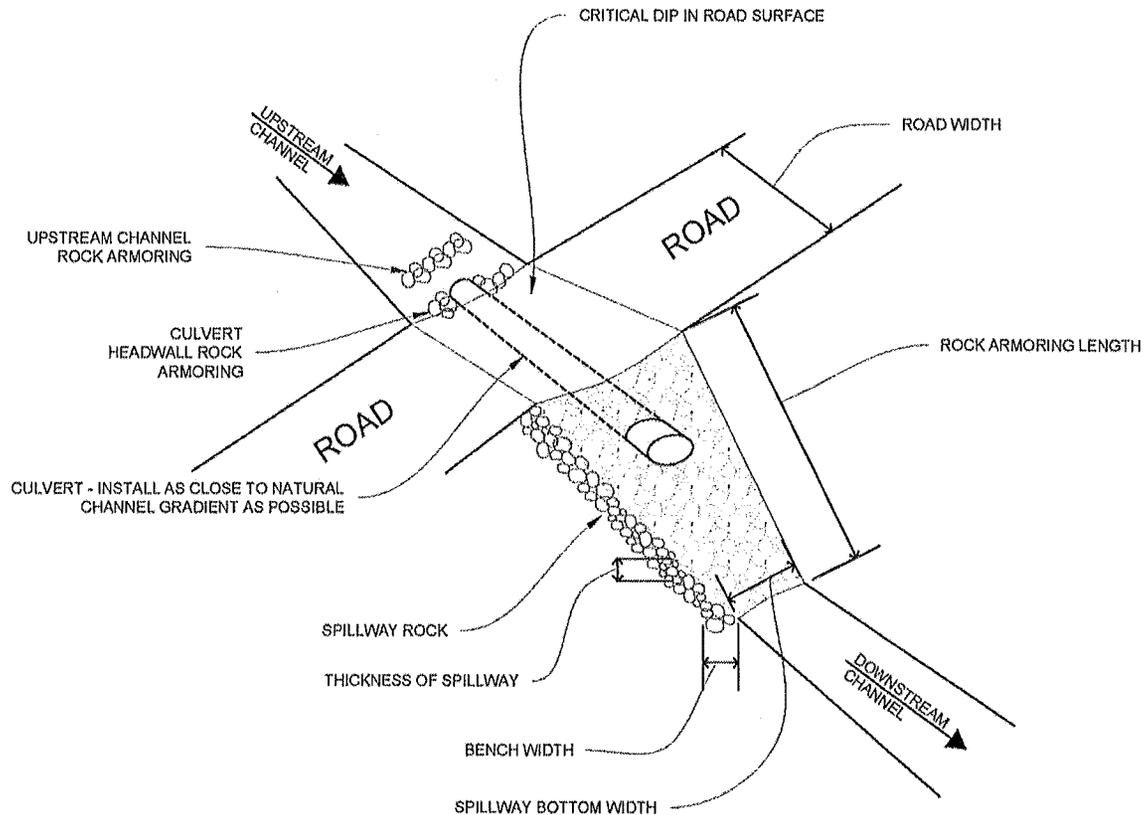


Figure 5. Culvert installation schematic.

4.3 Armored Ford Construction

We recommend widening and adding some additional armoring to the armored ford at Site 4. We determined the appropriate dimensions of the ford using the U.S. Army Corps of Engineers' *Hydrologic Engineering Center's River Analysis System* (HEC-RAS). It is critical that the armored fords are properly sized so that 100-year flows do not exceed the capacity of the ford which could lead to erosion of the adjacent outboard edge of the road. The specific dimensions for the armored ford are described below.

4.3.1 Site 4 armored ford specifications

Typical armored ford construction is depicted on Figure 6 with the specific dimensions and required rock armoring for Site 4 defined on Tables 5 and 6. Additionally, the following specification should be followed when constructing the armored fords:

- Construction should begin from the downstream extent of the ford's spillway with the first row of rock firmly keyed in to the bench at the bottom of the spillway.
- All loose dirt or gravel should be removed from the outboard edge of the road prior to construction of the spillway.
- The spillway should be constructed in lifts with larger rock on the face and smaller rock and gravel compacted behind the larger rock to fill any voids.
- Within the portion of the ford where the spillway meets the road surface rock, contractor shall exercise special care to compact the underlying material and use a variety of rock

sizes ranging from small gravel to cobble; this portion of the structure is especially susceptible to failure in the first few winters.

- Firmly compact road surface armoring to the dimensions and slopes shown on Table 5.
- All sites are subject to changes based on field conditions and/or as directed by engineer or watershed scientist.

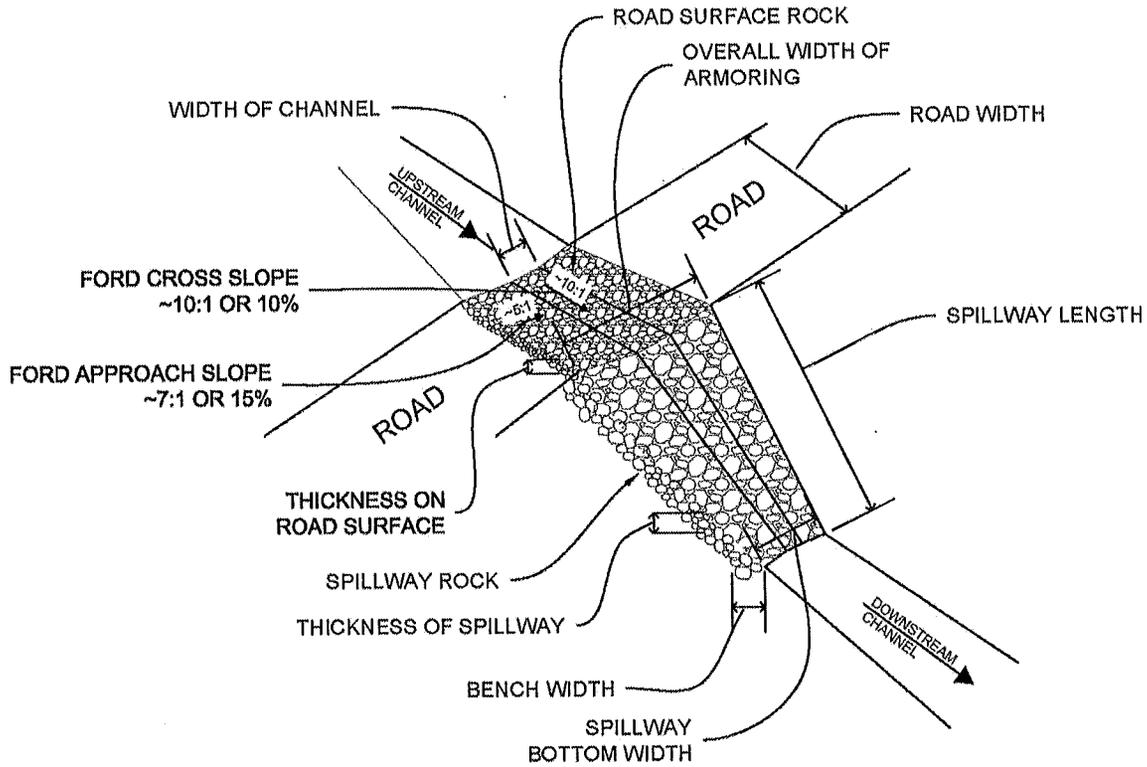


Figure 6. Armored ford schematic.

Table 5. Summary of crossing dimensions.

Site #	Width of channel (ft)	Overall width of armoring (ft)	Road width (ft)	Thickness of road armoring (ft)	Spillway length (ft)	Spillway thickness (ft)	Bench width (ft)	Spillway bottom width (ft)
4	4	16	8	1	8	2	2	12

Table 6. Summary of rock needed for each crossing.

Site #	Spillway rock size range (ft)*	Total spillway rock needed (cubic yards)	Road surface rock size range (ft)*	Total road surface rock size needed (cubic yards)	Total rock volume (cubic yards)**
4	2-4	7	0.5-1	5	12

*Approximate rock size to weight conversion:

- 2–4 ft rock = 1 to 2 ton
- 1.5–2 ft rock = ½ ton
- 0.5–1.5 ft rock = backing to ¼ ton
- 0.5–1 ft rock = backing

**Approximately 7 CY already onsite

4.4 General Road Surface Drainage Treatments

Install rolling dips and crown road surface to reduce runoff concentration along road segments, especially those in close proximity to intermittent streams.

4.5 Site 2 Recommendations

As shown on Figure 2 and Tables 1 and 3, there is also a low water crossing at Site 2. It is recommended that sediment catchment basins be installed at all water bar approaches to limit sediment delivery to the East Fork Honeydew Creek.

4.6 Ponds

Similar to the armored ford at Site 4, the flow capacity of the proposed pond outfall culverts and rock lined ditches were modeled using HEC-RAS. It is critical that the culverts and ditches are properly sized and positioned to allow 100-year flows to drain from the pond without backing up water or causing erosion. Additional specific recommendations for each pond are described below and depicted on the Plans in Appendix B.

4.6.1 Site-specific pond upgrade recommendations

- Pond 1 – Existing rainwater catchment pond, landowner to enlarge based on attached grading plans.
- Pond 2 – Sediment catchment use only, control runoff and erosion coming driveway and parking area with rock lined ditch directed to pond; improve outflow per grading plans.
- Pond 3 – Existing rainwater catchment pond, landowner to enlarge based on attached grading plans.

4.7 Erosion Control BMPs (to be used at all sites where soil is disturbed)

- Erosion and sediment control best management practices (BMPs) shall be installed prior to the wet season (1 October through 30 April).
- Sensitive areas and areas where existing vegetation is being preserved shall be protected with construction fencing; fencing shall be maintained throughout construction activities.
- All areas disturbed during grading activities shall be seeded with native grass seed and mulched with rice straw.
- Prior to seeding and straw, disturbed areas should be roughened by track walking with a dozer.
- Straw shall be applied at a uniform rate of approximately 4,000 lbs per acre by hand.

- At the completion of the project, straw wattles shall be placed as directed by the engineer or geologist.
- All sediment control BMPs shall be maintained throughout the wet season until new vegetation has become established on all graded areas.

5 CHEMICAL, FERTILIZER, PETROLEUM MANAGEMENT

The landowner currently stores all fertilizer (Table 7) in a rain-tight shed on parcel 133-033-004 (Sheet 2 of Appendix B). The landowner does not use herbicides or pesticides. All petroleum products are stored in a rain-tight 12-ft x 20-ft shed (Sheet 2 of Appendix B). The petroleum is stored in a 500 gallon above ground tank with sufficient secondary containment. All the necessary spill prevention and clean-up materials are on site and available in the immediate vicinity of the tank and generator.

Table 7. Types and quantities of soil and liquid nutrient amendments used each year on the parcels.

Amendment	Quantity	N-P-K percentage		
		N	P	K
Azomite	120 lbs	15	15	5
Chicken manure	3,000 lbs	3	2	2
Dolomite lime or limestone	60 lbs	0	0	0
Potassium magnesium sulfate	2 cups/100 gallons water/10 days	0	0	22
Sea Kelp	25 lbs	1	0.5	2.5
Worm castings	900 lbs	1	0	0
Mr. B's green teas	Not known	7	4	4
Tea Lab Kit	Not known	?	?	?
Fish emulsion	30 gallons	5	1	1
Quantum Light*	20 gallons	NA	NA	NA

*A blend of microorganisms to improve soil biology.

Pests are controlled with Safer Soap and Safer 3 in 1. These products are organic and have potassium salts of fatty acids (12.38%) and sulfur (6.48%) as active ingredients.

6 WATER USE

6.1 APN 108-033-014

This property has four sources of water: a jurisdictional spring, a groundwater spring, and two off-channel rainwater catchment ponds. The landowner is in the process of permitting the jurisdictional spring diversion. The landowner is also in the process of designing and permitting an enlargement of the off-channel rainwater catchment pond (See design sheet #5 in the Appendix).

6.1.1 Water storage and plumbing

Water is diverted and pumped from the jurisdictional spring to the place of use (domestic and irrigation) and storage (See sheet 2 in Appendix). Storage is provided by two 3,000 and one 1,250

gallon tanks. Water is gravity fed to the cultivation area where it is then hand watered onto the plants.

The existing off-channel rainfall catchment pond #3 is being enlarged to holds approximately ~180,000 gallon when it is full. Water from the pond will be pumped to the storage tanks for irrigation purposes, thereby reducing reliance on the jurisdictional spring. However, the landowner intends to permit the spring to allow topping off of the pond prior to the forbearance period if the pond does not entirely fill from rainfall.

6.1.2 Water use

Domestic use on the property is estimated to be 3,000 gallons per month, which is supplied by the spring.

The tables below are estimates of the amounts of water that will be diverted from storage or directly from the spring once the pond is enlarged and filled with rainwater.

Table 8. Total water diversion from storage by month (in gallons)

J	F	M	A	M	J	J	A	S	O	N	D
0	0	0	0	0	15,000	30,000	30,000	30,000	7,500	0	0

Table 9. Total water diversion from spring by month to top off storage (in gallons)

J	F	M	A	M	J	J	A	S	O	N	D
0	25,000	25,000	0	0	0	0	0	0	0	0	0

Table 10. Total water diversion from spring by month to supply indoor domestic needs (in gallons)

J	F	M	A	M	J	J	A	S	O	N	D
3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000

6.2 APN 108-033-004

This property has two sources of water: (1) a non-jurisdictional spring and (2) an off-channel rainwater catchment pond. The landowner is also in the process of designing and permitting an enlargement of the off-channel rainwater catchment pond (See design sheet #5 in the Appendix).

6.2.1 Water Storage and Plumbing

Water is diverted from the non-jurisdictional spring and gravity fed to the storage tanks. The spring is also gravity fed to a 1,250 gallon temporary storage tank located near the residence for use as domestic water (See sheet 2 in Appendix). Irrigation storage is provided by two 3,000 gallon tanks. Water is gravity fed to the cultivation area where it is then hand watered onto the plants.

The existing off-channel rainfall catchment pond #1 is being enlarged to holds approximately ~170,000 gallon when it is full. Water from the pond will be pumped to the storage tanks for irrigation purposes, thereby reducing reliance on the jurisdictional spring. However, the landowner intends to use the non-jurisdictional spring to top-off of the pond prior to the forbearance period if the pond does not entirely fill from rainfall.

There is currently a second pond (#2) on the property, which doesn't hold water and serves as a sediment trap. This pond is being enlarged to enable additional sediment storage and further reduce deliver to the East Fork Honeydew Creek.

6.2.2 Water Use

Domestic use on the property is estimated to be 3,000 gallons per month, which is supplied by the non-jurisdictional spring.

The tables below are estimates of the amounts of water that will be diverted from storage or directly from the spring once the pond is enlarged and filled with rainwater.

Table 11. Total water diversion from storage by month (in gallons)

J	F	M	A	M	J	J	A	S	O	N	D
0	0	0	0	0	15,000	30,000	30,000	30,000	7,500	0	0

Table 12. Total water diversion from spring by month to top off storage (in gallons)

J	F	M	A	M	J	J	A	S	O	N	D
0	25,000	25,000	0	0	0	0	0	0	0	0	0

Table 13. Total water diversion from spring by month to supply indoor domestic needs (in gallons)

J	F	M	A	M	J	J	A	S	O	N	D
3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000

7 OTHER PERMITS

The applicant has applied for the following permits:

- Humboldt County Commercial Cannabis Cultivation Permit
- Humboldt County Grading Permit for rainwater catchment pond construction
- CDFW 1602 Permit for crossing upgrades and water diversion
- State Water Board Initial Statement of Water Use for domestic purposes

8 REMEDIATION PLAN SUMMARY

Table 14. Features requiring improvement.

Unique map points	Map point description	Associated standard condition	Temporary BMP	Permanent BMP	Priority for action	Time schedule for completion of permanent BMP	Completion date
1	Culvert	2	Monitor throughout winter	Install outlet armoring	1	Late Spring/Summer 2018	15 October 2018
2	Low water crossing	1	Monitor throughout winter	Install sediment catch basins at all waterbars approaching crossing	1	Late Spring/Summer 2018	15 October 2018
3	Seasonal ford crossing	2	Monitor throughout winter	Replace ford with 72-inch culvert to handle 100-yr flows and armor inlet and outlet	2	Late Spring/Summer 2018	15 October 2018
4	Armored ford	2	Monitor throughout winter	Widen and armor ford to handle 100-yr flows armoring as discussed previously.	1	Late Spring/Summer 2018	15 October 2019
5	Undersize culvert	2	Monitor throughout winter	Upgrade 42-inch culvert to handle 100-yr flows and armor inlet and outlet	1	Late Spring/Summer 2018	15 October 2018
6 and 7	Small drainage crossing	2	Monitor throughout winter	Install 24-inch culvert to handle 100-yr flows and armor inlets and outlets	3	Late Spring/Summer 2018	15 October 2018
Pond 1	Rainfall catchment	5	Monitor throughout winter	Enlarge to contain ~170,000 gallons of water	1	Late Spring/Summer 2018	15 October 2018
Pond 2	Sediment catchment	3	Monitor throughout winter	Improve inflow drainage path and upgrade outflow to prevent future sediment delivery	1	Late Spring/Summer 2018	15 October 2018

Unique map points	Map point description	Associated standard condition	Temporary BMP	Permanent BMP	Priority for action	Time schedule for completion of permanent BMP	Completion date
Pond 3	Rainfall catchment	5	Monitor throughout winter	Enlarge to hold ~180,000 gallons of water	1	Late Spring/Summer 2018	15 October 2018
All roads shown on map	General road improvements	1	Temporary road grading to make sure all rolling dips and ditches are functional	Installation of new dips; crown and gravel road surface at areas where erosion is evident	1	Late Spring/Summer 2018	15 October 2018

9 MONITORING AND REPORTING

9.1 General Monitoring

Sites shall be inspected periodically by the landowner/cultivator or their qualified representatives to ensure conformance with standard conditions. Site inspections should include visual inspection of the site, including any management measures, to ensure they are being implemented and are functioning as expected. Inspections include photographic documentation of any controllable sediment discharge sites, as identified on the site map, and a visual inspection of those locations on the site where pollutants or wastes, if uncontained, could be transported into receiving waters, and those locations where runoff from roads or developed areas drains into or towards surface water. At a minimum, sites shall be inspected at the following times to ensure timely identification of changed site conditions and to determine whether implementation of additional management measures is necessary to prevent or minimize discharges of waste to surface water:

1. Before and after any significant alteration or upgrade to a given stream crossing, road segment, or other controllable sediment discharge site. Inspection should include photographic documentation, with photo records to be kept on site.
2. Prior to 15 October to evaluate site preparedness for storm events and stormwater runoff.
3. Following any rainfall event with an intensity of 3 inches precipitation in 24 hours. Precipitation data can be obtained from the National Weather Service by entering the site zip code at <http://www.srh.noaa.gov/forecast>.

Periodic inspection of the site will occur using a checklist to confirm placement and efficacy of management measures, and document progress on any plan elements subject to a time schedule.

An annual report (Appendix C of Order No. R1-2015-0023) will be submitted by 31 March of each year that documents implementation and effectiveness of management measures during the previous year and includes the inspection checklist. At a minimum, all site features must be monitored annually, to provide the basis for completion of the annual re-certification process.

9.2 Revegetation Mitigation and Monitoring Plan

The culvert replacement projects will require disturbance of some riparian vegetation as described in Appendix D, Table 3. The disturbance of riparian vegetation will be mitigated with planting of ~24 new riparian trees and transplanting of ~8 shrubs (site-specific description in Appendix C, Table 3).

It will be the landowner's responsibility to install, maintaining, and monitor the plantings. Plants will be installed during the wet season to ensure sufficient soil moisture for survival. Landowner will be trained in planting techniques by Stillwater Sciences staff who have extensive experience implementing and overseeing riparian planting projecting. No irrigation will be required – based on extensive Stillwater Science staff experience revegetating similar restoration sites within the northern CA region.

Annual monitoring will be conducted in March of each year and include photographic documentation of each site with associated notes on plant survival and vigor. After 5 years, a minimum of 85% individual survival rate (or 20 riparian trees and 7 shrubs) shall be achieved.

Note that it is okay to supplement/replace annual mortality of specific plants with appropriate native riparian species volunteers.

10 REFERENCES

Buxton, T.H., W.J. Trush, and S.A. Flanagan. 1996. A comparison of empirical and regional peak discharge predictions to actual January 3, 1995 discharge at fifteen Bull Creek, Northwestern California tributary culverts. Unpubl. Rept. Prepared for the Humboldt State Univ. Institute for River Ecosystems Road Stream Crossing Project. Arcata, CA. 10 p.

Cafferata, P., Spittler, T., Wopat, M., Bundros, G., and Flanagan, S., 2004, Designing watercourse crossings for passage of 100 year flood flows, wood, and sediment, California Department of Forestry and Fire Protection, Sacramento, CA. Available at: <http://www.fire.ca.gov/ResourceManagement/PDF/100yr32links.pdf>

California Department of Conservation, Geologic Map of California 2010. Available at: <http://maps.conservation.ca.gov/cgs/gmc/>

McLaughlin, R.J., S.D. Ellen, M.C. Blake, Jr., A.S. Jayko, W.P. Irwin, K.R. Aalto, G.A. Carver, and S.H. Clarke, Jr. 2000. Geology of the Cape Mendocino, Eureka, Garberville, and Southwestern part of the Hayfork 30 x 60 Minute Quadrangles and Adjacent Offshore Area, Northern California. USGS Miscellaneous Field Studies MF-2336

Weaver, W.E., Weppner, E.M. and Hagans, D.K., 2015, Handbook for Forest, Ranch and Rural Roads: A Guide for Planning, Designing, Constructing, Reconstructing, Upgrading, Maintaining and Closing Wildland Roads (Rev. 1st ed.), Mendocino County Resource Conservation District, Ukiah, California. Available at: http://www.pacificwatershed.com/sites/default/files/roadsenglishbookapril2015b_0.pdf

Yee, C.S. 1994, Culvert design and installation, Unpublished paper supplied to participants at the California Licensed Foresters Association Workshop titled Road Location and Design. Redding, CA, June 9, 1995.

Appendices

Appendix A
Photographs



Photo 1. Site 1 culvert outlet.



Photo 2. Site 2 low water crossing.



Photo 3. Site 3 proposed culvert crossing.



Photo 4. Site 4 armored ford crossing.



Photo 5. Site 5 culvert inlet.



Photo 6. Site 6 proposed culvert crossing.



Photo 7. Site 7 proposed culvert crossing.

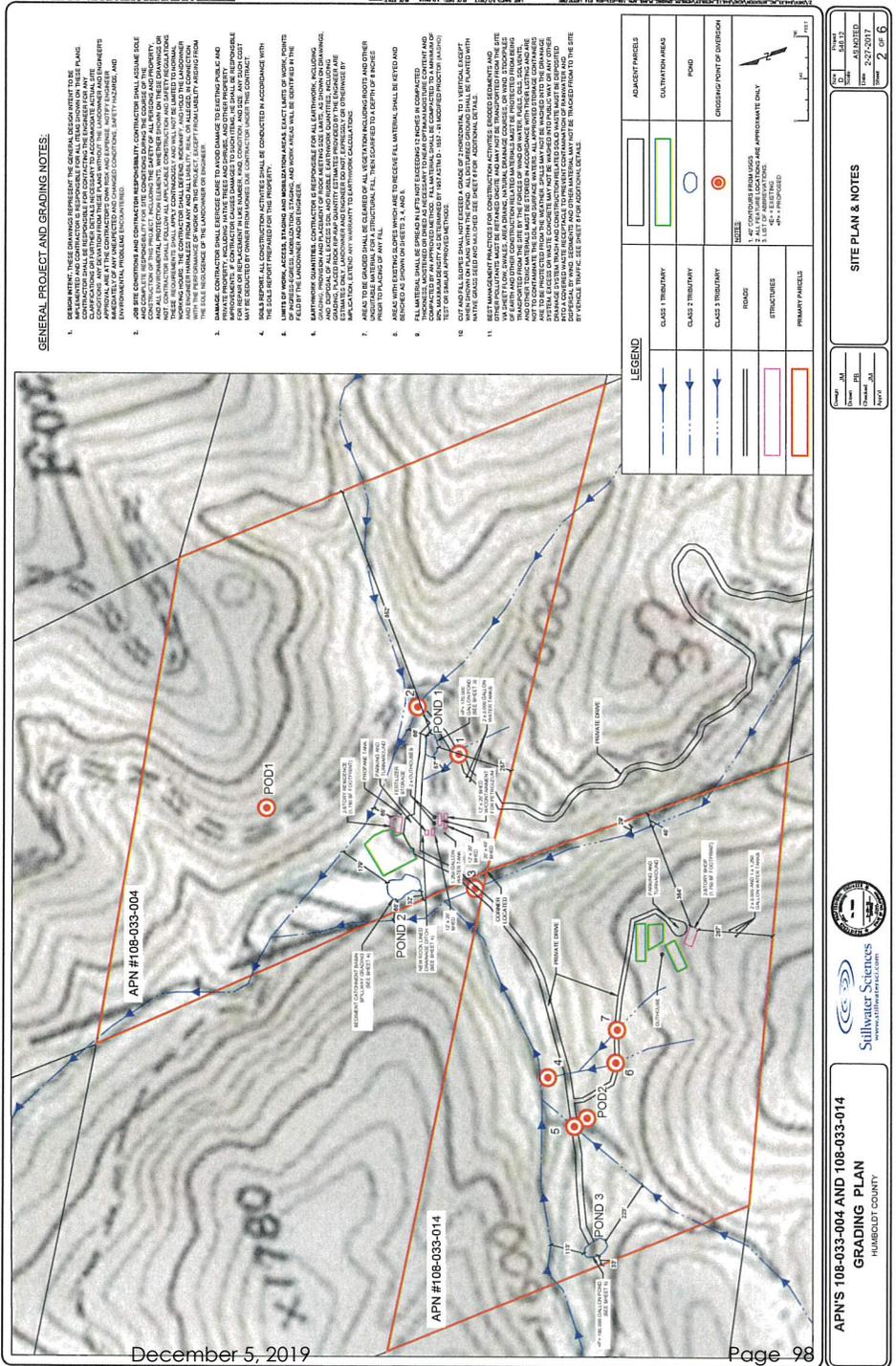


Photo 8. Pond 1 rain catchment to be enlarged.



Photo 9. Pond 2 sediment trap to be enlarged.

Appendix B
Design Plans



Stillwater Sciences

www.stillwatersciences.com

APN'S 108-033-004 AND 108-033-014

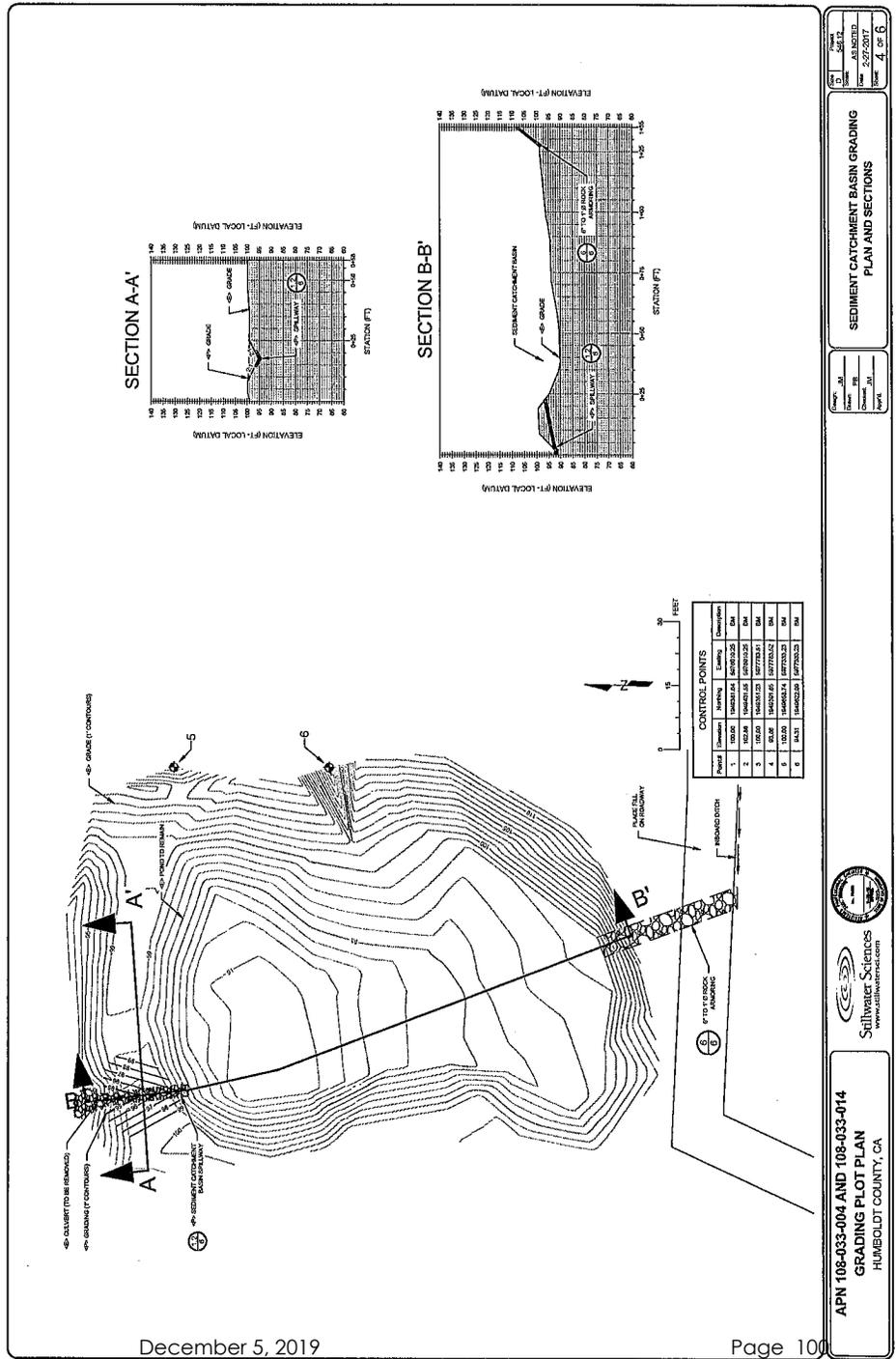
GRADING PLAN

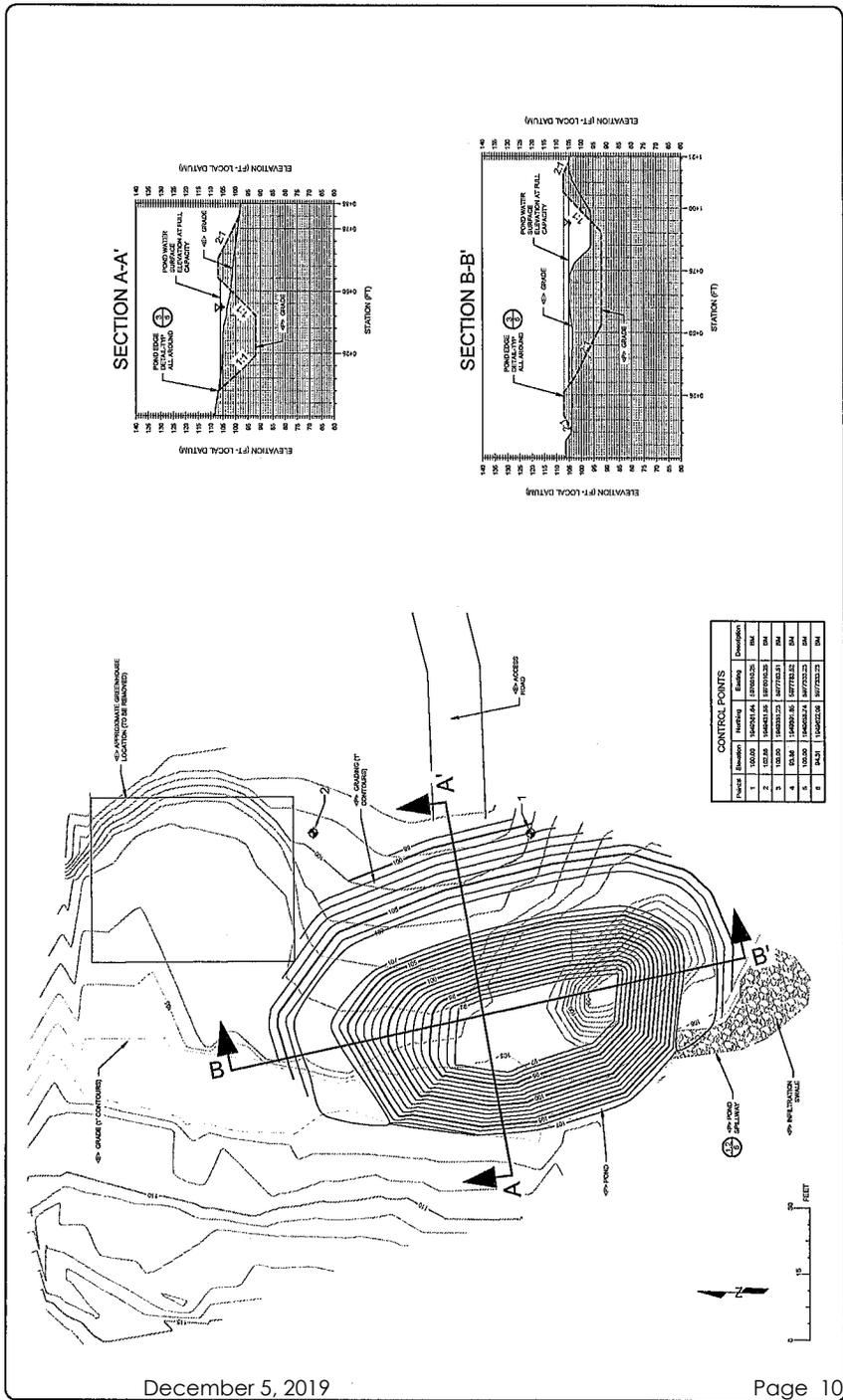
 HUMBLET COUNTY

SITE PLAN & NOTES

 SHEET NO. 2 OF 6

DATE: 2-27-2017





POND 3 GRADING PLAN AND SECTIONS

Drawn: JH
 Checked: JH
 Date: 5/2/2017
 Scale: 1" = 20'

Sheet No. **5** of **6**
 Project No. **108-033-014**

Stillwater Sciences
www.stillwatersciences.com

APN 108-033-004 AND 108-033-014
GRADING PLOT PLAN
 HUMBOLDT COUNTY, CA

Appendix C

401 Certification Documents

TABLE 3

Site	Latitude	Longitude	Existing Culvert Length (ft)	Proposed culvert Length (ft)	Existing Culvert Diameter (inches)	Proposed Culvert Diameter (inches)	Site-Specific Description (pre/post condition, longitudinal stream grade, culvert grade, and lateral riparian slopes)	Existing Permanent Impacts (i.e. existing Rock Slope Protection) (Linear Feet)	Proposed Permanent Impacts (i.e. increased length of culvert and proposed RSP) (Linear Feet)	Proposed Mitigation Measures and functional improvement quantified (e.g. planting plans, laying back stream banks to restore slope stability, culvert size upgrade, quantified sediment reduction)	Vegetation necessary to remove/relocate for construction	Vegetation Mitigation
1	40.161983	-124.089659	30	N/A	18	N/A	Existing culvert crossing on small Class III tributary is generally functioning well, project will add minor amount of rock armoring; current culvert is at ~5% grade	~30 LF Culvert, 15 LF of rock armoring	~5 LF of new rock armoring, add some rock to stabilize existing armoring	Sediment savings of ~10 CY by reducing chronic erosion at culvert outflow	N/A	N/A
2	40.162217	-124.08891	N/A	N/A	N/A	N/A	Existing ford crossing on Class III tributary used for occasional dry-season access only, no drainage structure in place	N/A	N/A	Sediment savings of 20 CY from reshaping road approaches and installing small off-stream sediment catchment basins	N/A	N/A
3	40.162528	-124.091353	N/A	30	N/A	60	Existing ford crossing on Class II tributary has significant sediment delivery from road surface due to steep >20% and unstable road approaches; stream gradient ~5%.	Existing 15 LF channel with constant disturbance from vehicle access and excess winter sediment delivery from road surfaces	30 LF culvert, ~10 LF rock armoring (stream banks at culvert inlet and outlet)	Sediment savings of ~20 CY from disconnecting road surface runoff from stream; reduction in chronic channel disturbance, embed culvert 1.5 feet in channel to maintain natural bottom; oversize culvert diameter by 1 foot.	N/A	N/A
4	40.162179	-124.093718	N/A	N/A	N/A	N/A	Existing armored ford crossing on Class III tributary is functioning, but needs additional rock added to road surface and outboard slope to improve long term function.	Existing 30 LF of gravel road fill and rock armoring on outboard edge	Upgrade existing crossing with no proposed increase in permanent impacts	Sediment savings of ~5 CY from chronic erosion at crossing	N/A	N/A
5	40.162218	-124.094093	30	30	24	42	Existing undersized culvert crossing on Class II tributary with evidence of overtopping, current culvert is at 5% grade; new culvert will be set at same % grade rock armor already existing at outlet	Existing 30 LF culvert has high plug potential; Existing 10 LF rock armor	Upgrade existing crossing with no proposed increase in permanent impacts	Sediment savings of ~25 CY from stabilization of road fill and diversion potential reduction by installing properly sized culvert	~4 ferns	Transplant 4 ferns into pots, and replant adjacent to new culvert inlet and outlet post-project
6	40.161542	-124.093834	N/A	30	N/A	24	Existing fill crossing on small Class III tributary has sediment delivery from road surface due to steep >20% and unstable road	Existing ~20 LF access road fill	30 LF for culvert (replace existing fill), 5 LF increase for rock armor	Sediment savings of 5 CY from reduced road fill and surface erosion at crossing	N/A	N/A

							approaches; stream gradient 10%.					
7	40.161456	-124.09347	N/A	30	N/A	24	Existing fill crossing on small Class III tributary has sediment delivery from road surface due to steep >20% and unstable road approaches; stream gradient 10%.	Existing ~20 LF access road fill	30 LF for culvert (replace existing fill), 5 LF increase for rock armor	Sediment savings of 5 CY from reduced road fill and surface erosion at crossing	One 4" Douglas fir tree	Plant 4 Douglas fir seedlings
POND 2	40.162979	-124.091037	20	N/A	24	N/A	Pond constructed by previous landowner >20 years ago doesn't hold water but acts as sediment catchment; improve function and longevity with drainage improvements	Existing 20 LF culvert potential to plug	20 LF rock armor (replace existing culvert)	Sediment savings of ~25 CY from scour reduction at outlet and flow diversion risk reduction by installing properly sized culvert	~4 small huckleberry bushes, ~4 Douglass fir seedlings (2-4" diameter)	Transplant and replant ~4 disturbed shrubs; Replant at ratio of 4 Douglas fir seedlings for each tree removed

**TIER 2 SURFACE WATER CORRECTION WORKPLAN
REQUIREMENTS
FOR COVERAGE OF REMEDIATION AND RESTORATION WORK IN STREAMS AND
WETLANDS UNDER
WAIVER OF WASTE DISCHARGE REQUIREMENTS
ORDER NUMBER R1-2015-0023**

In order to obtain authorization, enrollees under Order No. R1-2015-0023 with restoration or remediation work in streams or wetlands identified in Tier 2 water resource protection plans shall submit the following information and any applicable fees according to the California Code of Regulations, title 23, section 2200 (a)(3),¹ at least 60 days prior to proposed work. No work shall be performed without prior authorization. Alternatively, enrollees may elect to obtain coverage for remediation or restoration work in streams or wetlands from the Regional Water Quality Control Board, North Coast Region, under an individual or other general Order. Information on the Clean Water Act Section 401 Water Quality Certification program and the application packet are available on the Regional Water Board's website at:

http://waterboards.ca.gov/northcoast/water_issues/programs/water_quality_certification.shtml

CHECKLIST OF REQUIRED ELEMENTS:

- Site Address and Latitude / Longitude** Address unknown, Humboldt APNs 108-033-014 & 108-033-004, lat/long on Attachment A, pg 1 1)
- Property Owner & Project Proponent Name, Address, and Contact Information** Attachment A, pg 1
- Licensed professional consultant and contractor Name, Address, and Contact information** Attachment A, pg 1
- Detailed Project Description**
 - Proposed Schedule: Start & Completion Dates Work period: June 15 to Sep 30, 2018
 - Site Map Including Locations of Proposed Work See WRPP pg 6
 - Erosion Control / Construction BMPs See WRPP pg 15-16
 - Design Specifications See WRPP pgs 10-15, Design Plans Sheet 4 (appendix B of WRPP)
 - Calculations See WRPP pgs 7-10
- Project Purpose and Final Goal** Storm-proof road/stream crossings & existing pond to reduce sediment delivery
- Receiving Waters Identified** Tributaries to Honeydew Creek (tributary to Mattole River) - HUC 18010107
- Other Relevant Local, State and Federal Permits (CDFW Lake and Streambed Alteration Agreement and Army Corps of Engineers 404)** CDFW LSAA (final agreement attached)
- Acreage and/or Linear Feet Impacted (Permanent or Temporarily)** See Attachment A, pgs 3-6
 - Type of Waterbody (Wetland, Creek, Spring/Seep, Etc.)** Class II and III Watercourses
 - Use of Avoidance, Minimization or Mitigation Measures** See Attachment A, pg 2
- Mitigation Proposal** (total areas and types of waters restored, created etc.)
 - Planting plan See Attachment A, pgs 5-6
 - Monitoring Plan See WRPP pgs 22-23

¹ Correction work in streams or wetlands can be considered enforcement actions similar to Tier 3 cleanup work required pursuant to Water Code section 13304. In some enforcement cases the Army Corps of Engineers (ACE) may consider alternatives to requiring an after-the-fact dredge and fill permit pursuant to the Clean Water Act section 404, such as voluntary restoration at the site or an order requiring completion of initial corrective measures to alleviate any imminent adverse impacts to aquatic resources. In the event that the ACE does assert its Clean Water Act 404 jurisdiction, water quality certification is required, along with applicable fees.

- Success Criteria See WRPP pg 22-23
- Reporting See WRPP pg 22
- Comparable Habitat/Type/Size/Function See Attachment A, pgs 5-6
- Temporal Loss Accounted For See Attachment A, pgs 5-6

OTHER PLAN ELEMENTS MAY BE REQUIRED AT THE DISCRETION OF THE EXECUTIVE OFFICER AND DEPENDING ON OTHER AGENCY DETERMINATIONS.

Appendix D_Instream Correction Workplan Requirements

**Attachment A: Hessler Property – Supplemental Information to Surface Water Correction
Workplan (December 5, 2017)**

Latitude/Longitude:

Site number	Latitude	Longitude
1	40.161983	-124.089659
2	40.162217	-124.08891
3	40.162528	-124.091353
4	40.162179	-124.093718
5	40.162218	-124.094093
6	40.161542	-124.093834
7	40.161456	-124.09347
POND 2	40.162979	-124.091037

Property Owner:

Nya Hessler
PO Box 962
Fortuna, CA 95540
707-599-4812

Licensed Professional:

Joel Monschke PE
Stillwater Sciences
850 G St,
Arcata CA 95521
Phone: 707 496 7075
Email: jmonschke@stillwatersci.com

Contractor:

Landowner to conduct work with close oversight from licensed professional

Cumulative Impacts:

Currently, the cumulative impacts from drainage issues on the property are negatively impacting water quality. Through crossing upgrades and other drainage improvements, this project will reduce the cumulative impacts of these sites. Considering the cumulative impacts of other projects, over the past five years the landowner has constructed two small ponds, and conducted minor grading at several cultivation areas, conducted road work including maintenance/ installation of rolling dips and other road drainage features,. However, considering that the work proposed herein has a very small overall footprint, and that with the exception of a few sites, riparian vegetation will be avoided, this project will not lead to any significant cumulative impacts.

Avoidance and Minimization Measures:

Work at all eight proposed sites will all take place within 20 feet of existing roadways and pond dike (Pond 2 spillway upgrade, See design plans, Appendix B WRPP, sheet 4). The stream channels within these reaches have been heavily altered by historic road and pond construction and significant erosion is evident (see photos in Appendix A of WRPP). The proposed plan follows guidance from BMP 73 (from Order No. R1-2015-0023) including: 1) proper flow capacity of all new structures, and 2) placement of rock of adequate size to dissipate velocity. Unfortunately, bioengineering techniques are not appropriate for these sites due to the following factors: 1) most sites are in shady areas that will not support willow, 2) rock armoring is needed to support the steep slopes and high volumes of water that are present during large storm events, and 3) existing gullied conditions at most sites need rock armor to repair and stabilize.

In order to avoid and minimize impacts, work will be conducted within the road corridor and pond dike footprint that was previously disturbed during original construction. Additionally, there is chronic fine sediment delivery at each site including: undersized culvert (Site 5), downslope erosion due to lack of energy dissipation outslope of road (Sites 1, and 4), and road surface erosion due to steep approaches to fill crossings (Sites 2, 3, 6, and 7). The proposed project will mitigate these erosion risks by installing properly sized drainage structures with energy dissipation at their outlets and reshaping adjacent road segments to reduce road runoff connectivity to watercourses.

As described in the WRPP, this project includes general road reshaping activities including crowning, berm removal and graveling upslope and adjacent to the culvert replacement sites which will provide for hydrologic disconnection of the road surface. Based on these factors, we believe that this project is self-mitigating.

Additionally, to reduce project impacts, all heavy equipment will be restricted to the road/pond dike surface. Any work in the bed or bank of the unnamed tributaries to Honeydew Creek will occur when the bed is dry and in compliance with the stated work period. We expect to avoid all impacts to riparian vegetation as feasible. However, if some vegetation removal can't be avoided to properly implement the project, we will replant at a ratio of 4 new trees for each tree removed. Erosion control BMPs will be implemented per WRPP page 16, and only 100% biodegradable, wildlife friendly BMPs will be used.

TABLE 1

DREDGE AND FILL INFORMATION (The following must be completed for each action where dredging activities, fill material or other activities (e.g. excavation) will result in disturbance and/or discharge to a wetland or other waterbody. Add rows for multiple types of disturbance within the same waterbody type. Attach additional pages as necessary. Provide maps showing the location of project and of all impacts with the corresponding impacts in the format below. Provide all temporary and permanent impacts to waters of the U.S. and waters of the State.)						
TYPE OF WATERBODY (i.e. stream, wetland, ephemeral drainage)	FILL and/or EXCAVATION VOLUME AND TYPE (CUBIC YARDS)	FILL and/or EXCAVATION SURFACE AREA (SQUARE FEET OR ACRE)	FILL and/or EXCAVATION LENGTH (LINEAR FEET)	DREDGE VOLUME (CUBIC YARDS)	TYPE OF IMPACT (Temporary or Permanent)	
Waters of the U.S.						
<input type="checkbox"/> Wetland						
<input type="checkbox"/> Streambed (OHWM and below)	Rock Armor: 60 cy of rip rap rock for energy dissipation and slope protection at 7 crossing upgrades, and one pond spillway improvement	Rock Armor: 390 sf (~6' rock armor width per linear foot of impact at all sites)	Rock Armor: 65 Total LF (20 LF replaces existing culvert, 20 LF stabilizes existing rock armoring, 25 LF new rock armoring) Culverts: 120 Total LF (30 LF replaces existing culverts, 90 LF replaces ford crossings) See site-specific table below for additional details		Permanent	
<input type="checkbox"/> Ocean/Estuary/Bay						
<input type="checkbox"/> Other						
Sub-total Waters of the U.S.	60 cy	390 sf	185 lf			
Waters of the State						
<input type="checkbox"/> Riparian						
<input type="checkbox"/> Stream channel/bank (Above OHWM)						
<input type="checkbox"/> Spring/Seep/Headwaters						
<input type="checkbox"/> Other						
Sub-total Waters of the State						
Total Waters of U.S. and State	60 cy	390 sf	185 lf			

TABLE 2

Option 1 - Proponent Provided Mitigation Information								
Waterbody Type	Acres / Linear Feet							
	Established		Restored		Enhanced		Preserved	
Wetland								
Stream								
Riparian								
Vernal Pool								
Lake								
Other								

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

RECEIVED

MAY 17 2017

CDFW - EUREKA



STREAMBED ALTERATION AGREEMENT

NOTIFICATION No. 1600-2016-0487-R1

Unnamed Tributaries to East Fork Honeydew Creek, Tributary to Honeydew Creek, Tributary to the Mattole River and the Pacific Ocean

Ms. Karen Hessler and Mr. Nya Hessler representing Amaranth Farms
Hessler Water Diversion, Pond, and Stream Crossings Project
10 Encroachments

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and Ms. Karen Hessler and Mr. Nya Hessler (Permittees) representing Amaranth Farms.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, the Permittees initially notified CDFW on September 30, 2016, with revisions received February 22, 2017, that the Permittees 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 Permittees have reviewed the Agreement and accept its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, the Permittees agree to complete the project in accordance with the Agreement.

PROJECT LOCATION

The project to be completed is located within the Honeydew Creek watershed, approximately 6 miles south of the town of Honeydew, County of Humboldt, State of California. The project is located in Section 32, T3S, R1E, Humboldt Base and Meridian; in the Honeydew U.S. Geological Survey 7.5-minute quadrangle; Assessor's Parcel Numbers 108-033-04 and 108-033-14; latitude 40.1606 N and longitude 124.0903 W.

PROJECT DESCRIPTION

The project is limited to ten encroachments (Table 1). Two encroachments are for water diversion from unnamed tributaries to the East Fork Honeydew Creek. Water is diverted for domestic use and irrigation. In addition, water will be diverted to an off

stream pond for irrigation use. Work for the water diversion projects will include use and maintenance of the water diversion infrastructure. The seven other proposed encroachments are to upgrade unpermitted crossings and replace failing and undersized culverts. Work for these encroachments will include excavation, removal of the failing culverts, replacement with a new properly sized culverts, backfilling and compaction of fill, and rock armoring as necessary to minimize erosion.

Table 1. Project encroachments with description

ID	Latitude/Longitude	Description
Point of Diversion (POD-1)	40.1639, -124.0897	Water diversion from a spring
Point of Diversion (POD-2)	40.1621, -124.0913	Water diversion from a spring
Pond	40.1630, -124.0910	Water diversion to this pond, and then water use from the pond for irrigation
Crossing-1	40.1620, -124.0897	Armor culvert outlet at existing 18" diameter culvert
Crossing-2	40.1622, -124.0890	Install water bars to minimize sediment delivery and plant with native shrubs and/or trees
Crossing-3	40.1625, -124.0913	Install 60" diameter culvert at an existing stream ford
Crossing-4	40.1622, -124.0937	Armor existing rocked ford at Class III road/stream crossing
Crossing-5	40.1622, -124.0941	Replace undersized 24" diameter culvert with a new minimum 42" diameter culvert at road/stream crossing
Crossing-6	40.1615, -124.0938	Install a new minimum 24" diameter culvert at road/stream crossing
Crossing-7	40.1615, -124.0935	Install a new minimum 24" diameter culvert at road/stream crossing

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include: Southern Torrent Salamander (*Rhyacotriton variegatus*), Coastal Tailed Frog (*Ascaphus Truei*), 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 Permittees shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. The Permittees 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 Permittees 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 Permittees, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Adherence to Existing Authorizations. All water diversion facilities that the Permittees own, operate, or control 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 Permittees shall notify CDFW if the Permittees determine or learn 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 Permittees to resolve any conflict.

- 1.6 Project Site Entry. The Permittees agree 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 Permittees 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 Permittees 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 Permittees' Notification received on September 30, 2016, and revisions received on February 22, 2017, together with all maps, BMP's, photographs, drawings, and other supporting documents submitted with the Notification.
- 2.2 Maximum Diversion Rate. The maximum instantaneous diversion rate from the water intake shall not exceed 3 gallons per minute (gpm) at any time.
- 2.3 Bypass Flow. The Permittees 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.
- 2.4 Seasonal Diversion Minimization. No more than 150 gallons per day shall be diverted during the low flow season from May 15 to October 15 of any year. Water shall be diverted only if the Permittees can adhere to conditions 2.2 and 2.3 of this Agreement.
- 2.5 Measurement of Diverted Flow. The Permittees 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 Permittees.
- 2.6 Water Management Plan. The Permittees shall submit a Water Management Plan no later than May 15, 2017, that describes how compliance will be achieved under this Agreement. The Water Management Plan shall include details on water storage, water conservation, or other relevant material to maintain water needs in coordination with forbearance and bypass flow requirements. The Water Management Plan shall include a brief narrative describing water use on the property, photographs to support the narrative, and water use calculations to ensure compliance with this Agreement. The Water Management Plan shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501.

- 2.7 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.
- 2.8 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 Permittees shall regularly inspect, clean, and maintain screens in good condition.
- 2.9 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.
- 2.10 Water Conservation. The Permittees shall make best efforts to minimize water use, and to follow best practices for water conservation and management.
- 2.11 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 Permittees shall install any other measures necessary to prevent overflow of tanks resulting in more water being diverted than is used.
- 2.12 State Water Code. This Agreement does not constitute a valid water right. The Permittees 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

- 2.13 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.
- 2.14 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.

- 2.15 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 Permittees 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 Permittees within 24 hours at 707-445-6493 and consulted regarding clean-up procedures.
- 2.16 Work Period. All work, not including water diversion, shall be confined to the period June 15 through October 1 of each year. Work within the active channel of a stream shall be restricted to periods of **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.
- 2.17 Work Completion. The proposed work shall be completed by no later than **October 1, 2017**. A notice of completed work shall be submitted to CDFW within 7 days of project completion.
- 2.18 Stream Diversion. When work in a flowing stream is unavoidable, Permittees shall divert the stream flow around or through the work area during construction operations.
- 2.19 Coffer Dams. Prior to the start of construction, Permittees shall divert the stream around or through the work area and the work area shall be isolated from the flowing stream. To isolate the work area, water tight coffer dams shall be constructed upstream and downstream of the work area and water diverted, through a suitably sized pipe, from upstream of the upstream coffer dam and discharge downstream of the downstream coffer dam. Coffer dams shall be constructed of a non-erodible material which does not contain soil or fine sediment. Coffer dams and the stream diversion system shall remain in place and functional throughout the construction period. Coffer dams or stream diversions that fail for any reason shall be repaired immediately.
- 2.20 Excavated Fill. Excavated fill material shall be placed in upland 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.
- 2.21 Runoff from Steep Areas. The Permittees 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.

2.22 Culvert Installation.

2.22.1 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.

2.22.2 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).

2.22.3 Culvert bed shall be composed of either compacted rock-free soil or crushed 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.

2.22.4 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.

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

2.23 Rock Armor Placement.

2.23.1 No heavy equipment shall enter the wetted stream channel.

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

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

2.23.4 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.

2.24 Project Inspection. The Project shall be inspected by Joel Monschke of Stillwater Sciences or a licensed engineer to ensure that the stream crossings were installed

as designed. A copy of the inspection report, including photographs of each site, shall be submitted to CDFW within 90 days of completion of this project.

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 no later than **December 31** of each year **beginning in 2017**.
- 3.2 Water Management Plan. The Permittees shall submit a **Water Management Plan** (condition 2.6) no later than **May 15, 2017**, that describes how compliance will be achieved under this Agreement. The Water Management Plan shall be submitted to CDFW at 619 Second Street, Eureka, CA 95501.
- 3.3 Project Inspection. The Permittees shall submit the **Project Inspection Report** (condition 2.24) to CDFW, LSA Program at 619 Second Street, Eureka, CA 95501

CONTACT INFORMATION

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

To Permittees:

Ms. Karen Hessler and Mr. Nya Hessler
Amaranth Farms
P.O. Box 907
Redway, California 95560
707-986-4002
amaranthfarms@gmail.com

To CDFW:

Department of Fish and Wildlife
Northern Region
619 Second Street
Eureka, California 95501
Attn: Lake and Streambed Alteration Program
Notification #1600-2016-0487-R1

LIABILITY

The Permittees shall be solely liable for any violation of the Agreement, whether committed by the Permittees or any person acting on behalf of the Permittees, 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 Permittees to proceed with the project. The decision to proceed with the project is the Permittees' alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety this Agreement if it determines that the Permittees or any person acting on behalf of the Permittees, 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 Permittees 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 Permittees an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to the Permittees, 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 Permittees 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 Permittees or any person acting on behalf of the Permittees, 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 Permittees or any person acting on behalf of the Permittees, 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 Permittees or any person acting on behalf of the Permittees, 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 Permittees may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and the Permittees. To request an amendment, the Permittees 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 Permittees 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 Permittees 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 Permittees 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 Permittees 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 Permittees fail to submit a request to extend the Agreement prior to its expiration, the Permittees 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 Permittees 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 Permittees 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 Permittees, the signatory hereby acknowledges that he or she is doing so on the Permittees' behalf and represents and warrants that he or she has the authority to legally bind the Permittees to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If the Permittees begin or complete a project different from the project the Agreement authorizes, the Permittees 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 AMARANTH FARMS

Karen Hessler
Karen Hessler

May 14, 2017
Date

Nya Hessler
Nya Hessler

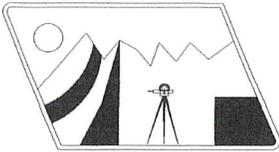
MAY 14th 2017
Date

FOR DEPARTMENT OF FISH AND WILDLIFE

Scott Bauer
Scott Bauer
Senior Environmental Scientist Supervisor

6/5/17
Date

Prepared by: David Manthorne, Senior Environmental Scientist Specialist, March 6, 2017
Revised 5/10/17.



A.M. BAIRD

ENGINEERING & SURVEYING, INC.

1257 Main Street • P.O. Box 396 • Fortuna, CA. 95540 • (707) 725-5182 • Fax (707) 725-5581

CONSULTING - LAND DEVELOPMENT - DESIGN - SURVEYING

July 10, 2019



Stephen Luther
Humboldt County Planning and Building Dept.
3015 H Street
Eureka, Ca 95501

Subject: Amaranth Farms
Nya Hessler
App #'s 10897 & 11268
APN's: 108-033-004
108-003-014
Baird Job# 19-4848

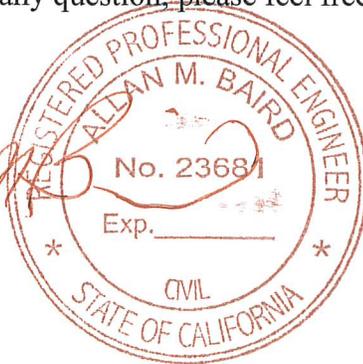
Dear Mr. Luther,

Baird Engineering has performed a boundary survey on a portion of the above mentioned parcels. After surveying the property lines it was determined that all cannabis activity as well as their spring is clearly within the Hessler property boundaries.

If you have any question, please feel free to call my office at 707-725-5182.

Sincerely,

Allan M. Baird
Principal Engineer



P/W

HUMBOLDT COUNTY DEPARTMENT OF PUBLIC WORKS
ROAD EVALUATION REPORT

PART A: Part A may be completed by the applicant

Applicant Name: Amaranth Farms APN: 108-033-014

Planning & Building Department Case/File No.: 10897

Road Name: Unnamed Road (complete a separate form for each road)

From Road (Cross street): Wilder Ridge Road

To Road (Cross street): Windy Ridge Road

Length of road segment: 1.2 miles Date Inspected: June 14, 2017

Road is maintained by: County Other Private Road
(State, Forest Service, National Park, State Park, BLM, Private, Tribal, etc)

Check one of the following:

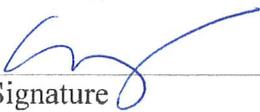
Box 1 The entire road segment is developed to Category 4 road standards (20 feet wide) or better. If checked, then the road is adequate for the proposed use without further review by the applicant.

Box 2 The entire road segment is developed to the equivalent of a road category 4 standard. If checked, then the road is adequate for the proposed use without further review by the applicant.

An equivalent road category 4 standard is defined as a roadway that is generally 20 feet in width, but has pinch points which narrow the road. Pinch points include, but are not limited to, one-lane bridges, trees, large rock outcroppings, culverts, etc. Pinch points must provide visibility where a driver can see oncoming vehicles through the pinch point which allows the oncoming vehicle to stop and wait in a 20 foot wide section of the road for the other vehicle to pass.

Box 3 The entire road segment is not developed to the equivalent of road category 4 or better. The road may or may not be able to accommodate the proposed use and further evaluation is necessary. Part B is to be completed by a Civil Engineer licensed by the State of California.

The statements in PART A are true and correct and have been made by me after personally inspecting and measuring the road.

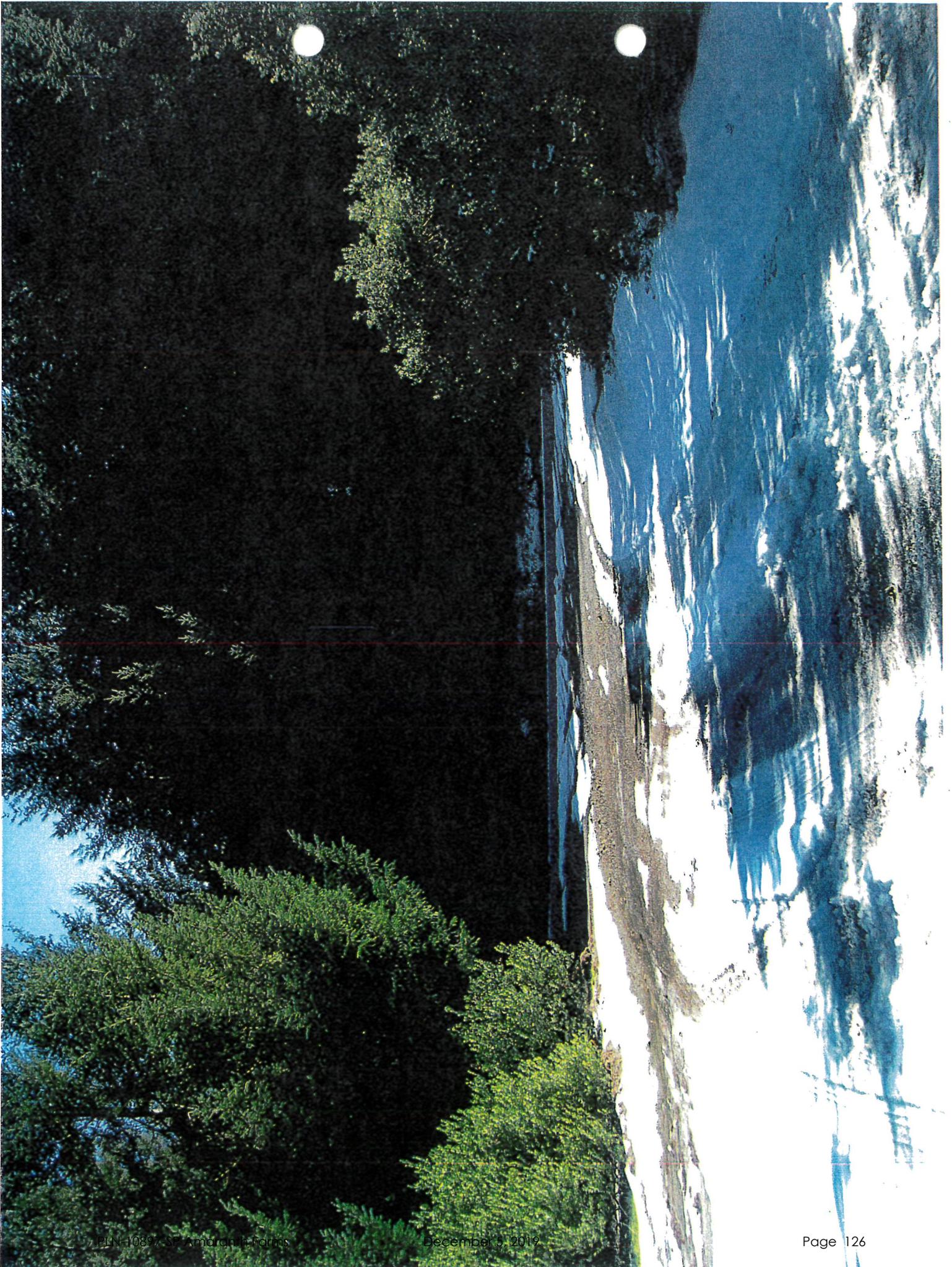
 p.p. Nya Hessler

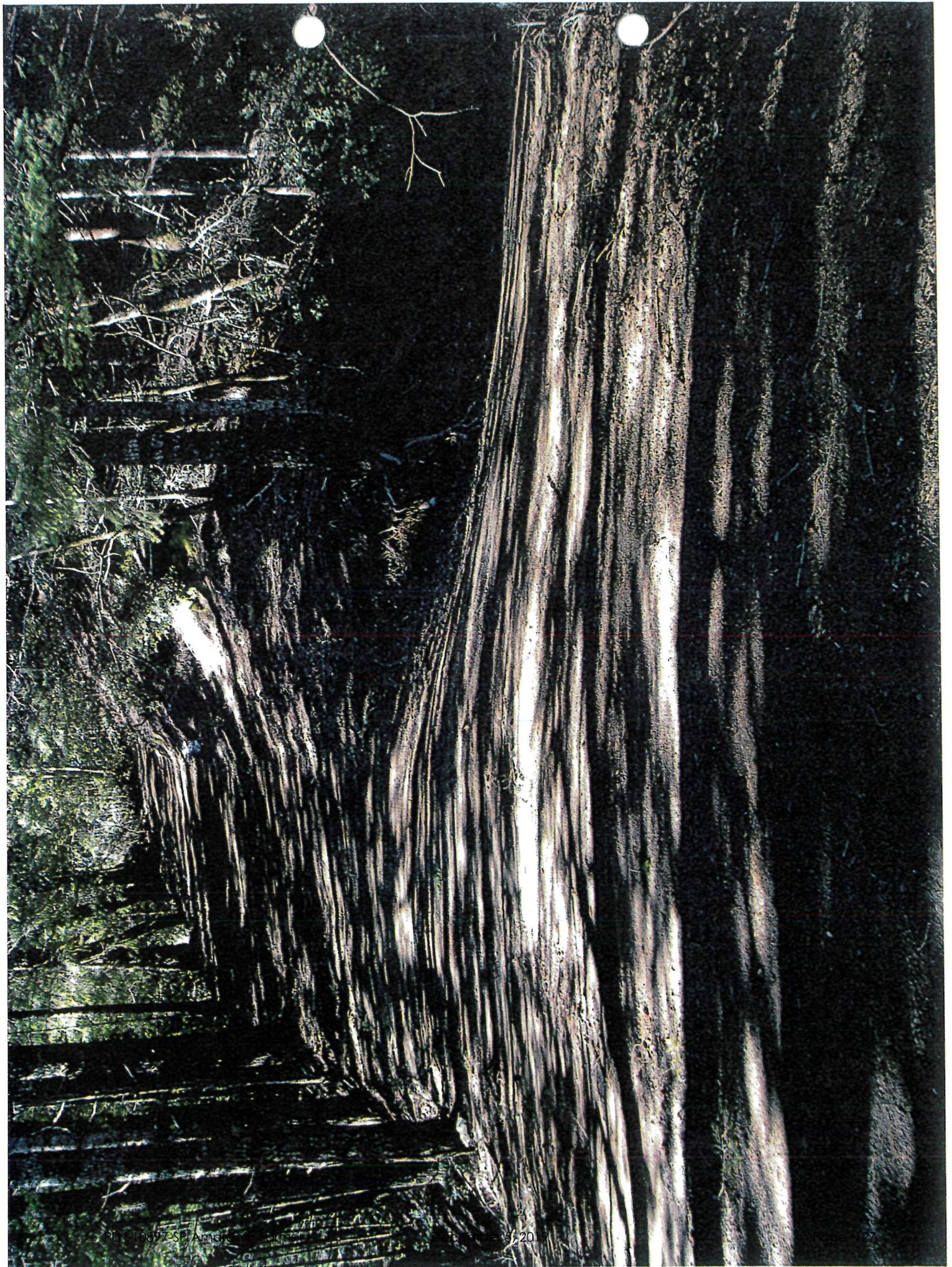
June 14, 2017
Date

Nya Hessler

Name Printed

Important: Read the instructions before using this form. If you have questions, please call the Dept. of Public Works Land Use Division at 707.445.7205.





Windy Ridge Lane
NO TRESPASSING
PRIVATE PROPERTY
PRIVATE ROAD
BLOCKED GATES AHEAD
NO TURN AROUND
© 2008 WINDY RIDGE LANE







Luther, Stephen

From: Vendor LACO 3
Sent: Friday, March 08, 2019 12:24 PM
To: Luther, Stephen
Subject: FW: APN 108-033-014 Mapped Marbled Murrelet Habitat

From: Dennis Halligan [mailto:Dennis@stillwatersci.com]
Sent: Thursday, November 08, 2018 12:19 PM
To: Vendor LACO 3 <vendorlaco3@co.humboldt.ca.us>
Cc: Joel Monschke <jmonschke@stillwatersci.com>; Nya Hessler <nyahessler@gmail.com>; Nancy Stevens <nstevens@stillwatersci.com>
Subject: APN 108-033-014 Mapped Marbled Murrelet Habitat

Hello Meghan,

I was asked by Nya Hessler and Joel Monschke (Stillwater Sciences Engineer) to follow up on an additional information request you sent to Karen Hessler. In that email you requested the following:

b. There is mapped Marbeled murrelet habitat on the subject parcel. Please provide a habitat scoping survey from a qualified professional (such as a biologist or forester) that describes the quality of habitat on site and distances from the proposed pond location to Marbeled murrelet habitat on-site and/or off-site.

My qualifications include conducting timber stand typing, marbled murrelet (MAMU) and northern spotted owl surveys, forestry, herpetology (amphibians), fisheries, erosion control, watershed analyses, and other specialist tasks over the past 27 years. I have been the author and co-author of many permit applications, NEPA/CEQA documents, biological assessments, construction monitoring, and a host of other documents. I have worked under contract with CDFW, County of Humboldt; Bureau of Land Management, USFS, Bureau of Reclamation, non-profits, industrial and non-industrial timberland owners, and public utilities. I am currently the vice-chairman of the City of Arcata's Forest Management Committee. I believe that I am a qualified professional, as required in your request.

Similar to my review of the Hessler's 108-033-004 parcel (see my email from November 6, 2018), I have looked over the 108-033-014 parcel area on Google Earth, County's WebGIS, and the CDFW spotted owl database (also contains occurrence information for other species, not just NSO). I also queried the CDFW CNDDDB. I couldn't see any timber stands on the Hessler property that would be suitable for MAMU. The stands on the Hessler's 108-033-014 parcel are composed primarily of hardwood with a mix of small conifers; not the relatively large old-growth conifers stands that MAMU utilize. The CDFW spotted owl database did not show any MAMU occurrences and the CNDDDB did not contain any recorded occurrences for this USGS quadrangle (Honeydew). There is a small stand of large conifers located on a neighboring parcel (108-033-006) and approximately 2,800 ft to the north of the 108-033-014 parcel. It appears that this stand is included in designated critical habitat for MAMU. This stand is relatively narrow and approximately 1,100 ft long and about 6.25 acres and, as such, may be subject to significant edge-effect predation pressures from corvids. Overtime, these predation pressures could decrease MAMU nesting success and result in a stand that is no longer suitable for MAMU.

The distance of the 108-033-014 parcel from the stand of large trees make it highly unlikely that there will be any adverse effect from the proposed project. This is because no MAMU habitat trees will be removed as part of the proposed project and the distance of the property from the potential habitat is outside any noise impact concerns. It can be expected that the ambient noise levels in the project area would range from low (61-70 dB [small power tools, light traffic, residences]) to moderate (71-80 dB [small generators, small chainsaws, small off-road motorcycles, etc.]). The

ongoing noise generated by the proposed project would be of the same nature as the current ambient condition. However, construction of the pond would result in a high level (81-90 dB [loaders, bulldozer, etc.]) for a short period (2-3 days) of time. Based on the information and procedures in USFWS (2006), the estimated harassment distance while pond construction is occurring could be expected to be about 165 ft from the noise source. Since the proposed pond is about 2,800 ft from the stand of potentially MAMU-suitable timber, it can be expected that operations will have no impact on any MAMU that may, but are unlikely to, be present.

USFWS. 2006. Transmittal of Guidance: Estimating the effects of auditory and visual disturbance to northern spotted owls and marbled murrelets in Northwestern California. Arcata Fish and Wildlife Office, Arcata, California.

I hope this information suffices to fulfill your request for more information.

Please contact me if you have any questions.

Thank you

Dennis Halligan

Senior Fisheries Biologist
direct 707-822-9607 ext 205 cell 707-407-7287
dennis@stillwatersci.com

Stillwater Sciences

850 G St., Suite K, Arcata, CA 95521
tel 707-822-9607 fax 888-766-5110
www.stillwatersci.com

Find out about what's new at Stillwater: http://www.stillwatersci.com/new_and_notable.php
Stillwater Sciences is a California small business and a Woman Business Enterprise.



United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Arcata Field Office
1695 Heindon Road
Arcata, CA 95521-4573
www.blm.gov/california



October 31, 2018

Planning Commission Clerk
County of Humboldt County
Planning and Building Department
3015 H Street, Eureka, CA 95501

Dear Sir or Madam:

In response to Application (APPS#) 10897 and 11268

BLM has had issues with trespass on public lands. The applicant should have their parcel surveyed by a licensed professional land surveyor. The survey will define the applicant's property boundary and will prevent potential trespass issues on BLM in the future.

Any activity related to cannabis operations on public land such as the cultivation, production, transportation or distribution of supplies or product will violate the Controlled Substances Act and may be subject to federal criminal and/or civil action.

Sincerely,

Molly Brown
Field Manager

ATTACHMENT 5

Referral Agency Comments and Recommendation

The project was referred to the following referral agencies for review and comment. Recommendations received are summarized, and the locations of the recommendations are noted.

Referral Agency	Response	Recommendation	On File
Building Inspection Division	✓	Conditional Approval	Attached
Department of Public Works – Land Use Division	✓	Conditional Approval	Attached
Division of Environmental Health	✓	Conditional Approval	Attached
CALFire	✓	Standard Comments	Attached
CA Department of Fish and Wildlife	✓	Comments	Attached
Bureau of Land Management (BLM)	✓	Requested property survey	Attached
NWIC	✓	Requested archaeological study	On file with Planning
Bear River Band Rohnerville Rancheria	✓	Inadvertent Discovery Protocols	On file with Planning
Telegraph Ridge Fire Protection District	✓	Employee safety training	Attached
Intertribal Sinkyone Wilderness Council		No response	
Southern Humboldt Unified School District		No response	
Division of Water Resources		No response	
Regional Water Quality Control Board		No response	
Agricultural Commissioner		No response	
Humboldt County Sheriff's Office		No response	
District Attorney		No response	
County Counsel		No response	



**HUMBOLDT COUNTY
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION
3015 H STREET, EUREKA, CA 95501 ~ PHONE (707) 445-7541**

8/24/2017

PROJECT REFERRAL TO: Building Inspection Division

Project Referred To The Following Agencies:

Building Inspection Division, Public Works Land Use Division, Health and Human Services Environmental Health Division, County Counsel, CalFire, California Department of Fish And Wildlife, Northwest Information Center, Bear River Band Rohnerville Rancheria, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, California Division of Water Resources, Sinkyone Tribe, Southern Humboldt Joint Unified School District, Telegraph Ridge Fire Protection District, Humboldt County Sheriff

Applicant Name Amaranth Farms **Key Parcel Number** 108-033-014-000

Application (APPS#) 10897 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** SP16-100

Please review the above project and provide comments with any recommended conditions of approval. To help us log your response accurately, please include a copy of this form with your correspondence.

Questions concerning this project may be directed to the assigned planner for this project between 8:30am and 5:30pm Monday through Friday.

County Zoning Ordinance allows up to 15 calendar days for a response. If no response or extension request is received by the response date, processing will proceed as proposed.

If this box is checked, please return large format maps with your response.

Return Response No Later Than 9/8/2017 Planning Commission Clerk
County of Humboldt Planning and Building Department
3015 H Street
Eureka, CA 95501
E-mail: PlanningClerk@co.humboldt.ca.us **Fax:** (707) 268-3792

108-033-14

We have reviewed the above application and recommend the following (please check one):

Recommend Approval. The Department has no comment at this time.

Recommend Conditional Approval. Suggested Conditions Attached.

Applicant needs to submit additional information. List of Items attached.

Recommend Denial. Attach reasons for recommended denial.

Other Comments: _____

DATE: 6/22/18

PRINT NAME: Rudy Marenghi



COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
BUILDING DIVISION

3015 H STREET EUREKA CA 95501
PHONE: (707) 445-7245 FAX: (707) 445-7446

Building Division's Referral Comments for Cannabis Operations:

Application No.: 46728/10897
Parcel No.: 108-033-014
Case No.: SP16-100

The following comments apply to the proposed project, (check all that apply).

- Site/plot plan appears to be accurate.
- Submit revised site/plot plan showing all of the following items: all grading including ponds and roads, location of any water course including springs, all structure including size and use and all setbacks from the above stated to each other and property lines.
- Existing operation appears to have expanded, see comments: _____

- Existing structures used in the cannabis operation shall not to be used/occupied until all required permits have been obtained.
- Proposed new operation has already started.
- Recommend approval based on the condition that all required grading, building, plumbing electrical and mechanical permits and or Agricultural Exemption are obtained.
- Other Comments: Revise plot plan to show bladder as to be decommissioned, the correct orientation of the road near 2-story residence, all GH's with dimensions, 1,650 SF CA containing (2) 10x70 GH's, 2,800 SF CA containing (2) 10x80 GH's, the three water tanks at south end of parcel, all grading over 50 cubic yards, and all grading on a slope over 15%.

Name: Rudy Marenghi

Date: 6/22/19

Note: Remember to take photographs and then save them to the Planning's case number. File location J, Current Planning, Projects, (CUP, SP, ZCC) Case number.



HUMBOLDT COUNTY
 PLANNING AND BUILDING DEPARTMENT
 CURRENT PLANNING DIVISION
 3015 H STREET, EUREKA, CA 95501 ~ PHONE (707) 445-7541



DEH received
 8-25-17

17/18-0459

PROJECT REFERRAL TO: Health and Human Services Environmental Health Division

Project Referred To The Following Agencies:

Building Inspection Division, Public Works Land Use Division, Health and Human Services Environmental Health Division, County Counsel, CalFire, California Department of Fish And Wildlife, Northwest Information Center, Bear River Band Rohnerville Rancheria, Regional Water Quality Control Board, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, California Division of Water Resources, Sinkyone Tribe, Southern Humboldt Joint Unified School District, Telegraph Ridge Fire Protection District, Humboldt County Sheriff

Applicant Name Amaranth Farms **Key Parcel Number** 108-033-014-000

Application (APPS#) 10897 **Assigned Planner** Cannabis Planner (CPOD) (707) 445-7541 **Case Number(s)** SP16-100

Please review the above project and provide comments with any recommended conditions of approval. To help us log your response accurately, please include a copy of this form with your correspondence.

Questions concerning this project may be directed to the assigned planner for this project between 8:30am and 5:30pm Monday through Friday.

County Zoning Ordinance allows up to 15 calendar days for a response. If no response or extension request is received by the response date, processing will proceed as proposed.

If this box is checked, please return large format maps with your response.

Return Response No Later Than Planning Commission Clerk
 County of Humboldt Planning and Building Department
 3015 H Street
 Eureka, CA 95501
E-mail: PlanningClerk@co.humboldt.ca.us **Fax:** (707) 268-3792

We have reviewed the above application and recommend the following:

Conditional Approval

DISTRIBUTED
3-12-18

Comments:

DEH recommends approval with the following conditions:

(1) Prior to reissuance of annual permit **provide an invoice, or equivalent documentation to DEH** to confirm the continual use of portable toilets or provide an approved means of sewage disposal to serve the needs of the cultivation staff.

*This review and recommendation is for the Land Use aspects of the planning project and does not include or imply compliance with all DEH programs. Although DEH recommends the approval of the Planning project, Solid Waste and HazMat Program requirements need to be addressed directly with staff from those programs.

Response Date: 3/12/2018 **Recommendation By:** Adam Molofsky

2746





DEPARTMENT OF PUBLIC WORKS
COUNTY OF HUMBOLDT

MAILING ADDRESS: 1106 SECOND STREET, EUREKA, CA 95501-0579
AREA CODE 707



ARCATA-EUREKA AIRPORT TERMINAL
MCKINLEYVILLE
FAX 839-3556

PUBLIC WORKS BUILDING
SECOND & L ST., EUREKA
FAX 445-7409

CLARK COMPLEX
HARRIS & N ST., EUREKA
FAX 445-7388

AVIATION 839-5401

ADMINISTRATION 445-7491
BUSINESS 445-7652
ENGINEERING 445-7377
FACILITY MAINTENANCE 445-7493

NATURAL RESOURCES 445-7741
NATURAL RESOURCES PLANNING 267-9540
PARKS 445-7651
ROADS & EQUIPMENT MAINTENANCE 445-7421

LAND USE 445-7205

LAND USE DIVISION INTEROFFICE MEMORANDUM

TO: Michelle Nielsen, Senior Planner, Planning & Building Department

FROM: Kenneth M. Freed, Assistant Engineer *KMF*

DATE: 2-06-2018

RE:	Applicant Name	AMARANTH FARMS
	APN	108-033-014
	APPS#	10897

The Department has reviewed the above project and has the following comments:

- The Department's recommended conditions of approval are attached as **Exhibit "A"**.
- Additional information identified on **Exhibit "B"** is required before the Department can review the project. **Please re-refer the project to the Department when all of the requested information has been provided.**
- Additional review is required by Planning & Building staff for the items on **Exhibit "C"**. **No re-refer is required.**
- Road Evaluation Reports(s)* are required; See **Exhibit "D"**. **No re-refer is required.**

*Note: Exhibits are attached as necessary.

Additional comments/notes:

Review Item #4 on Exhibit "C"

Appears that applicant combined two roads (non-county maintained) into one evaluation form. Applicant states the road is equivalent to a cat 4 road (0611417).

// END //

Exhibit "A"

Public Works Recommended Conditions of Approval

APPS # 10897

(All checked boxes apply)

COUNTY ROADS- FENCES & ENCROACHMENTS:

All fences and gates shall be relocated out of the County right of way. All gates shall be setback sufficiently from the County road so that vehicles will not block traffic when staging to open/close the gate. In addition, no materials shall be stored or placed in the County right of way.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

COUNTY ROADS- DRIVEWAY (PART 1):

The submitted site plan is unclear and/or shows improvements that are inconsistent with County Code and/or Department of Public Works policies. The applicant is advised that these discrepancies will be addressed at the time that the applicant applies to the Department of Public Works for an Encroachment Permit. If the applicant wishes to resolve these issues prior to approval of the Planning & Building permit for this project, the applicant should contact the Department to discuss how to modify the site plan for conformance with County Code and or Department of Public Works policies. Notes:

COUNTY ROADS- DRIVEWAY (PART 2):

Any existing or proposed driveways that will serve as access for the proposed project that connect to a county maintained road shall be improved to current standards for a commercial driveway. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way. This also includes installing or replacing driveway culverts; minimum size is typically 18 inches.

- If the County road has a paved surface at the location of the driveway, the driveway apron shall be paved for a minimum width of 18 feet and a length of 50 feet.
- If the County road has a gravel surface at the location of the driveway, the driveway apron shall be rocked for a minimum width of 18 feet and a length of 50 feet.
- If the County road is an urban road, frontage improvements (curb, gutter, and sidewalk) shall also be constructed to the satisfaction of the Department. Any existing curb, gutter or sidewalk that is damaged shall be replaced.

The exact location and quantity of driveways shall be approved by the Department at the time the applicant applies to the Department of Public Works for an Encroachment Permit.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

COUNTY ROADS- DRIVEWAY (PART 3):

The existing driveway will require substantial modification in order to comply with County Code. The applicant may wish to consider relocating the driveway apron if a more suitable location is available.

COUNTY ROADS-PARKING LOT- STORM WATER RUNOFF:

Surfaced parking lots shall have an oil-water filtration system prior to discharge into any County maintained facility.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

COUNTY ROADS- DRIVEWAY & PRIVATE ROAD INTERSECTION VISIBILITY:

All driveways and private road intersections onto the County Road shall be maintained in accordance with County Code Section 341-1 (Sight Visibility Ordinance).

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

COUNTY ROADS- PRIVATE ROAD INTERSECTION:

Any existing or proposed non-county maintained access roads that will serve as access for the proposed project that connect to a county maintained road shall be improved to current standards for a commercial driveway. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way.

- If the County road has a paved surface at the location of the access road, the access road shall be paved for a minimum width of 20 feet and a length of 50 feet where it intersects the County road.
- If the County road has a gravel surface at the location of the access road, the access road shall be rocked for a minimum width of 20 feet and a length of 50 feet where it intersects the County road.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

COUNTY ROADS- ROAD EVALUATION REPORT(S):

All recommendations in the *Road Evaluation Report(s)* for County maintained road(s) shall be constructed/implemented to the satisfaction of the Public Works Department prior to commencing operations, final sign-off for a building permit, or approval for a business license. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way.

// END //

Additional Review is Required by Planning & Building Staff

APPS # 10897

All of the following questions are to be answered by Planning and Building Department staff. No further involvement with the Department of Public Works is required for these items; however Public Works staff is available to answer any questions that may arise.

- 1. **ROADS – PART 1.** Does the project takes access from a series of non-county maintained roads that connect directly to a State Highway (36, 96, 101, 255, 299, etc...)?
 YES NO

If YES, the project does not need to be referred to the Department. Include the following requirement:

All recommendations in the Road Evaluation Report(s) for non-county maintained road(s) shall be constructed/implemented to the satisfaction of the Planning & Building Department prior to commencing operations, final sign-off for a building permit, or approval for a business license. A grading permit may be required; check with the Building Division of the Planning and Building Department for any permit requirements.

- 2. **ROADS – PART 2.** Does the project takes access from a series of non-county maintained roads that connect directly to a Caltrans State Highway, US Forest Service Road, BLM Road, or a City road?
 YES NO

If YES, the Department recommends that prior to the project presented to the Planning Commission or Zoning Administrator, that the project should be referred to the affected road agency(ies).

- 3. **ROADS – PART 3.** Does the project take access or use a county maintained road that does not have a centerline stripe or is not on the "approved list" of known category 4 roads? YES NO

If YES, a *Road Evaluation Report* must be done for the County road(s) that do not have a centerline stripe or are not on the "approved" list. The project along with the road evaluation report(s) for the County maintained road(s) must be referred to Public Works for review to ensure that the Department supports the findings in the report. If the road is on the "not approved" list, then Part B of the *Road Evaluation Report* form must be completed.

- 4. **Deferred Subdivision Improvements.** Does the project have deferred subdivision improvements? YES NO

How to check: **Method 1:** Planning and Building Department staff review the legal description for the subject property in the deed. If the deed reads similar to "Parcel __ of Parcel Map No. ___" then there may be deferred subdivision improvements; further research will be needed. **Method 2:** Planning and Building Department staff need to review the title report(s) for the subject property(ies) to see if a "Notice of Construction Requirements" document is listed. If the document is listed, then there are deferred subdivision improvements.

If YES then the subject property has deferred subdivision improvements. The project cannot be presented to the Zoning Administrator or the Planning Commission until the deferred subdivision improvements are completed. The applicant should be directed to the Department of Public Works regarding the deferred subdivision improvements.

- 5. **AIRPORT- PART 1 (ALUCP).** Is the project located within Airport Land Use Compatibility Plan (ALUCP) Zone A, B, B1, B2, or B3 as shown on the ALUCP GIS layer? YES NO

If YES, include the following requirement:

The applicant shall cause to be dedicated to the County of Humboldt an Avigation Easement. The avigation easement shall be on the form prescribed by the Department of Public Works. This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

Exhibit "C"

Additional Review is Required by Planning & Building Staff

The applicant shall conduct all operations consistent with the ALUCP and in a manner that does not attract flocks of birds. Open ponds shall not be permitted.

6. **AIRPORT – PART 2 (County Code Section 333).** Is the project is located within the County Code Section 333 GIS layer AND is the project proposing to construct (or permit) a fence, building or other structure? YES NO

If YES, the applicant shall submit a completed *Airspace Certification Form* prior to the project being presented to the Zoning Administrator or the Planning Commission for approval.

7. **AIRPORT – PART 3 (Height Restrictions).** Planning & Building Staff shall review the completed *Airspace Certification Form* as follows:
- o If Box 1 is checked **NO**, the applicant shall either modify the project to comply with County Code Section 333-4 or the applicant shall request a variance pursuant to County Code Section 333-8. The project shall not be presented to the Zoning Administrator or the Planning Commission for approval until the variance is approved by the Board of Supervisors, or the project was modified to comply with County Code Section 333-4.
 - o If Box 2 is checked **YES**, the applicant shall submit form FAA 7460-1 to the FAA for review and comment. The project shall not be presented to the Zoning Administrator or the Planning Commission for approval until the FAA supports the project.
 - o If Box 3 is checked **YES**, then the project cannot be permitted and must be modified to conform to the easement. As an alternative, the applicant may wish to seek approval from both the County and the FAA to quitclaim a portion of the easement to allow the project to be permitted.
 - o If Box 1 is checked **YES** and Box 2 is checked **NO** and Box 3 checked **NO** or **NA**, then Planning & Building staff shall signoff on the project in the "county use only" section of the form. In the "pre-construction" right of way (or "post construction" right of way if the building exists), check the approval box; date and initial your work.

Note that if the proposed structure is close to the imaginary surface (within 5 feet), then require a post construction certificate to be filed. By including the following requirement:

Applicant shall file a post construction *Airspace Certification Form* to ensure that the proposed structures are in compliance with County Code 333-3. This shall be completed within 90 days of completion of construction or prior to building final, whichever occurs first.

Submit a copy of all processed *Airspace Certification Forms* to the Land Use Division.

8. **MS4/ASBS Areas.** Is the project located within MS4 Permit Area as shown on the GIS layer? YES NO

If YES, include the following requirement:

The applicant shall demonstrate to the satisfaction of the Planning & Building Department that the project is in compliance with MS4/ASBS requirements.

// END //



California Department of Fish and Wildlife
CEQA: Project Referral Comments

Applicant: Amaranth Farms		Date: 11-7-2019	
APPS No.: 10897	APN: 108-033-014	DFW CEQA No.: 2017-0601	
<input checked="" type="checkbox"/> Existing	Proposed: <input checked="" type="checkbox"/> Outdoor (SF): 10,000		

Thank you for referring this application to the California Department of Fish and Wildlife (CDFW) for review and comment.

CDFW offers the following comments on the Project in our role as a Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code Section 21000 *et seq.*). These comments are intended to assist the Lead Agency in making informed decisions early in the planning process.

Please provide the following information prior to Project Approval: *(All supplemental information requested shall be provided to the Department concurrently)*

- CDFW is not clear on how the water use estimates were derived or how the amount of water storage proposed will meet the requirements for seasonal water diversion minimization. CDFW requests, prior to Project approval, that the applicant provide further detail on the methods used to estimate water usage.
- If the project proposes ground disturbing activities, include protocol level surveys, conducted by a qualified botanist, for any California Rare Plant Ranked Species that may be present within 200 feet of the proposed project site. Surveys should be conducted in order to identify and establish buffers for any sensitive natural communities, such as wetlands, springs, seeps, and riparian areas, or plants with a State Rare Plant Rank of 1 or 2. CDFW databases such as the California Natural Diversity Database (CNDDDB), and the Biogeographic Information and Observation System (BIOS), can be used as scoping tools for minimum baseline information regarding sensitive biological resources within the 7.5-minute quadrangle and all adjoining quadrangles. Biological, botanical, and/or wetland delineation surveys should be conducted by a qualified biologist with appropriate training. Botanical surveys should follow the protocol in CDFW’s 2009 “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities” (See: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline=1>)
- CDFW requests an assessment of the access road leading to the project site, prior to Project approval to identify nonpoint source pollution that may affect fish and wildlife.

Please note the following information and/or requested conditions of Project approval:

- The existing project is located approximately 400 feet from NSO Critical habitat as designated by the United States Fish and Wildlife Service (USFWS). This Critical Habitat is essential to the conservation of the species and may require special management considerations or protections.
- The proposed Existing Project may have a potentially significant adverse effect on biological resources, specifically Northern Spotted Owl (*Strix occidentalis caurina*; NSO). Consistent with CEQA Guidelines, Section 15380, Northern Spotted Owl (NSO) has been identified as a threatened species pursuant to the federal Endangered Species Act (16 U.S.C. § 1531 *et seq.*) and under the California Endangered Species Act (Fish & G. Code, § 2050 *et seq.*) qualifies it as an endangered, rare, or threatened species under CEQA.

CDFW requests that the applicant assume presence and avoid impacts as determined by a qualified biologist, in consultation with CDFW. Avoidance measures include, but are not limited to, the prohibition of generators, project lighting and fans, including those used in ancillary structures (e.g. nurseries) during the breeding season (February 1 to July 9), each year. Following the breeding season, CDFW requests the succeeding measures, as conditions of Project approval:

- The construction of noise containment/dampening structures for to all generators and fans on parcel; noise released shall be no more than 50 decibels measured from 100ft or edge of habitat whichever is closer. CDFW further requests, a noise attenuation monitoring and management plan for this activity within thirty-days, following execution of the final permit.
 - That additional timber removal be prohibited within 150ft of the designated cultivation sites.
- ☒ CDFW recommends the applicant be required to submit a Noise and Light Attenuation Plan for review and approval in consultation with CDFW prior to use of lights, generators, and fans as applicable to this project.
 - ☒ Prohibition on use of synthetic netting. To minimize the risk of wildlife entrapment, Permittee shall not use any erosion control and/or cultivation materials that contain synthetic (e.g., plastic or nylon) netting, including photo- or biodegradable plastic netting. Geotextiles, fiber rolls, and other erosion control measures shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves.
 - ☒ The environmental impacts of improper waste disposal are significant and well documented. CDFW requests, as a condition of Project approval, that all refuse be contained in wildlife proof storage containers, at all times, and disposed of at an authorized waste management facility.
 - ☒ That photo documentation be provided, indicating the proper containment of all hazardous chemicals/materials within thirty-days, following execution of the final Project permit.
 - ☒ That all imported soil located onsite be fully contained and setback a minimum of 150ft from watercourses and/or wet areas; and that all discarded soil and trash present onsite be removed and properly disposed of at a waste management facility.
 - ☒ CDFW requests, as a condition of Project approval, all generators and associated fluids be relocated to stable surfaces with a minimum 200ft buffer from Class I streams (measured horizontally from the outer edge of the riparian or top of bank, whichever is greater).
 - ☒ That access roads leading to the site are assessed by an experienced licensed Professional and that BMP's are implemented within sixty-days following the execution of this agreement, to prevent sediment delivery to nearby watercourses/wet areas.
 - ☒ The referral materials state that there is a plan to construct a rainwater catchment pond(s) onsite. CDFW requests the following measures be incorporated as conditions of Project approval in order to avoid and minimize potential impacts to fish and wildlife:
 - That the pond(s) be designed by a qualified licensed engineer (in consultation with a licensed geologist where appropriate) and that construction implementation include oversight and/or sign off by a qualified licensed professional.
 - That the pond(s) be designed to hold no more than the necessary volume of water needed for the project, with consideration to evaporative loss and designed in such a way to

accommodate annual pond dewatering. The volume of water contained within the pond should be based on the square footage and method of cultivation in use prior to January 1, 2016.

- That the applicant install an overflow spillway that will withstand a 100-year flood event, designed with a dispersal mechanism, or low-impact design, that discourages channelization and promotes dispersal and infiltration of flows to prevent surface overflow from reaching waters of the State. CDFW recommends the spillways be designed and placed to allow for a minimum of two-feet of freeboard.
 - That the applicant install several exit ramps to prevent wildlife entrapment. Exit ramps shall meet the following requirements: installed at no greater than 2:1 slope, securely fixed, and made of solid material (e.g. wood).
 - That the applicant comply with the attached CDFW Bullfrog Management Plan (**Exhibit A**). Reporting requirements shall be submitted to CDFW at 619 2nd Street, Eureka, CA 95501, no later than December 31 of each year.
 - That fish stocking be prohibited without written permission from the Department pursuant to Section 6400 of the Fish and Game Code.
- A Final Lake or Streambed Alteration Agreement (1600-2016-0487-R1) has been issued to the applicant. To date, the applicant has not completed the required mitigation work, and are not in compliance with the Agreement.
- This project has the potential to affect sensitive fish and wildlife resources such as Marbled Murrelet (*Brachyramphus marmoratus*), Fisher - West Coast DPS (*Pekania pennanti*), Long-eared Myotis (*Myotis evotis*), North American Porcupine (*Erethizon dorsatum*), Northern Spotted Owl (*Strix occidentalis caurina*), Townsend Big-eared Bat (*Corynorhinus townsendi*), Steelhead Trout (*O. mykiss*), Foothill Yellow-legged Frog (*Rana boylei*), Pacific Giant Salamander (*Dicamptodon tenebrosus*), Southern Torrent Salamander (*Rhyacotriton variegatus*), Northwestern Salamander (*Ambystoma gracile*), Rough-skinned Newt (*Taricha granulosa*), Northern Red-legged Frog (*Rana aurora*), Tailed Frog (*Ascaphus truei*), Boreal Toad (*Anaxyrus boreas boreas*), Western Pond Turtle (*Actinemys marmorata marmorata*), and amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

Thank you for the opportunity to comment on this Project.

Sincerely,

California Department of Fish and Wildlife
619 2nd Street
Eureka, CA 95501



DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Humboldt – Del Norte Unit
 118 Fortuna Blvd.
 Fortuna, CA 95540
 Website: www.fire.ca.gov
 (707) 726-1272



Ref: 7100 Planning
 Date: August 29, 2017



John Ford, Director
 Humboldt County Planning and Building Department – Planning Division
 3015 H Street
 Eureka, CA 95501

Attention: Cannabis Planner (CPOD)
Applicant: Amaranth Farms
APN: 108-033-014-000
Area: Shelter Cove
Case Numbers: SP16-100

Humboldt County Application #: 10897
Type of Application: Special Permit
Date Received: 8/28/2017
Due Date: 9/9/2017

Project Description: A Special Permit for 10,000 square feet of existing outdoor cannabis cultivation is requested. Processing is done off-site at a licensed processing facility until an off-site ADA compliant facility is constructed on the Applicant's adjoining parcel (108-033-004). The water source used for irrigation is from the Applicant's point of diversion on the property. The Applicant is also proposing to construct a 200,000 gallon rainwater catchment pond. The Applicant is proposing a total of 10,000 gallons of hard tank storage. Off-grid power is provided by a gas generator and a solar power system is proposed.

Mr. Ford,

The California Department of Forestry and Fire Protection (CALFIRE) provides these standard project review comments on the above noted project for the following subject matter:

- Fire Safe
- Resource Management
- Cannabis

The following pages address these concerns directly.

If CALFIRE staff develops additional comment on this project, it will be forwarded in an additional response letter.

By: Planning Battalion
 CALFIRE Humboldt – Del Norte Unit

For **Hugh Scanlon**, Unit Chief

FIRE SAFE

General:

CALFIRE has responsibility for enforcement of Fire Safe Standards as required by Public Resources Code (PRC) 4290 and 4291. However CALFIRE is not the lead agency in planning development and project permitting. CALFIRE provides input as a contributing agency, generally limited to plan review, and is not the approving agency for these projects.

Local Responsibility Areas:

Should this project include Local Responsibility Area (LRA) lands, CALFIRE has no direct fire safe input on those parcels. However, in those areas with LRA parcels adjacent to State Responsibility Area (SRA) land, CALFIRE recommends that local standards be applied that are consistent with those CALFIRE makes for SRA lands.

State Responsibility Areas:

Should this project include State Responsibility Area (SRA) lands, the following are CALFIRE's Fire Safe minimum input and recommendation for any and all development.

1. In Humboldt County, developments must meet minimum fire safe standards by constructing the project in conformance with County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and setback distances for maintaining defensible space.
2. New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas shall comply with the 2007 California Building Code (CBC) Section 701A.3.2. This requires roofing assemblies, attic and eave ventilation, exterior siding, decking and deck enclosure, windows and exterior doors, and exposed under floor areas that are approved "ignition resistive" in design.
3. All development, especially commercial or industrial development, should be designed to comply with the most current versions of the following standards:
 - a) California Fire Code (CFC) — for overall design standards
 - b) Public Utilities Commission (PUC) General Order 103 — for design of water systems
 - c) National Fire Protection Association Standards (NFPA) for fire flow minimums and other design questions not specifically covered by CFC and PUC
 - d) Housing and Community Development Codes and Standards —for mobile home parks and recreational camps
4. For Department of Real Estate reporting purposes, fire protection coverage in SRA is generally described as follows:

During the declared fire season (usually June through October) CALFIRE responds to all types of fires and emergencies in SRA.

During the remainder of the year (winter period), CALFIRE responds to emergency requests with the closest available fire engine, if a response can reasonably be expected to arrive in time to be effective. A fire engine is usually available somewhere in the Unit, but may have an extended response time.

There are many hazards confronting fire protection agencies in most subdivisions on SRA lands. Steep terrain and heavy wildland fuels contribute to fire intensity and spread. The distances from fire stations and road grades encountered usually create an excessive response time for effective structure fire suppression purposes.

Subdivisions increase fire risks from additional people and increase probable dollar losses in the event of fire due to added structures and improvements.
5. If the project expects to produce densities consistent with a major subdivision, the impacts on all infrastructures should be mitigated. Local government more appropriately provides the responsibility for high-density area protection and services. Annexation or inclusion into Local Responsibility Area should be studied as well.

6. CALFIRE does not support development in areas where there is no local agency fire service for structure fires and emergency medical response. Fire services should be extended into service gap areas as a condition of development. New development can adversely impact existing fire services. Careful consideration must be given where development may overload the local fire service's ability to respond.

RESOURCE MANAGEMENT

CALFIRE has enforcement responsibility for requirements of the Z'berg—Nejedly Forest Practice Act of 1973. CALFIRE is also the lead agency for those parts of projects involving the scope of the Forest Practice Act. The following basic input will cover the majority of projects. Each project will be reviewed with additional input sent at a later date, if needed.

The following comments reflect the basic Resource Management policies of the Board of Forestry and Fire Protection and CALFIRE on CEQA review requests. These policies apply to both Local and State Responsibility Areas.

1. If this project reduces the amount of timberland, by policy, the Board of Forestry and CALFIRE cannot support any project that will reduce the timberland base of California. "Timberland" means land which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees regardless of current zoning (PRC 4526). However, if the zoning and intended use are consistent with the county's general plan; and if no land other than timberland can be identified to site the project; then CALFIRE may choose not to oppose the project.
2. If **any** commercial timber operations are involved with a project, the timber operations cannot be conducted without a CAL FIRE permit. Commercial timber operations include the cutting or removal of trees offered for sale, barter, exchange, or trade or the conversion of timberlands to land uses other than the growing of timber (PRC 4527). Contact your nearest CAL FIRE Resource Management office for guidance on obtaining the necessary permits.
3. If **any** timberlands are being converted to a non-timber growing use by this project, the conversion operations cannot be conducted without a CAL FIRE permit (PRC 4621). Conversion of timberland takes place when trees are removed and the land use changes, even without the sale, barter, exchange, or trade of the trees. Contact your nearest CAL FIRE Resource Management office for guidance on obtaining the necessary permits.
4. If timberland is in the viewshed of a project, the current and future owners should be overtly notified that changes will occur to their views due to timber management activities. Further, no project should be allowed to negatively affect access to timberland for timber management purposes; neither on the project parcel(s) nor any other timberland parcels.
5. If timber harvesting has occurred and post-harvest restocking and prescribed erosion control maintenance obligations have not been met on a parcel, future owners should be overtly notified (14 CCR 1042). The current owner of a parcel is responsible for restocking requirements and maintenance of roads whether or not they were involved in the actual harvest plan.
6. If the project involves the development of parcels zoned as Timber Production Zone (TPZ), CALFIRE cannot support the project. Dividing TPZ land into parcels of less than 160 acres requires a Joint Timber Management plan prepared by a Registered Professional Forester (RPF), recorded as a deed restriction for a minimum of 10-years on all affected parcels, and approved by a four – fifths vote of the full board (Govt. Code 51119.5). TPZ may be rezoned using a "Ten Year Phase Out," which precludes the need for a Timberland Conversion Permit. CALFIRE opposes immediate rezoning of TPZ land.

Cannabis

General:

CALFIRE has responsibility for enforcement of Fire Safe Standards as required by Public Resources Code (PRC) 4290 and 4291. CALFIRE is not the lead agency in planning development and project permitting. However, CALFIRE provides comment as an emergency response expert agency, generally limited to plan review, and is not the approving agency for these projects.

Local Responsibility Areas:

Should this project include Local Responsibility Area (LRA) lands, CALFIRE has no direct fire safe input on those parcels. However, in those areas with LRA parcels adjacent to State Responsibility Area (SRA) land, CALFIRE recommends that local standards be applied that are consistent with those CALFIRE makes for SRA lands. Also CAL FIRE is the primary command and control dispatch, for most local agency fire districts and departments.

State Responsibility Areas:

Should this project include State Responsibility Area (SRA) lands, the following are CALFIRE's minimum input.

1. Agricultural cannabis growing operations medicinal or commercial shall have an easily accessible material safety data sheet (MSDS) or safety data sheet (SDS) for all chemicals and hazardous materials on site. Posted (NFPA 704) Placard clearly visible to emergency responders
2. California code of regulations Health and Safety (CCR 11362.769.) Indoor and outdoor medical marijuana cultivation shall be conducted in accordance with state and local laws related to land conversion, grading, electricity usage, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters. State agencies, including, but not limited to, the State Board of Forestry and Fire Protection, the Department of fish and Wildlife, the State Water Resources Control Board, the California regional water quality control boards, and traditional state law enforcement agencies shall address environmental impacts of medical marijuana cultivation and shall coordinate, when appropriate, with cities and counties and their law enforcement agencies in enforcement efforts.
3. International Fire Code (N101.1 Scope) Marijuana growing and extraction shall be in accordance with this chapter, of the International Building Code, and the International Mechanical Code. Cryogenic fluids shall comply with Chapter 55. Compressed gases shall comply with Chapter 53. Flammable and combustible liquids shall comply with Chapter 57. Hazardous materials shall comply with Chapter 50. LP-gas shall comply with Chapter 61 and the International Fuel Gas Code. All applicable California State Fire Marshal standards and regulations for the designated occupancy must be met.
4. Growing marijuana and the extracting of oils
Extraction of marijuana oils; All materials hazardous and non-hazardous associated with the extraction process shall be utilized in conformance of the law and fire safe codes.