COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION

3015 H Street, Eureka CA 95501
Phone: (707)445-7541 Fax: (707) 268-3792

Hearing Date: October 21, 2021

To: Humboldt County Planning Commission

From: John H. Ford, Director of Planning and Building Department

Subject: **J and R Ranch Conditional Use Permit and Special Permit**
Record Number PLN-11503-CUP
Assessor's Parcel Number (APN) 316-015-006
Willow Creek area

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Please contact Jordan Mayor, Assigned Planner, at 707-683-4711 or by email at jordan.mayor@icf.com, if you have any questions about the scheduled public hearing item.

AGENDA ITEM TRANSMITTAL

Hearing Date	Subject	Contact
October 21, 2021	Conditional Use Permit and Special Permit	Jordan Mayor

Project Description: J and R Ranch seeks a Conditional Use Permit for an existing 14,000-square-foot (SF) outdoor cannabis cultivation operation and a 2,900-SF propagation area (recommended to be reduced to 1,400 SF as a condition of approval). J and R Ranch also seeks a Special Permit for work completed within Streamside Management Areas (SMA). The project also includes the permitting of existing facilities appurtenant to the cultivation, including seven greenhouses, one shed, one nutrient shed, and a nursery. A historic guerilla grow that was located within a stream buffer and steep slope is being retired, remediated, and relocated to the central portion of the site outside the SMA and on slopes between 1.8 and 8.9 percent. Irrigation water is sourced from a 295-foot-deep permitted groundwater well. Existing available water storage capacity is 11,500 gallons in five plastic water tanks. Estimated annual water usage is 240,000 gallons (17.1 gallons/SF/year). Drying occurs onsite in an existing shed and processing will occur offsite at a licensed processing or manufacturing facility. Power is sourced from five onsite generators located in two noise containment sheds.

Project Location: The project is located in Humboldt County, in the Willow Creek area, on both sides of Friday Ridge Road, approximately 4.3 miles south from the intersection of U.S. Forest Service Route 05N10 and Friday Ridge Road, on the property known to be in the northeast quarter of Section 26, Township 05 North, Range 04 East (APN 316-015-006).

Present Plan Land Use Designations: Timberland (T) Density: 40-160 acres per dwelling unit; Slope Stability: Moderate instability (2)

Present Zoning: Agriculture Exclusive (AE-B-5[160]) and Timber Production Zone (TPZ)

Record Number: PLN-11503-CUP

Assessor's Parcel Number: 316-015-006

Applicant	Owner	Agent
J and R Ranch 1805 Henry Lane McKinleyville, CA 95519	McCarty Max 3202 Upper Bay Road Arcata, CA 95521	Green Road Consulting C/O Kaylie Saxon 1650 Central Ave. Suite C McKinleyville, CA 95519

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

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

Major Issues: None

J and R Ranch
Record Number: PLN-11503-CUP
Assessor's Parcel Number: 316-015-006

Recommended Commission Action
1. Describe the application as a public hearing;
2. Request that staff present the project;
3. Open the public hearing and receive testimony; and
4. Close the hearing and take the following action:

Adopt the Resolution which does the following: 1) Finds that the Commission has considered the Addendum to the adopted Mitigated Negative Declaration (MND) for the Commercial Medical Marijuana Land Use Ordinance (CMMLUO) as described by Section 15164 of the State California Environmental Quality Act (CEQA) Guidelines; 2) makes all of the required findings for approval of the Conditional Use Permit and Special Permit and 3) approves the J and R Ranch Conditional Use Permit and Special Permit recommended by staff subject to the recommended conditions.

Executive Summary: J and R Ranch seeks a Conditional Use Permit to allow the continued operation of an existing 14,000-square-foot (SF) outdoor cannabis cultivation operation in accordance with Humboldt County Code Section 314-55.4 of Chapter 4 of Division I of Title III, CMMLUO. The 155-acre parcel is designated as Timberland (T) in the Humboldt County 2017 General Plan and zoned Agriculture Exclusive (AE-B-5[160]) and Timber Production Zone (TPZ). The outdoor cultivation will occur in seven greenhouses of varying sizes in one main cultivation area located in the central portion of the parcel. The project also includes the permitting of existing grading and facilities appurtenant to the cultivation, including seven greenhouses, one shed, one nutrient shed, and a nursery as a condition of approval (COA #6, #7, and #8). A historic guerilla grow that was located within a stream buffer and steep slope has been moved to the central portion of the site outside the Streamside Management Area (SMA) and on slopes between 1.8 and 8.9 percent (Attachment 3). The greenhouses utilize light-deprivation techniques to produce two flowering cycles per year. The growing season extends from March through October.

Immature plants are propagated in the onsite nursery totaling 2,900 SF to be reduced to 1,400 SF as a condition of approval (COA #9). Drying occurs onsite in an existing shed using fans, and processing will occur offsite at a licensed processing or manufacturing facility. Power is sourced from five onsite generators located in two noise-containment sheds. In accordance with the Division of Environmental Health referral response, the applicants' continued use of portable toilets for workers shall be documented and provided to the Planning Division as a condition of approval (COA #10). Up to three employees may be utilized during peak operations and would carpool to the site 8–12 times per month. The access road is barred by a locked gate and game cameras are installed over the gate and the cultivation areas.

Water Resources
Irrigation water is sourced from a 295-foot-deep permitted groundwater well (16/17-0682). The well is screened at various depths from 95 feet to 295 feet and was estimated to yield 25 gallons per minute based on a standard 4-hour draw-down test in July 2017 (Attachment 3). Existing available water storage capacity is 11,500 gallons in five plastic water tanks. Estimated annual water usage is 240,000 gallons (17.1 gallons/SF/year) with peak demand occurring in August at 43,200 gallons. Use of well water and water tank storage shall be monitored as a condition of approval (COA #12). An Initial Statement of Water Diversion and Use was filed in 2016 for two points of diversion (S026961, S026959) located on the eastern portion of the parcel; these historic points of diversion are no longer used for irrigation. A Site Management Plan (SMP) was prepared for the project in July 2019 in accordance with the State Water Resources Control Board General Order WQ 2019-001-DWQ (WDID 1B170045CHUM). The SMP indicates there are seven stream crossings on the property, all east of Friday Ridge Road where no cultivation is occurring. These ford or culverted crossings were installed along historic skid roads utilized for seasonal access, but as they are no longer used, they are set to be decommissioned in accordance with a Final Lake or Streambed Alteration Agreement (LSAA 1600-2018-0837-R1) with the California Department of

Fish and Wildlife (CDFW). The SMP provided five map point locations summarizing remediation recommendations to reduce erosion risk near the cultivation areas and these have been made a condition of approval (COA #13). The final LSAA includes measures to protect fish and wildlife resources during the decommissioning of the seven stream crossings and restoration of stream channels and these are made ongoing conditions of approval.

Although Humboldt County's WebGIS shows no mapped streams within the subject parcel, the site plan shows 3 Class III drainages and 2 Class II streams with the associated 100-foot and 50-foot SMA buffers, respectively, flowing west of the property onto public lands managed by Six Rivers National Forest. The cultivation areas are outside of the SMA buffer and over 800 feet from public lands as verified with a property boundary survey conducted by Kolstad Land Surveyors in July 2019. A 2018 site inspection by Regional Water Quality Control Board staff indicated the ridge-top site is over 3,500 feet from the nearest perennial watercourse.

Biological Resources
A Biological Resources Assessment Report was prepared by TransTerra Consulting in June 2019 and stated that tree clearing is not currently proposed, nor is additional grading or expansion of facilities (Attachment 3). The ambient conditions from cannabis cultivation are similar to the impacts of historic logging/grazing. The site was well maintained, and solid waste or other hazardous materials were not observed. The report recommended following all recommendations outlined by existing agency policies for minimizing impacts on natural resources. Impacts from light, noise, and chemicals can be addressed in the operations plan and best management practices can be employed to minimize impacts. Additional disturbance, clearing, and road cuts would likely modify existing groundwater, and surface water patterns and could affect water quality and/or hydrophytic species. Given the existing nature of the cultivation sites, as well as the existing disturbance to the proposed cultivation site, the minimal development that occurred and will occur should have no significant adverse indirect impacts on the surrounding environment and habitats.

The Biological Resource Assessment report addressed potential impacts on northern spotted owl (NSO) and identified that the closest activity center is approximately 0.69 mile southwest of the project site and the most recent positive observations of an owl were made in 2007. While the activity centers of HUM0494 and HUM0087 are noted further than 1 mile of the property both contained positive observations within the 1-mile buffer. Critical habitat for NSO is located approximately 1 mile to the northeast. The project is conditioned to adhere to Dark Sky Association standards for greenhouse lighting and security lighting, refrain from using synthetic netting, ensure refuse is contained in wildlife-proof storage and refrain from using anticoagulant rodenticides to further protect wildlife. As proposed and conditioned, the project is consistent with CMMLUO performance standards and CDFW guidance and will not negatively affect NSO or other sensitive species.

Remediation
On July 12, 2018 Green Road Consulting preformed a field investigation to identify evidence of a historic guerilla grow onsite and prepared a Guerilla Grow Remediation plan (Attachment 3). As a result of the field investigation, Green Road Consulting was able to identify substantial evidence of a historic guerilla grow. At the time of the field investigation, it was apparent that the area of the historic guerilla grow had been decommissioned for some time. There was no evidence of any major grading (over 50 cubic yards) or large-scale vegetation removal. Due to these facts much of the vegetation had returned to its natural state. The report recommended that the applicant remove any remaining cultivation-related waste including but not limited to plastic pots, irrigation lines, and potting soil and this has been made a condition of approval (COA #14). In addition, any remaining areas of bare soil shall be covered with straw and seeded for stability. The new cultivation location is environmentally superior because the area is not within a stream buffer or on steep slopes between 12 and 39 percent.

Tribal Cultural Resources Coordination
The project was referred to the Northwest Information Center, Bear River Band of the Rohnerville Rancheria, Hoopa Valley Tribe, and Tsnungwe Council for comments and recommended conditions of

approval. The Northwest information Center responded that a previous archaeological study had been completed covering a portion of the property which found no resources and recommended that further study be done given the amount of time since the original study in 1978. A Cultural Resources Survey of the entire project area was conducted in 2019 by Archaeological Research and Supply Company who found isolated chert flakes however no other resources. The report concluded that the chert flakes were outside of the area of direct effect however were located within 600 feet of the proposed project. The report concludes that the project will not have an impact on cultural resources.

Access
The project site is approximately 21 miles southwest of the City of Willow Creek at 40.789917, -123.688928. Access to the site is from Friday Ridge Road which runs through the central portion of the subject parcel. The haul route is shown in Attachment 3. A Road Evaluation Report for Friday Ridge Road from USFS 5N01 Road to the property entrance was prepared by the applicant (Attachment 3) which indicates it is a private road that is developed to the equivalent of a road category 4 standard. The US Forest Service was referred, and responded to recommend denial of this project due to the fact that cannabis is federally illegal and the access to the site includes transportation over USFS roads.

Environmental review for this project was conducted and based on the results of that analysis, staff finds that all aspects of the project have been considered in a previously adopted MND that was adopted for the CMMLUO and has prepared an addendum to this document for consideration by the Planning Commission (See Attachment 2 for more information).

RECOMMENDATION: Based on a review of Planning Division reference sources and comments from all involved referral agencies, Planning staff believes that the applicant has submitted evidence in support of making all of the required findings for approval of the Conditional Use Permit and Special Permit.

ALTERNATIVES: The Planning Commission could elect not to approve the project, or to require the applicant to submit further evidence, or modify the project. If modifications may cause potentially significant impacts, additional CEQA analysis and findings may be required. These alternatives could be implemented if the Commission is unable to make all of the required findings. Planning staff has stated that the required findings in support of the proposal have been made. Consequently, Planning staff does not recommend further consideration of any alternative.

The Planning Commission could also decide the project may have environmental impacts that would require further environmental review pursuant to CEQA. Staff did not identify any potential impacts. As the lead agency, the Department has determined that the project is consistent with the MND for the CMMLUO as stated above. However, the Commission may reach a different conclusion. In that case, the Commission should continue the item to a future date at least 2 months later to give staff the time to complete further environmental review.

RESOLUTION OF THE PLANNING COMMISSION
OF THE COUNTY OF HUMBOLDT
Resolution Number 21-
Record Number PLN-11503-CUP
Assessor's Parcel Number: 316-015-006

Resolution by the Planning Commission of the County of Humboldt certifying compliance with the California Environmental Quality Act (CEQA) and conditionally approves the J and R Ranch, Conditional Use Permit and Special Permit.

WHEREAS, **J and R Ranch,** submitted an application and evidence in support of approving a Special Permit for work completed within a Streamside Management Area (SMA) and Conditional Use Permit for the continued operation an existing 14,000-square-foot (SF) outdoor cannabis cultivation operation with appurtenant propagation and drying activities;

WHEREAS, the County Planning Division, the lead agency, prepared an Addendum to the Final Mitigated Negative Declaration (MND) prepared for the Commercial Medical Marijuana 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 MND. No new information of substantial importance that was not known and could not be known at the time was presented as described by Section 15162(c) of CEQA Guidelines; and

WHEREAS, the Humboldt County Planning Commission held a duly-noticed public hearing on October 21, 2021, and reviewed, considered, and discussed the application for a Conditional Use Permit and Special Permit and reviewed and considered all evidence and testimony presented at the hearing.

Now, THEREFORE BE IT RESOLVED, that the Planning Commission makes all the following findings:

1. **FINDING:** **Project Description:** The application is for a Special Permit for work completed within an SMA and a Conditional Use Permit to allow a 14,000-SF cannabis cultivation operation with appurtenant propagation and drying activities. Power is sourced from five onsite generators located in two noise-containment sheds. Water for irrigation is provided by a permitted 295-foot-deep groundwater well (16/17-0682).

   EVIDENCE: a) Project File: PLN-11503-CUP

2. **FINDING:** **CEQA.** The requirements of CEQA have been complied with. The Humboldt County Planning Commission has considered the Addendum to and the MND prepared for the CMMLUO adopted by the Humboldt County Board of Supervisors on January 26, 2016.

   EVIDENCE: a) Addendum Prepared for the proposed project.

   b) The proposed project does not present substantial changes that would require major revisions to the previous MND. No new information of substantial importance that was not known and could not be known at the time was presented as described by Section 15162(c) of CEQA Guidelines.

   c) A Site Management Plan (SMP) was prepared for the project in July 2019 in accordance with the State Water Resources Control Board General Order WQ 2019-001-DWQ (WDID 1B170045CHUM). The SMP indicates there are seven stream crossings on the property, all located to the east of Friday Ridge Road where no cultivation is occurring. These ford or culverted

crossings were installed along historic skid roads utilized for seasonal access, but as they are no longer used, they are set to be decommissioned in accordance with a Final Lake or Streambed Alteration Agreement (LSAA 1600-2018-0837-R1) with the California Department of Fish and Wildlife (CDFW).

d) A Preliminary Biological Resources Assessment Report was prepared by TransTerra Consulting in June 2019 and stated that tree clearing is not currently proposed, nor is additional grading or expansion of facilities. The Assessment methods included a search of the California Natural Diversity Database and California Native Plant Society database. A habitat assessment was conducted in the project area. No special-status species were observed during the assessment. Although the seasonal timing of the field visit was not appropriate for the detection of blooming rare and special-status plant species, the biologist concluded that the ecological habitat and preexisting use of the site makes it unlikely that special-status plant and animal species are present within the proposed site location, or would be negatively affected by the project because no tree removal shall occur and relocated cultivation will be located within existing cultivation areas. Northern spotted owl habitat exists in the vicinity, but the closest activity centers are approximately 0.69 air mile from the project site. Conditions of approval will require noise to be at or below 50 decibels at 100 feet which is below the guidance established by CDFW for protection of the species.

e) There are no known tribal cultural resources on the project site. A cultural resources survey was completed for a portion of the site in 1978 which found no significant resources and a more recent survey was completed for the entire project site in 2019 by Archaeological Research and Supply Company. While some isolated chert flakes were located no significant cultural resources were found and the report concludes that the project would have no significant impact on cultural resources. The project was referred to the Northwest Information Center, Bear River Band of the Rohnerville Rancheria, Hoopa Valley Tribe, and Tsnungwe Council for comments and recommended conditions of approval. None of the tribes responded. Ongoing conditions of approval are incorporated regarding the Inadvertent Discoveries Protocol to protect cultural resources.

f) A Road Evaluation Report for Friday Ridge Road from USFS 5N01 Road to the property entrance was prepared by the applicant (Attachment 3) which indicates it is developed to the equivalent of a road category 4 standard.

FINDINGS FOR CONDITIONAL USE PERMIT

3. FINDING The proposed development is in conformance with the County General Plan, Open Space Plan, and the Open Space Action Program.

EVIDENCE a) General agriculture is an allowable use type permitted in the Timberland (T) land use designation. The proposed cannabis cultivation, an agricultural product, is within land planned and zoned for agricultural and timber products, consistent with the use of Open Space land for managed production of resources. The use of an timberland parcel for commercial agriculture is consistent with the Open Space Plan and Open Space Action Program. Therefore, the project is consistent with and complimentary to the

Open Space Plan and its Open Space Action Program.

4. FINDING The proposed development is consistent with the purposes of the existing Agricultural Exclusive (AE-B-5[160]) and Timber Production Zone (TPZ) combining-zones in which the site is located.

EVIDENCE

a) The AE-B-Zone is applied to areas of the County in which specialty agriculture and horticulture are the desirable predominant uses. The TPZ-Zone is applied to areas of the County in which timber production and recreation are the desirable predominant uses and agriculture is the secondary use.

b) All general agricultural uses are principally permitted in the AE and TPZ Combining-Zones.

c) Humboldt County Code Section 314-55.4.8.2.2 allows cultivation of up to 43,560 SF of existing outdoor cannabis and up to 22,000 SF of existing mixed-light cannabis on a parcel over 1 acre subject to approval of a Conditional Use Permit and a determination that the cultivation was in existence prior to January 1, 2016. The application for 14,000 SF of outdoor cultivation on a 155-acre parcel is consistent with this and with the cultivation area verification prepared by the County.

5. FINDING The proposed development is consistent with the requirements of the CMMLUO Provisions of the Zoning Ordinance.

EVIDENCE

a) The CMMLUO allows existing cannabis cultivation to be permitted in areas zoned AE and TPZ (Humboldt County Code Section 314-55.4.8.2.2).

b) The parcel was created in compliance with all applicable state and local subdivision regulations, as it was created in its current configuration by the Grant Deed recorded on May 12, 2016.

c) The project will obtain water from a non-diversionary water source, a 295-foot-deep groundwater well.

d) A Road Evaluation Report for Friday Ridge Road from USFS 5N01 Road to the property entrance was prepared by the applicant which indicates it is developed to the equivalent of a road category 4 standard. All road segments evaluated were found to be functionally appropriate for the expected traffic.

e) The slope of the land where cannabis will be cultivated is less than 15%.

f) The location of the cultivation complies with all setbacks required in Section 314-55.4.11.d apart from tribal cultural resources. It is more than 600 feet from any school, church, or public park but less than 600 feet from known tribal cultural resources. Conditions of approval require adoption of the inadvertent discoveries protocol to protect cultural resources.

6. FINDING The cultivation of 14,000 SF of cannabis cultivation and the conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the vicinity.

EVIDENCE

a) The site is located on a road that has been certified by the applicant to safely accommodate the amount of traffic generated by the proposed cannabis cultivation.

b) The site is in a rural part of the county where the typical parcel size is over 40 acres and many of the land holdings are very large. The proposed cannabis

will not be in a location where there is an established neighborhood or other sensitive receptor such as a school, church, park or other use which may be sensitive to cannabis cultivation. Approving cultivation on this site and the other sites which have been approved or are in the application process will not change the character of the area due to the large parcel sizes in the area.

c) The location of the proposed cannabis cultivation is more than 300 feet from the nearest offsite residence.

d) Irrigation water will come from a 295-foot-deep groundwater well that has been permitted by the Environmental Health Department.

e) Provisions have been made in the applicant's proposal to protect water quality and thus runoff to adjacent property and infiltration of water to groundwater resources will not be affected.

7. FINDING 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.

EVIDENCE a) The parcel was not included in the housing inventory of Humboldt County's 2019 Housing Element but does have the potential to support one housing unit. The approval of cannabis cultivation on this parcel will not conflict with the ability for a residence to be constructed on this parcel.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Humboldt County Planning Commission does hereby:

- Adopt the findings set forth in this resolution; and
- Conditionally approves the Conditional Use Permit for J and R Ranch, based upon the Findings and Evidence and subject to the conditions of approval attached hereto as Attachment 1 and incorporated herein by reference; and

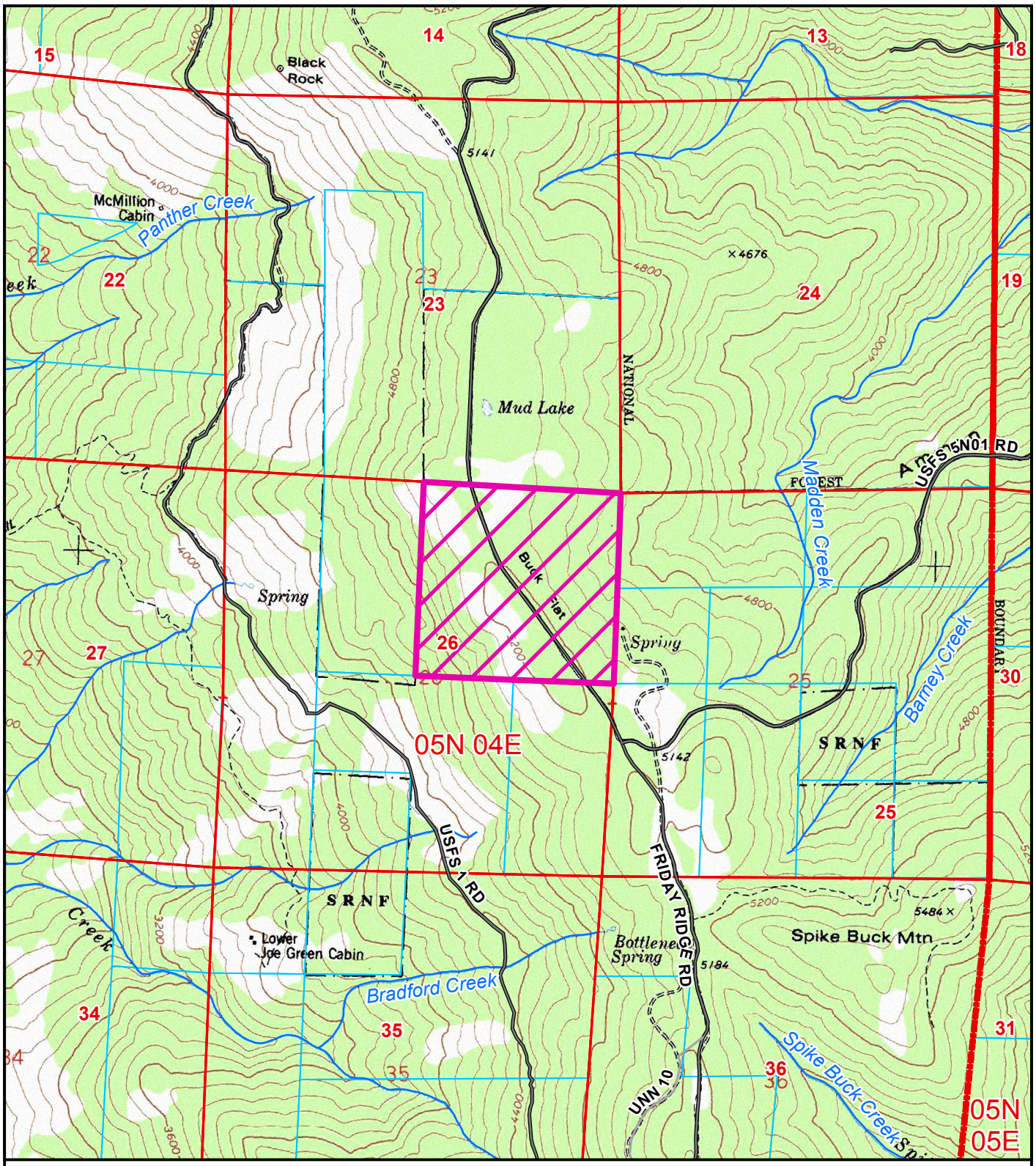
Adopted after review and consideration of all the evidence on **October 21, 2021**

The motion was made by COMMISSIONER _____and second by COMMISSIONER _____ and the following ROLL CALL vote:

AYES: COMMISSIONERS:
NOES: COMMISSIONERS:
ABSENT: COMMISSIONERS:
ABSTAIN: COMMISSIONERS:
DECISION:

I, John Ford, Secretary to the Planning Commission 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 Commission at a meeting held on the date noted above.

_____
John Ford, Director
Planning and Building Department



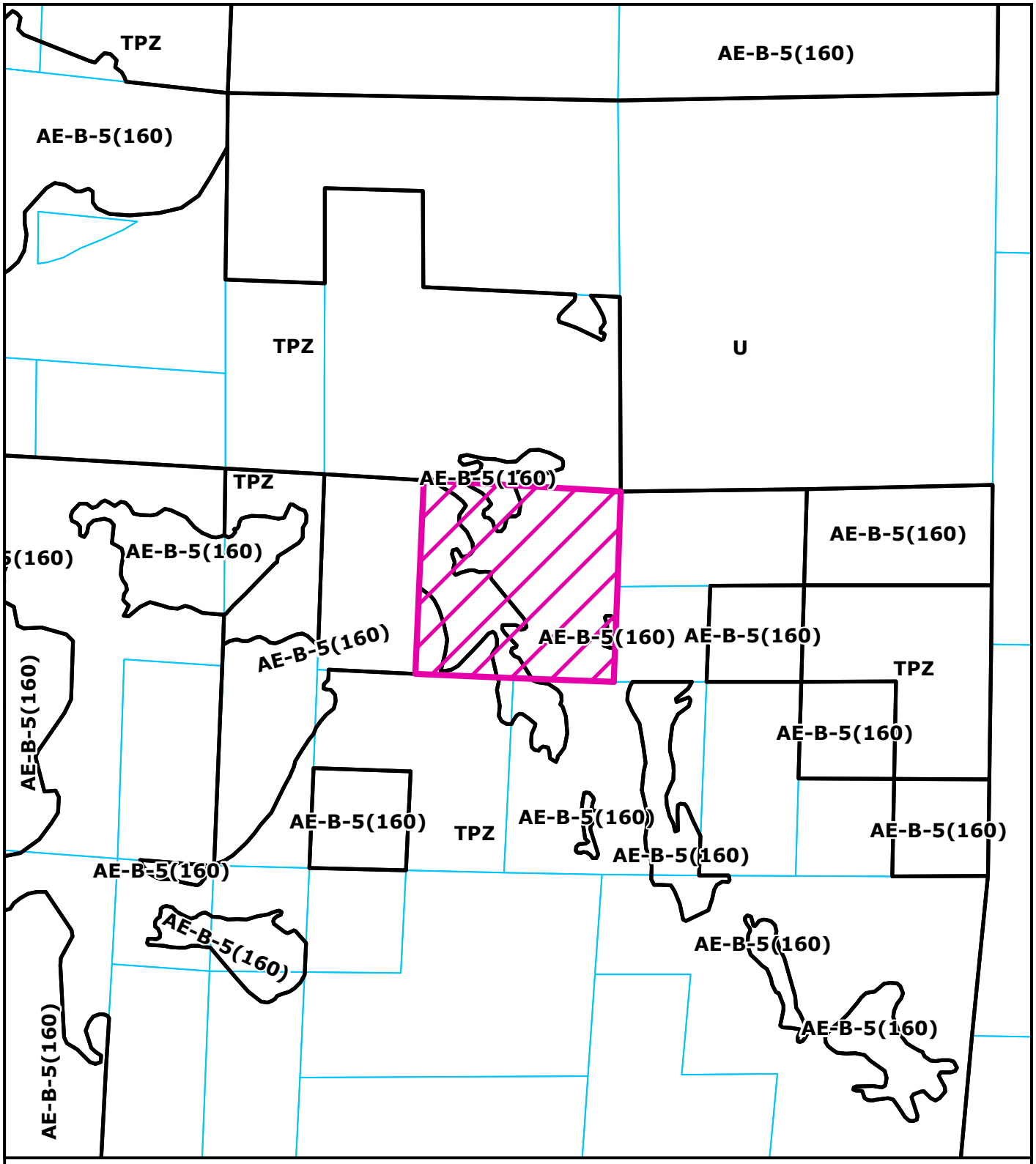
TOPO MAP
PROPOSED J AND R RANCH
WILLOW CREEK AREA
CUP-16-268; SP-17-106
APN: 316-015-006
T05N R04E S26 HB&M (GROUSE MTN)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 1,000 2,000 4,000 Feet



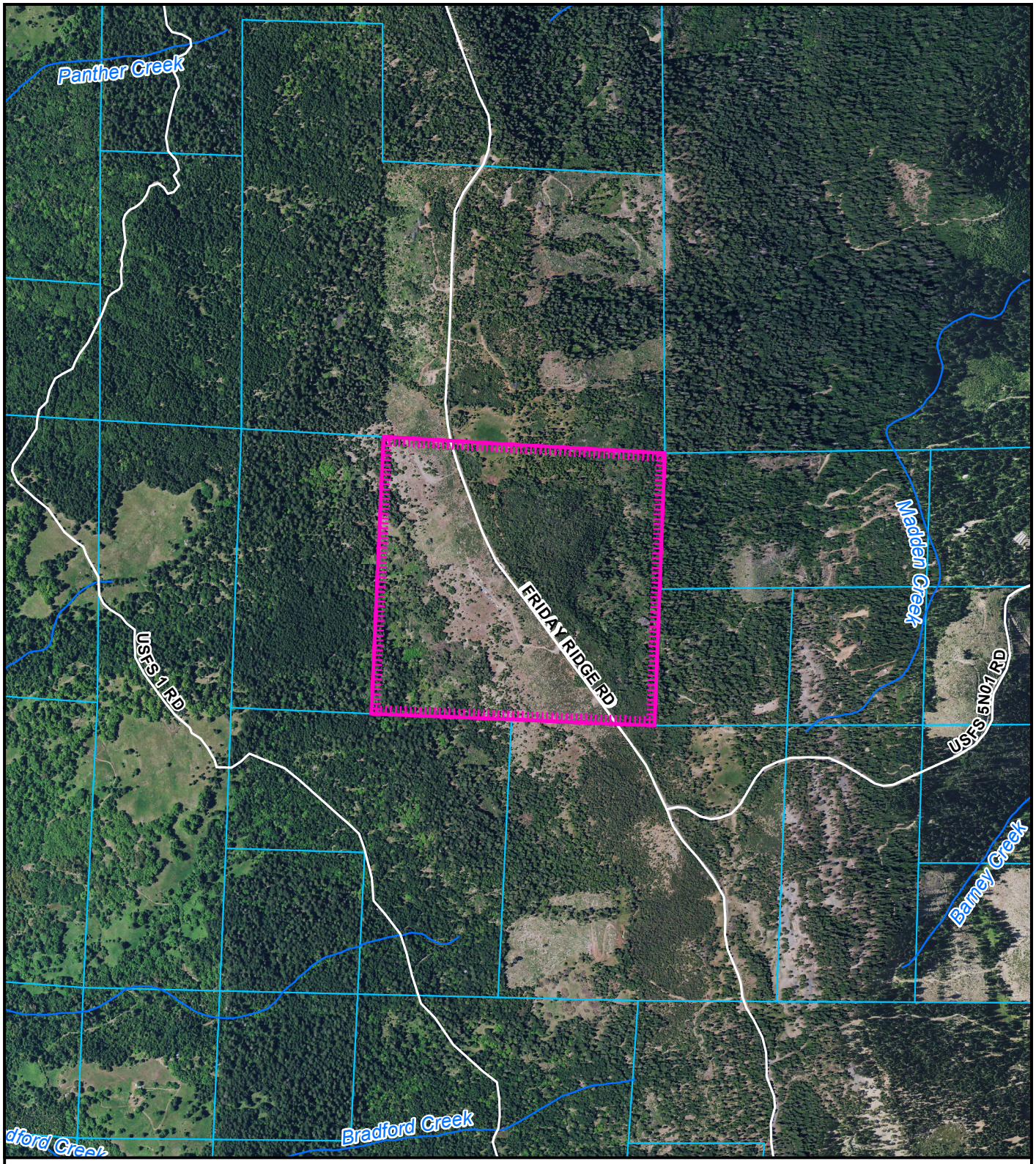
ZONING MAP
PROPOSED J AND R RANCH
WILLOW CREEK AREA
CUP-16-268; SP-17-106
APN: 316-015-006
T05N R04E S26 HB&M (GROUSE MTN)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 1,000 2,000 4,000 Feet



AERIAL MAP
PROPOSED J AND R RANCH
WILLOW CREEK AREA
CUP-16-268; SP-17-106
APN: 316-015-006
T05N R04E S26 HB&M (GROUSE MTN)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 1,000 2,000 Feet

J&R RANCH

APN: 316-015-006

VICINITY MAP

1:100,000

IMAGE SOURCE: ESRI 2018

AERIAL MAP

IMAGE SOURCE: BING 2018

0 500 1000 Feet

NOTE:
PARCEL BOUNDARIES PROVIDED BY CLIENT ARE FROM BOUNDARY EXHIBIT PREPARED BY KOLSTAD LAND SURVEYORS.

PROJECT DIRECTIONS

FROM: EUREKA, CA

TAKE US-101 N (7.2 MI)

- TAKE EXIT 716A FOR CA-299 TOWARD WEAVERVILLE/REDDING (0.2 MI)
- CONTINUE ONTO CA-299 E (28 MI)
- TURN RIGHT ONTO COUNTY RTE 7K100/TITLOW HILL RD (8.4 MI)
- KEEP LEFT TO CONTINUE TOWARD NF51 (0.3 MI)
- CONTINUE ONTO NF51 (1.4 MI)
- CONTINUE ONTO FOREST RTE 6N01/FRIDAY RIDGE RD, DESTINATION WILL BE ON THE LEFT (1.2)

TRAVEL TIME

APPROXIMATELY: 41 MIN (37.5 MI)

SHEET INDEX

PROJECT INFORMATION

LAT/LONG: 40.7881, -123.6873
APN: 316-015-006
APPLICANT: J&R RANCH
PARCEL SIZE: ± 239 ACRES
ZONING: AE-B5(160);TPZ
APPLICATION TYPE:
-

COASTAL ZONE: N
100 YEAR FLOOD: N

AGENT:

KAYLIE SAXON
GREEN ROAD CONSULTING INC
1650 CENTRAL AVE. SUITE C
MCKINLEYVILLE, CA 95519
707-630-5041

GREEN ROAD CONSULTING

PROJECT INFORMATION
PROPERTY OWNER: MAX McCARTY
ADDRESS: APN: 316-015-006
SHEET INFO: COVER PAGE

REVISIONS

NO	NOTES	DATE
1	NOTES-INITIALS	00-00-00
2	NOTES-INITIALS	00-00-00
3	NOTES-INITIALS	00-00-00
4	NOTES-INITIALS	00-00-00
5	NOTES-INITIALS	00-00-00
6	NOTES-INITIALS	00-00-00

DATE 8/8/19
DRAFTER DDV
SCALE AS SHOWN
SHEET C1

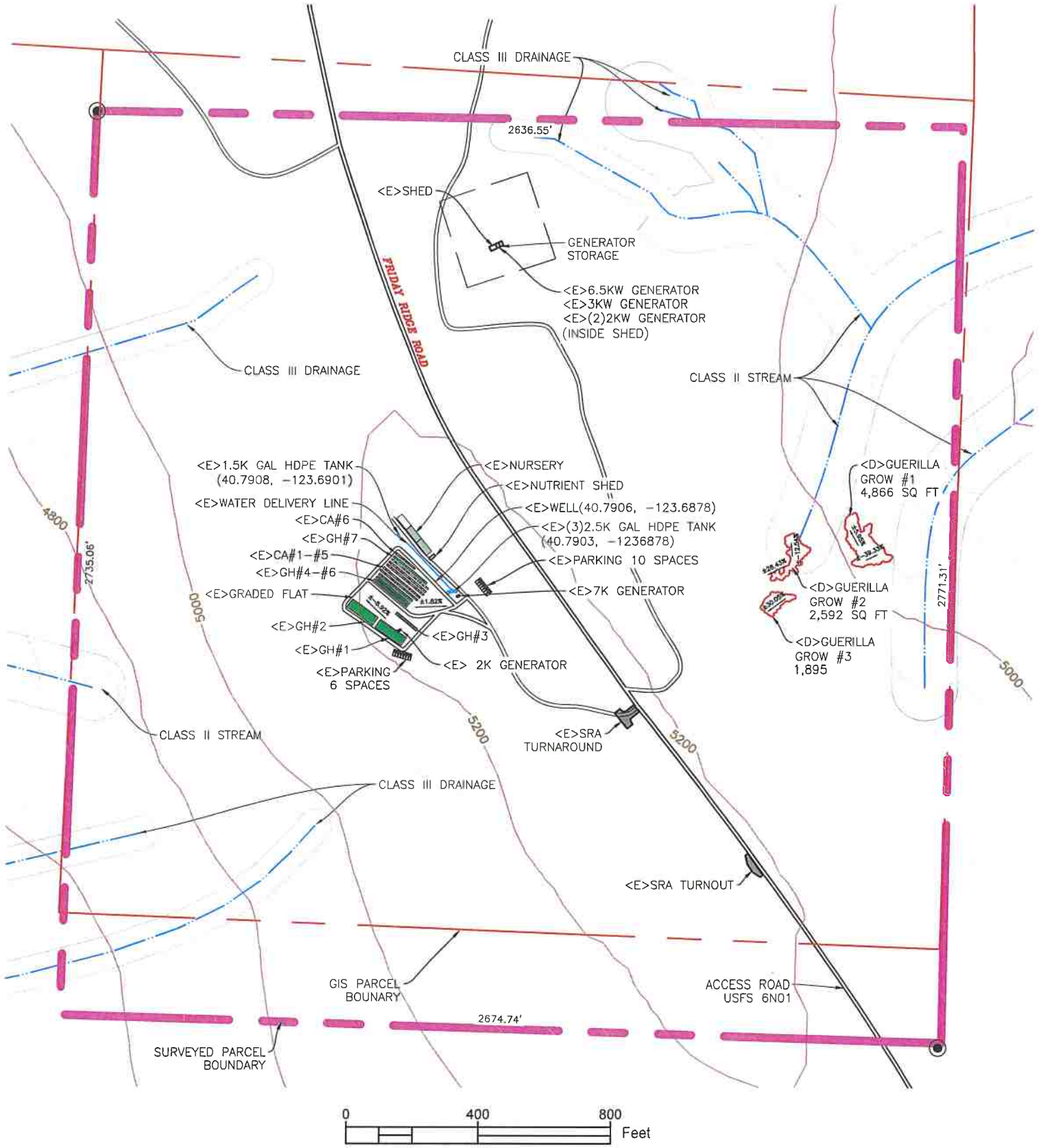
October 21, 2021

PLN-11503-CUP J and R Ranch

8/8/2019 - X:_Projects\Sam Hu\316-15 Sam\CAD\CULTIVATION MAP\316-015-006-CUL.dwg - 8:49 PM - GRC

PARCEL OVERVIEW

APN: 316-015-006



NOTE:

PARCEL BOUNDARIES PROVIDED BY CLIENT ARE FROM BOUNDARY EXHIBIT PREPARED BY KOLSTAD LAND SURVEYORS.

CULTIVATION INFORMATION

LIGHT DEPRAVATION (OUTDOOR) CULTIVATION AREA

GH	LENGTH		WIDTH	SQ FT
1	96	X	30	2,880
2	96	X	30	2,880
3	80	X	7.5	600
4	130	X	7	910
5	130	X	7	910
6	130	X	7	910
7	130	X	7	910

TOTAL LIGHT DEPRAVATION CULTIVATION AREA = 10,000 SQ FT

FULL-TERM (OUTDOOR) CULTIVATION AREA

CA	LENGTH		WIDTH	SQ FT
1	145	X	5	725
2	145	X	5	725
3	145	X	5	725
4	145	X	5	725
5	145	X	5	725
6	75	X	5	375

TOTAL FULL CULTIVATION AREA = 4,000 SQ FT

***TOTAL OUTDOOR CULTIVATION=**
14,000FT²

CULTIVATION BUILDINGS AND USE

BUILDINGS	USE	SIZE	YEAR
SHED	HARVEST&GENERATOR STORAGE	40'x14'	2015
NUTRIENT SHED	PESTICIDE/NUTRIENT STORAGE	20'x8'	2015
NURSERY	IMMATURE PLANT AREA	145'x20'(100'x20' USED FOR IMMATURE PLANT AREA)	2015

WATER STORAGE AND USE

TYPE	YEAR OF INSTALLATION	QUANTITY	GALLONS	TOTAL GALLONS
HDPE TANK	2018	3	2,500	7,500
HDPE TANK	2018	1	1,500	1,500
			TOTAL AMOUNT OF WATER STORAGE=	9,000 GALLONS

WATER SOURCE

TYPE
WELL

POWER SOURCE

6.5KW GENERATOR
3KW GENERATOR
(3)2KW GENERATOR
7KW GENERATOR

UNNAMED CLASS II STREAM WITH REQUIRED 100 FT BUFFER
UNNAMED CLASS III DRAINAGE WITH REQUIRED 50 FT BUFFER

SURROUNDING BUILDINGS

THERE ARE NO SCHOOLS, BUS STOPS, PLACES OF WORSHIP, PUBLIC PARKS OR TRIBAL CULTURAL RESOURCES WITHIN 600 FEET OF THE CULTIVATION SITE.
THERE ARE NO OFF SITE RESIDENCES WITHIN 300 FEET OF THE CULTIVATION SITE.

NOTE:

PROCESSING/PACKAGING/LABELING OCCURS OFFSITE BY A LICENSED 3RD PARTY

N

GREEN ROAD CONSULTING

PROJECT INFORMATION

PROPERTY OWNER: MAX McCARTY
ADDRESS: APN: 316-015-006
SHEET INFO: PARCEL OVERVIEW

REVISIONS

NO	NOTES	DATE
1	NOTES-INITIALS	00-00-00
2	NOTES-INITIALS	00-00-00
3	NOTES-INITIALS	00-00-00
4	NOTES-INITIALS	00-00-00
5	NOTES-INITIALS	00-00-00
6	NOTES-INITIALS	00-00-00

DATE 8/8/19
DRAFTER DDV
SCALE AS SHOWN

SHEET
C2

October 21, 2021

PLN-11503-CUP J and R Ranch

ATTACHMENT 1

RECOMMENDED CONDITIONS OF APPROVAL

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

A. General Conditions

1. The applicant is responsible for obtaining all necessary County and State permits and licenses, and for meeting all requirements set forth by other regulatory agencies.

2. 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 Planning and Building 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.

3. The applicant is responsible for costs for post-approval review for determining project conformance with conditions. A deposit is collected to cover this staff review. Permit conformance with conditions must be demonstrated prior to release of building permit or initiation of use and at time of annual inspection. A 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) shall be paid within 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.

4. A Notice of Determination (NOD) will be prepared and filed with the County Clerk for this project in accordance with the State California Environmental Quality Act Guidelines. **Within 3 days of the effective date of permit approval**, the Department will file the NOD and will charge this cost to the project.

5. Within 60 days of the effective date of permit approval, the applicant shall execute a Compliance Agreement with the Humboldt County Planning and Building Department detailing all necessary permits and infrastructure improvements described under Conditions of Approval #6 through #16. 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.

6. The applicant shall secure permits for all structures related to the cannabis cultivation and other commercial cannabis activity, including but not limited to, existing and proposed greenhouses, the existing and proposed structures associated with drying and storage or any activity with a nexus to cannabis, and any noise containment structures as necessary. The plans submitted for building permit approval shall be consistent with the project description and the approved project site plan. A letter or similar communication from the Building Division verifying that all structures related to the cannabis cultivation are permitted will satisfy this condition.

7. The approved building plans shall meet all applicable fire codes, including fire suppression infrastructure requirements deemed necessary for the project by the Building Inspection Division.

8. The applicant shall submit a grading, erosion, and sediment control plan prepared by a qualified engineer. The plan shall identify the cubic yards of all grading that has been completed, and any proposed. A letter or similar communication from the Building Division verifying that all grading

related to the cannabis cultivation operation are permitted, or not needed, will satisfy this condition.

9. The onsite nursery totaling 2,900 square feet (SF) is to be reduced to 1,400 SF, an area not to exceed 10% of the total cultivation area. Within 60 days of the effective date of permit approval the applicant shall submit a revised site plan indicating the approved size of the nursery and shall remove any nursery area above ten percent from the site.

10. An invoice or equivalent documentation of continued use of portable toilets will be provided to the Division of Environmental Health. A letter or similar communication from the Division of Environmental Health verifying that the portable toilet(s) are regularly serviced will satisfy this condition.

11. The applicant shall install water monitoring device(s) on each source—well and storage tanks as applicable—to monitor water used for cannabis irrigation sperate from domestic use.

12. The applicant shall abide by the recommendations in the Site Management Plan (SMP) prepared by Green Road Consulting in July 2019 and implement all corrective actions detailed in the SMP developed for the project. A letter or similar communication from the State Water Resources Control Board (SWRCB) verifying that all the following Map Point (MP) remediations have been completed will satisfy this condition.
    a. MP#1: Remove all cultivation-related waste and any bare soil be strawed and seeded as a part of winterization measures.
    b. MP#2: Ibid.
    c. MP#3: Ibid.
    d. MP#4: Ibid.
    e. MP#5: Install adequate drainage features to reduce storm flow velocity and prevent further erosion.

13. The applicant shall abide by the recommendations in the Guerilla Grow Remediation Plan prepared by Green Road Consulting in July 2018 to remove any remaining cultivation-related waste including but not limited to plastic pots, irrigation lines, and potting soil. In addition, any remaining areas of bare soil shall be covered with straw and seeded for stability.

14. 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. Document review fees as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors will be required.

15. The applicant shall be compliant with the County of Humboldt's Certified Unified Program Agency (CUPA) requirements regarding 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.

16. 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 Humboldt County Code and available at the Planning Division.

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

1. The combination of background, generator and greenhouse fan or other operational equipment created noise must not result in the harassment of northern spotted owl species as required to meet the performance standards for noise set by Department Policy Statement No. 16-005 clarifying CMMLUO Section 55.4.11 (o) requirements. The combined noise levels measured at 100 feet or the edge of habitat, whichever is closer, shall be at or below 50 decibels. Conformance will be evaluated using current auditory disturbance guidance prepared by the United States Fish and

Wildlife Service, and further consultation where necessary. A building permit shall be obtained should any structures be necessary for noise attenuation.

2. The light source used in the mixed-light and nursery greenhouses should comply with the 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. Should the Humboldt County Planning Division receive complaints that the lighting is out of alignment or not complying with these standards, within 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.

3. Should the Humboldt County Planning Division receive complaints that the lighting or noise is not complying with the standards listed above in items B.1. and B.2., within 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, and noise levels have been repaired, inspected, and corrected as necessary.

4. Ensure all generators be located on stable surfaces with a minimum 200-foot buffer from all waterways measured horizontally from the outer edge of the riparian drip zone.

5. 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.

6. All refuse shall be contained in wildlife-proof storage containers, at all times, and disposed of at an authorized waste management facility.

7. Should any wildlife be encountered during work activities, the wildlife shall not be disturbed and be allowed to leave the work site unharmed.

8. The use of anticoagulant rodenticide is prohibited.

9. The operator shall provide information to all employees about the potential health impacts of cannabis use on children. Information shall be provided by posting the brochures from the Department of Health and Human Services titled "Cannabis Palm Card" and "Cannabis Rack Card." This information shall also be provided to all employees as part of the employee orientation.

10. 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. If offsite processing is chosen to be the preferred method of processing, this permit shall be modified to identify the offsite licensed facility.

11. Cannabis cultivation and other commercial cannabis activity shall be conducted in compliance with all laws and regulations as set forth in the CMMLUO and Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA), as applicable to the permit type.

12. 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 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 1 year of issuance of the provisional clearance or permit. If good faith effort toward compliance can be shown within the 2 years following the issuance of the

provisional clearance or permit, the Department may, at the discretion of the Director, provide for extensions of the provisional permit to allow additional time to meet the outstanding requirements.

13. 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.

14. Compliance with all statutes, regulations, and requirements of the SWRCB 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.

15. 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 Section 55.4.11(d).

16. Maintain enrollment in Tier 1, 2, or 3, certification with North Coast Regional Water Quality Control Board 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.

17. Comply with the terms of any applicable Lake and Stream Alteration Agreement (LSAA 1600 or 1602) Permit obtained from the California Department of Fish and Wildlife.

18. Comply with the terms of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection, if applicable.

19. Consent to an annual onsite compliance inspection, with at least 24 hours prior notice, to be conducted by appropriate County officials during regular business hours (Monday through Friday, 9:00 a.m. to 5:00 p.m., excluding holidays).

20. Refrain from the improper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide.

21. Pay all applicable application, review for conformance with conditions and annual inspection fees.

22. 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.

23. The master log books maintained by the applicant to track production and sales shall be maintained for inspection by the County.

24. Pay all applicable taxes as required by the Humboldt County Commercial Marijuana Cultivation Tax Ordinance (Humboldt County Code Section 719-1 et seq.).

<u>Performance Standards for Cultivation and Processing Operations</u>

25. 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."

26. 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, the California Agricultural Labor Relations Act, and the Humboldt County Code (including the Building Code).

27. Cultivators engaged in processing shall comply with the following Processing Practices:
    a. Processing operations must be maintained in a clean and sanitary condition including all work surfaces and equipment.
    b. Processing operations must implement protocols which prevent processing contamination and mold and mildew growth on cannabis.
    c. Employees handling cannabis in processing operations must have access to facemasks and gloves in good operable condition as applicable to their job function.
    d. Employees must wash hands sufficiently when handling cannabis or use gloves.

28. All persons hiring employees to engage in commercial cannabis cultivation and processing shall comply with the following Employee Safety Practices:
    a. 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;
        (5) Materials handling policies;
        (6) Job hazard analyses; and
        (7) Personal protective equipment policies, including respiratory protection.
    b. Cultivation operations and processing operations must visibly post and maintain an emergency contact list which includes at a minimum:
        (1) Operation manager contacts;
        (2) Emergency responder contacts; and
        (3) Poison control contacts.
    c. 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.
    d. Onsite housing provided to employees shall comply with all applicable federal, state, and local laws and regulations.

29. All cultivators shall comply with the approved processing plan as to the following:
    a. Processing practices
    b. Location where processing will occur
    c. Number of employees, if any
    d. Employee Safety Practices
    e. Toilet and handwashing facilities
    f. Plumbing and/or septic system and whether or not the system is capable of handling increased usage
    g. Drinking water for employees
    h. Plan to minimize impact from increased road use resulting from processing
    i. Onsite housing, if any

30. Term of Commercial Cannabis Activity Special Permit. Any Commercial Cannabis Cultivation Special Permit issued pursuant to the CMMLUO shall expire 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.

31. 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 permit holder with a written statement identifying the items not in compliance, and the action that the permit holder may take to cure the noncompliance, or file an appeal within 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 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 noncompliance. Failure to request reinspection or to cure any items of noncompliance 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.

32. Permit Renewals to Comply with Updated Laws and Regulations. Permit renewal is subject to the laws and regulations effective at the time of renewal, which may be substantially different than the regulations currently in place and may require the submittal of additional information to ensure that new standards are met.

33. 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.

34. 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:
    a. Identifying information for the new owner(s) and management as required in an initial permit application;
    b. A written acknowledgment by the new owner in accordance as required for the initial permit application;
    c. The specific date on which the transfer is to occur;
    d. Acknowledgement of full responsibility for complying with the existing permit; and
    e. Execution of an Affidavit of Non-diversion of Medical Cannabis.

35. 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 or 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 2 years after 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 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 1 year after all appeal periods have lapsed (see "Effective Date"), except where the Compliance Agreement per Condition of Approval #6 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 #26 and 27 of the Ongoing Requirements/Development Restrictions, above.

3. If cultural resources are encountered during construction activities, the contractor onsite shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist and the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and the 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 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 (PRC) Section 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99.

4. The applicant shall be aware that the Federal Government considers the cultivation of cannabis to be an illegal activity. This project is accessed by using roads that pass-through lands owned by the Federal Government. The Federal Government may not allow the applicant to use these roads to transport cannabis. In such case, Humboldt County will not provide relief to the applicant. Approval of this permit does not authorize transportation of cannabis across Federal lands.

ATTACHMENT 2

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

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

APN 316-015-006; 40.789917, -123.688928 Friday Ridge Road, Willow Creek
County of Humboldt

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

October 7, 2021

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 Conditional Use Permit an existing 14,000-square-foot (SF) outdoor cannabis cultivation operation and a 2,900-SF propagation area reduced to 1,400 SF as a condition of approval. J and R Ranch also seeks a Special Permit for work completed within Streamside Management Areas (SMA). The project also includes the permitting of existing facilities appurtenant to the cultivation, including seven greenhouses, one shed, one nutrient shed, and a nursery. An historic guerilla grow that was located within a stream buffer and steep slope is being retired, remediated, and relocated to the central portion of the site outside the SMA and on slopes between 1.8 and 8.9 percent. Irrigation water is sourced from a 295-foot-deep permitted groundwater well. Existing available water storage capacity is 11,500 gallons in five plastic water tanks. Estimated annual water usage is 240,000 gallons (17.1 gallons/SF/year). Drying occurs onsite in an existing shed and processing will occur offsite at a licensed processing or manufacturing facility. Up to three employees may be utilized during peak operations and would carpool to the site 8–12 times per month. Power is sourced from five onsite generators located in two noise containment sheds.

A Biological Assessment Report was prepared in June 2019 that concluded the project is to occur entirely within the boundaries of preexisting disturbed areas and no vegetation, including trees, will be removed within the proposed project site or adjacent areas for this project. There are no known tribal cultural resources on the project site. The project was referred to the Northwest Information Center, Bear River Band of the Rohnerville Rancheria, Hoopa Valley Tribe, and Tsnungwe Council for comments and recommended conditions of approval. None of the tribes responded. Ongoing conditions of approval are incorporated regarding the Inadvertent Discoveries Protocol to protect cultural resources.

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 impacts of existing cultivation. These include ensuring supplemental lighting and security lighting adheres to Dark Sky Association standards and ensuring project-related noise does not harass nearby wildlife which will limit impacts on biological resources as a result of light and noise.

Purpose - Section 15164 of the California Environmental Quality Act (CEQA) provides that the lead agency shall prepare an addendum to a previously certified MND if some changes or additions are necessary but none of the conditions described in Section 15162 calling for a subsequent Environmental Impact Report (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;

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 continued operation of an existing cannabis cultivation site consisting of 29,354 SF of cultivation with ancillary drying activities 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:

- Site Plan prepared by Green Road Consulting dated 11/20/19.
- Cultivation and Operations Manual prepared by Green Road Consulting dated 8/9/19.
- Site Management Plan prepared by Green Road Consulting dated 7/10/19.
- Self-Certified Road Evaluation Report for Friday Ridge Road prepared by Ryan Simas, dated 7/22/19.
- Well Completion Report dated 7/14/17 and permit dated 1/25/17.
- Biological Assessment Report for APN 316-015-006, dated June 2019, prepared by TransTerra Consulting.
- California Department of Fish and Wildlife Lake and Streambed Alteration Agreement (Notification No. 1600-2017-0764-R1), signed 9/19/19, received 9/19/19.
- Parcel Boundary Survey prepared by Kolstad Land Surveyors dated received 9/9/19.
- Guerilla Grow Remediation prepared by Green Road Consulting dated 8/5/19.
- Regional Water Quality Control Board inspection report dated 11/16/18.
- Cultural Resources Survey completed by Archaeological Research and Supply Company in May 2019.

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 and bring the operation into 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 3

Applicant's Evidence in Support of the Required Findings

Attachment 3 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. (On file)

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 one-quarter mile (1,320 feet) 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. (Site Plan dated 11/20/19 – **Attached** with project Maps)

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; 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. (Cultivation and Operations prepared by Green Road Consulting dated 8/9/19 – **Attached**)

5. Description of water source, storage, irrigation plan, and projected water usage. (Included in Cultivation & Operations Manual (item 4. above).

6. Copy of Notice of Intent (NOI) and Monitoring Self-Certification and other documents filed with the North Coast Regional Water Quality Control Board demonstrating enrollment in Tier 1, 2 or 3, North Coast Regional Water Quality Control Board Order No. 2015-0023, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency. (NOI and reporting, and Site Management Plan prepared by Green Road Consulting – **Attached** Notice of Inspection Report by Regional Water Quality Control Board for Humboldt County APN 316-015-006, dated 11/16/18 – **Attached**)

7. 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 California Department of Fish and Wildlife. (Notification No. 1600-2017-0764-R1 executed 9/19/19 – **Attached**)

8. If the source of water is a well, a copy of the County well permit, if available. (Permit Number 17/18-0013 and Well Completion Report dated 7/14/17 – **Attached**)

9. 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. (Not applicable)

10. 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)

11. 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)

12. 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)

13. 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)

14. Self-Certified Road Evaluation Report for Friday Ridge Road prepared by Ryan Simas dated 7/22/19 (**Attached**)

15. Biological Assessment Report for APN 316-015-006, dated June 2019, prepared by TransTerra Consulting. (On file)

16. Guerilla Grow Remediation prepared by Green Road Consulting dated 8/5/19. (**Attached**)

17. Parcel Boundary Survey prepared by Kolstad Land Surveyors dated received 9/9/19. (**Attached**)

18. Cultural Resources Survey prepared by Archaeological Research and Supply Company dated May 2019 (on-file and confidential).

GREEN ROAD CONSULTING

Site Plan Overview and Cultivation and Operations Plan

Applicant: J & R Ranch, Inc.

Mailing Address: 1805 Henry Lane McKinleyville, CA 95519

APN: 316-015-006

Agent

Dante Hamm

Green Road Consulting

1650 Central Avenue, Suite C

McKinleyville, CA 95519

Table of Contents

I. Site Plan Overview

1.0 Project Information

J & R Ranch, Inc. ("Applicant") is submitting this application for a Type 3 Use Permit for the 14,000 square feet of existing outdoor commercial cannabis cultivation located on a 160-acre parcel near Willow Creek, CA ("Parcel"), Assessor's Parcel Number ("APN") 316-015-006.

This application is submitted through their agent, Dante Hamm of Green Road Consulting, Inc., and has been prepared in accordance with Humboldt County's ("County") Commercial Medical Marijuana Land Use Ordinance ("CMMLUO").

The Use Permit would achieve the following results for the Applicant:

a. Permit 14,000 square feet of outdoor commercial cannabis cultivation that was in existence prior to January 1, 2016, in compliance with the County CMMLUO.
b. Comply with applicable standards for water quality maintenance and watershed protection through the Waiver of Waste Discharge requirements of the North Coast Regional Water Quality Control Board ("Water Board") and California Department of Fish and Wildlife ("Fish and Wildlife").

2.0 Project Location

The Applicant's parcel is located in the inland zone of Humboldt County near Willow Creek, CA. The parcel is comprised of 160-acres and is identified by Assessor's Parcel Number ("APN") 316-015-006. There is no street address for the Parcel.

2.1 Zoning Classification

The County's Zoning Classification of the parcel is AE-B-5(160);TPZ with a Current General Plan of T. The CMMLUO permits existing outdoor commercial cannabis cultivation on land zoned as AE and TPZ with existing outdoor cultivation sites up to 43,560 square feet with a Use Permit.

2.2 Site Topography

A map of the Parcel's topography is included as Attachment "A."

3.0 Easements

The following is from Exhibit One of the Grant Deed, a copy of which is included in the Evidence of Ownership and Authorization section of this application.

"That real property situate in the County of Humboldt, State of California, described as follows:

PARCEL ONE:

Lots 2, 3 and 4;

The South Half of the Northwest Quarter;

The Northeast Quarter of the Southwest Quarter;

The South Half of the Northeast Quarter; and

The North Half of the Southeast Quarter of Section 1.

EXCEPTING that portion of the Southeast Quarter of the Northwest Quarter of Section 1, which was conveyed to the United State of America by Deed dated July 19, 1934, and recorded in Book 214 of Deeds, Page 448, Humboldt County Records.

Lot 1;

The Southeast Quarter of the Northeast Quarter of Section 2

All in Township 4 North of Range 4 East of Humboldt Meridian.

PARCEL TWO

Easement rights contained in that certain Mutual License for Right of Way recorded September 25, 1979 in book 1590 of Official Records, Page 1145, under Recorder's Serial No. 21721, Humboldt County Records."

4.0 Natural Waterways

There are seven (7) Class II watercourses and four (4) Class III drainages that cross the Parcel. The closest cultivation area to any watercourse or drainage is approximately 480 feet away.

5.0 Location and Area of Existing Cultivation

The cultivation is located in one general location in the center of the parcel. The Applicant has opted to relocate a portion of their historic guerrilla grow to center of the parcel.

Relocation Justification

A large portion of the historic guerilla grow was located within a stream buffer. Thus, rendering a large portion of the former grow area unsuitable for cannabis cultivation. In addition, the new location has a slope of approximately 1.82%-8.92% while the former grow area has a slope of approximately 12.5%-39.33%.

Full Term (Outdoor) Cultivation Area

*The Applicant anticipates one harvest annually from their full-term (outdoor) cultivation area.

Cultivation Area # 1-#5

CA #1-#5 measures 145'x5', each totaling 725 ft^2 of full-term (outdoor) cultivation area.

Cultivation Area #6

CA #6 measures 75'x5', totaling 375 ft^2 of full-term (outdoor) cultivation area.

Light Depravation (Outdoor) Cultivation– 9,960 ft^2

*The Applicant anticipates two harvests annually from their light depravation (outdoor) cultivation area by utilizing light deprivation techniques.

Greenhouse #1 and #2

Greenhouse #1 and #2 are 96'x30' (2,880 ft^2) each, totaling 5,760 ft^2 of light depravation (outdoor) cultivation area.

Greenhouse #3

Greenhouse #3 is an existing 80'x7.5' totaling 600 ft^2 of light depravation (outdoor) cultivation area.

Greenhouse #4 - #7

Greenhouse #4-#7 are 130'x7' (910 ft^2) each, totaling 3,640 ft^2 of light depravation (outdoor) cultivation area.

**Total outdoor (full-term & light dep) cultivation area = 14,000 ft^2*

Propagation Area/ Immature Plant Area

Immature plants are propagated in the onsite nursery, a 145'x20' structure totaling 2,900 ft^2 of immature plant area.

4.0 Setbacks of Cultivation Area

All cultivation and immature plant areas are set back from the parcel boundaries and watercourses by over 200 ft.

5.0 Access Roads

The access road to the property is Friday Ridge Rd. The nearest publicly maintained road is USFS SNO1 Rd (maintained by the Forest Service).

Stream Crossings

(The following information was taken directly from the Applicants Site Management plan. Map points called out are referencing maps provided in the Site management Plan)

There are seven (7) stream crossings on the property that are the responsibility of the property owner and are summarized below in Table 2. Stream crossing locations can be seen on the Site Overview map.

Table 1. Overview of stream crossing on the property.

Stream Crossing (STX)	Existing Size (inch)	Type	Watercourse Class	Action
STX1	NA	Ford	Class III	Dependent on LSA Final Agreement.
STX2	NA	Ford	Class III	Dependent on LSA Final Agreement.
STX3	NA	Ford	Class III	Dependent on LSA Final Agreement.
STX4	NA	Bridge	Class II	Dependent on LSA Final Agreement.
STX5	NA	Ford	Class III	Dependent on LSA Final Agreement.
STX6	NA	Ford	Class III	Dependent on LSA Final Agreement.
STX7	NA	Ford	Class II	Dependent on LSA Final Agreement.

An LSA Notification has been submitted to CDFW and no instream work shall occur prior to an LSA Final Agreement. All permitted work shall commence during the allowable period specified in the LSA Final Agreement and all appropriate agencies shall be notified prior to and post work completion.

9.0 Graded Flats

There are no graded flats that have been identified to require permitting.

10.0 Existing Buildings

There are two (2) buildings onsite.

Shed

The Shed is an existing 40'X14', it is used for harvest storage, drying, and generator storage.

Nutrient Shed

The Nutrient Shed is an existing 20'X8', it is used for nutrient storage.

11.0 Water Source, Storage, Irrigation Plan and Projected Water Usage

11.1 Water Source

The Applicant has a permitted well for cannabis irrigation. The Applicant has submitted a 1600 notification to the Department of Fish and Wildlife. In the 1600 notification the well and its use as the Applicant main cannabis irrigation source was disclosed. The Applicant is now awaiting the departments determination on the status of the well. Once the department makes a determination on the status of the well and a final LSAA is issued, a copy will be provided to your office.

11.2 Water Storage

The Applicant has five (5) water tanks that total to 11,500-gallons of hard tank water storage on the parcel. The size and number are outlined below:

- Four (4) 2,500-gallon HDPE tanks
- One (1) 1,500-gallon HDPE tank

11.3 Irrigation Plan

All irrigation of cannabis is completed by a timed, drip irrigation system preventing any over watering or runoff.

11.4 Projected Water Use

(**The following figures were taken directly from the Applicants 'Online 2018 Cannabis Water Quality Monitoring & Reporting Program' (reported to the SWRQCB).*

March-12,000 gallons

April-24,000 gallons
May-28,800 gallons
June-28,800 gallons
July-36,000 gallons
August-43,200 gallons
September- 36,000 gallons
October-31,200 gallons
**Total= 240,000 gallons*

12.0 Site Drainage, Runoff, Erosion Control Measures and Watershed Protection

(The following information was taken directly from the Applicants Site Management plan. Map points called out are referencing maps provided in the Site management Plan)

Site Drainage, Runoff, and Erosion Control Measures

As evident by the forest composition the property was historically logged with some skid roads present. Historic skid roads were utilized for seasonal access, but the majority are no longer used and are set to be decommissioned as per the LSA Notification. Post logging, the property was used for cattle grazing, which left behind a small 20ft x 20ft x 2ft instream pond (Water Use map). The pond is not used for any beneficial purposes by the landowner. Pond removal is dependent on the LSA Final Agreement and impacts from removal are assumed to be minimal due to its small embankment.

At **MP5** rill erosion was observed to be occurring on the natural slope below CA1. The flat predates the current landownership and based on historic imagery it was established no earlier than 1988. The flat is bermed on both sides and focuses storm water towards **MP5** resulting in an ~120ft rill. To prevent increased erosion the cultivator shall install erosion control features. Examples of erosion control features could include; several check dams to reduce storm flow velocity and encourage sediment deposition, straw wattles staked along contour, heavy mulching along with native vegetation reintroduction to any bare soil areas or creating a swale to divert the flow into an area with established vegetation. Site specific native vegetation could include but are not limited to; *Xerophyllum tenax, Muhlenbergia rigens, Elymus condenstatus, Festuca idahoensis, Juncus patens, carex pragracilis, Ceanothus integerrimus, Ceanothus cordulatus, Ribes roezlii and Baccharis pilularis*.

Map points **(MP)** are used to identify areas of concern and correspond to the Remediation Summary Table found in section 10 of this report. **MP** locations can be seen on the Disturbed Area map. The disturbed areas consisted of the current cultivation areas **(CA1-3)**, and unconsolidated, previously cultivated areas **(MP1-4).**

Watershed Protection

The site currently has one location where cultivation takes place that are grouped into three cultivation areas (**CA**). The total area across these sites was approximately recorded at 19,449 ft^2. The site had a total of 41,463 ft^2 of disturbed area, all of which was located outside riparian setbacks.

13.0 Distances from Significant Landmarks

There are no schools, school bus stops, places of worship, state parks or Tribal Cultural Resources within 600 feet of the cultivation site. There also are not any off-site residences within 300 feet of the cultivation site.

II. Cultivation and Operations Plan

1.0 Materials Storage

(The following information was taken directly from the Applicants Site Management plan).

Fertilizer/Pesticide Storage

All fertilizers and pesticides will be mixed or prepared in locations where they cannot enter a waterbody (surface or groundwater). Fertilizers and pesticides shall be applied at agronomic rates specified on the product label. The enrollee will keep a log of their fertilizers and pesticides use for annual reporting. All labels will be kept, and directions followed when amendments and fertilizers are applied. All liquid chemicals will be stored in separate secondary containment. During the off season all chemicals will be stored in a covered building. Agricultural chemicals will not be applied within 48-hr of a predicted rain event with a 50% or greater chance of 0.25-inches. Disposal of unused products will be consistent with labels on containers. Empty containers will be disposed of at an authorized recycling center. A spill clean-up kit will be stored in the garage/shop. No restricted materials or pesticides will be used or stored on site. The cultivator currently uses 309 pounds of nitrogen per acre per year, which was calculated based on their 14,000 ft^2 of permitted cannabis cultivation. No greater than 319 pounds of nitrogen per acre per year shall be applied. A summary of fertilizers and pesticides used annually are listed below in Table 5.

Table 5. Overview of annual chemical use.

Product Name	Chemical Type	N-P-K or Active Ingredient	Annual Use (lbs. or gallons)
Organicide	Pesticide	Sesame oil	8 gal
Aza Max	Pesticide	Azadirachtin	1 gal
Monterey Bt	Pesticide	*Bacillus thuringiensis*	40 lbs.
Maxsea Grow	Fertilizer	16-16-16	300 lbs.
Maxsea Bloom	Fertilizer	3-20-20	300 lbs.
Flora Bloom	Fertilizer	0-5-4	60 gal
Flora Micro	Fertilizer	5-0-1	50 gal
Maxi Bloom	Fertilizer	5-15-14	150 lbs.
Sonic Bloom	Fertilizer	0-51-34	40 lbs.

Product Name	Chemical Type	N-P-K or Active Ingredient	Annual Use (lbs or gallons)
Cal-Mag	Fertilizer	2-0-3	50 gal
Flora Nectar	Fertilizer	0-0-1	60 gal

Generator/Petroleum Product Storage

The site is not grid tied and utilizes several generators as its main source of electricity generation. There are no large fuel containers on site. Generators and fuel are stored in the generator shed. At all times generators shall be equipped with secondary drip containment and placed outside of riparian setbacks. Fueling of the generators, as well as any other equipment or vehicles, will also take place outside of the riparian setbacks. All equipment containing petroleum derivatives will be inspected regularly for leaks. When the generators are not in use they will be stored in a covered building. A summary of annual petroleum is listed below in Table 6.

Table 6. Overview annual petroleum usage.

Product	Chemical Type	Annual Use (lbs or gallons)
Gasoline	Petroleum	98 gallons
Motor Oil	Petroleum	4 gallons

Trash and recycling is removed daily and taken to the facility in McKinleyville. There is no compost pile on site. There is no soil pile on-site. The Applicant brings in soil to fill the beds and pots. The soil is reamended for each cultivation cycle. Once the dirt is no longer viable for cultivation, it is removed and disposed of at Wes Green in Arcata.

2.0 Cultivation Activities

Cultivation Schedule

The Applicant anticipates two (2) annual harvest via light depravation.

*Please note, the cultivation schedule may change due to the weather, strain, and the Applicant's personal schedule.

Light Dep 1st Run
March-April (veg)
May-July (flower)
July (harvest)

Light Dep 2nd Run
July-August (veg)

August-October (flower)
October (harvest)

Full-Term
June-July (veg)
July-October (flower)
October (harvest)

3.0 Processing Practices

During the cultivation season workers will carpool to the site on average 8-12 times per month. during the months of harvest this number may increase to 20-24 times per week

Plants will be harvested one at a time using hand shears and hung to dry in the Shed. All processing will be performed by an offsite licensed 3rd party processing company.

All work surfaces and equipment are maintained in a clean, sanitary condition. Protocols to prevent the spread of mold are strictly followed. The final cannabis product is stored in a secure location.

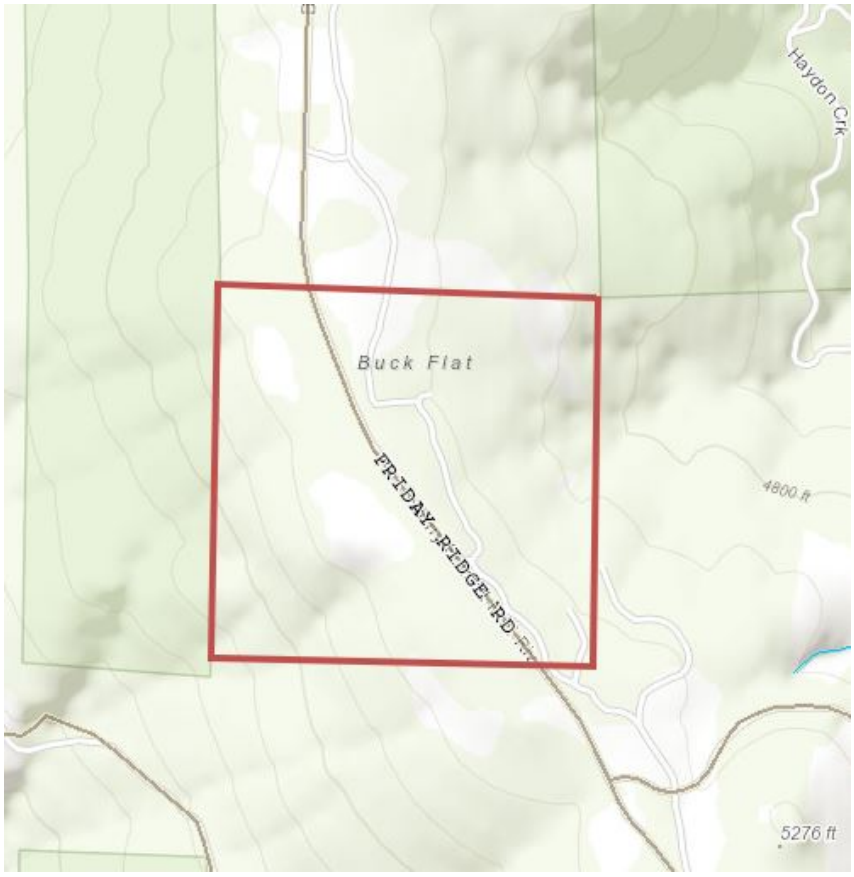
The Applicant will be utilizing any Track and Trace program the County seeks to implement, abiding by all appropriate record keeping practices

4.0 Security Measures

The access road is barred by a locked gate. Game cameras are installed over the gate and the cultivation areas.

Site Management Plan

WDID: 1B170045CHUM



Prepared for:

State Water Resources Control Board (SWRCB)

North Coast Regional Water Quality Control Board (NCRWQCB)

Prepared by:

Green Road Consulting

1650 Central Ave., Suite C, Mckinleyville CA, 95519

(707) 630-5041

Date of completion: 7/10/2019

General Site Information

Discharger: J and R Ranch

Landowner: Max McCarty

Lat/Long: 40.7881, -123.6873

Mailing Address: 1805 Henry Lane, Mckinleyville, CA 95519

Parcel Number: 316-015-006

General Plan Designation: Timber Production (T)

Zone: Agricultural Exclusive (AE); Timberland Production Zone TPZ

Parcel Size: 155-acres

HUC12 Watershed: Old Campbell Creek (180102120505) & Noisy Creek-Redwood Creek (180101020102)

Disturbed Area: 41,463 ft^2

Cultivation Area: 19,449 ft^2

Tier Level: 1

Risk Level: Low

Abbreviations

CA	**Cultivation Area**
CPP	**Corrugated Plastic Pipe**
CMP	**Corrugated Metal Pipe**
CDFW	**California Department of Fish and Wildlife**
DRC	**Ditch Relief Culvert**
GRC	**Green Road Consulting**
IBD	**In-board Ditch**
NCRWQCB	**North Coast Regional Water Quality Control Board**
PWA	**Pacific Watershed Associates**
SWRCB	**State Water Resources Control Board**
STX	**Stream Crossing**

Table of Contents

1. Introduction

This document was prepared by Green Road Consulting (GRC) for J and R Ranch; parcel number 316-015-006, as required by the SWRCB Order WQ 2017-0023-DWQ1. The purpose of the order is to provide a regulatory structure for cannabis cultivation that reduces contributions to existing water quality issues and prevents additional adverse impacts to water resources throughout California. The purpose of the Site Management Plan is to identify conditions present on a parcel that may pose a threat to water quality and resources and establish a plan to meet or surpass requirements set forth in the order.

Green Road Consulting (GRC) has made an initial assessment of this parcel through field work as well as through a variety of county, state, and private websites (e.g. USDA web soil survey, USGS stream stats program, Google Earth, Humboldt County Web GIS). The parcel boundaries are approximate and obtained from Humboldt County. Property lines on maps created by GRC may be shifted to match property line and corners located in the field. The site was surveyed with a GPS unit (2 to 4-meter accuracy) to document roads, buildings, cultivation sites, watercourses, and areas requiring remediation. Maps were created using the software ESRI ArcMap.

2. Site Characteristics

2.1. General

The site is in Eastern Humboldt County, approximately 20 miles south of the City of Willow Creek, which can be accessed from Friday Ridge Road, off Hwy 299. The elevation of the site is approximately 5,400 feet above sea level. The parcel is located on a mountainous ridge with unnamed drainages that flow from east to west into Bradford Creek and west to east into Madden Creek. Bradford Creek is a tributary to Redwood Creek and Madden Creek is a tributary to South Fork Trinity River. The South Fork Trinity River and Redwood Creek are on the USEPA's Section 303(d) list for impairment or threat of impairment to water quality associated with elevated sediment and temperature levels. Both waterways are known to have Coho, Chinook and Steelhead anadromous fish species which are designated as a Federally and State threatened species. Slopes on the site range from 6% to 88%. The hillslopes in the region are known to have moderate instability. The site geology is part of the Franciscan Complex which is primarily composed of Late Cretaceous to Pliocene sandstone, shale and minor conglomerate. The region was historically logged with some legacy logging roads and landings remaining on the site.

2.2. Site Overview

Structures on the approximately 155-acre property include three (3) greenhouses and three (3) storage sheds. Other developments include a permitted groundwater well, three (3) HDPE tanks, and three (3) cultivation areas. Water for cannabis irrigation and for domestic use is drawn from a permitted well. The parcel is not grid tied and currently uses generators as its source of power. There are no large fuel storage tanks on the site.

The site currently has one location where cultivation takes place that are grouped into three cultivation

[1] Order entitled "STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2017-0023-DWQ GENERAL WASTE DISCHARGE REQUIREMENTS AND WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF WASTE ASSOCIATED WITH CANNABIS CULTIVATION ACTIVITIES"

areas (**CA**). The total area across these sites was approximately recorded at 19,449 ft^2. The site had a total of 41,463 ft^2 of disturbed area, all of which was located outside riparian setbacks. Proper adherence to the erosion and sediment control measures specified in the "Erosion Prevention and Sediment Capture" section of this report will be necessary to ensure that these areas are sufficiently stabilized.

Table 1. Cultivation area overview.

Cultivation Area (CA)	Cultivation Area (ft^2)	Natural Slope (%)	Distance to Water Body (ft)	Water Body Classification
CA1	2,000	0-5	600	Class II
CA2	11,689	0-5	520	Class III
CA3	5,760	0-5	380	Class III

2.3. Access Roads

The site has 0.59-miles of permanent roads, 0.81-miles of seasonal access roads, and 0.68-miles of skid roads. The permanent road which runs through the property is maintained by the USFS (Forest Rte. 6N01/Friday Ridge Road). The seasonal access roads on the site are maintained on an as-need basis.

The skid roads in the north eastern section of the property are steep, with minor erosion features and contain all the stream crossings (see Site Overview map). The skid roads are no longer utilized for any purpose. Aside from STX4 and STX7, all stream crossings are on the head of Class III watercourses. The site resides on a mountainous ridge, and therefore soil composition is very rocky, because of this the crossings are a low risk for sediment transportation and are beginning to naturalize on their own. The LSA Notification submitted by Green Road Consulting on behalf of the landowner is proposing to decommission the entire north eastern skid road network, however any action shall be dependent on an LSA Final Agreement. The LSA Notification calls for stream crossing naturalization and water bars to be installed to maintain a well-drained, hydraulically disconnected road. Water bars are mapped in approximate locations on the Disturbed Area map using PWA's *Handbook for Forest, Ranch and Rural Roads* recommendations based on road gradient and soil erodibility. Because the north eastern skid road network is no longer being used, and is set for decommissioning, the road network was not considered disturbed area and was not included in determining tier and risk level for SWRCB transitioning. Disturbed areas are discussed in section 3, Erosion Prevention and Sediment Capture.

All seasonal roads are only used during the cannabis cultivation season May through October. The roads are used minimally by workers navigating the site and bringing in supplies. Workers are on the site daily and most supplies are brought in, in the beginning of the season. Vehicles are mainly parked near CA1.

2.4. Stream Crossings

There are seven (7) stream crossings on the property that are the responsibility of the property owner and are summarized below in Table 2. Stream crossing locations can be seen on the Site Overview map.

Table 2. Overview of stream crossing on the property.

Stream Crossing (STX)	Existing Size (inch)	Type	Watercourse Class	Action
STX1	NA	Ford	Class III	Dependent on LSA Final Agreement.

Stream Crossing (STX)	Existing Size (inch)	Type	Watercourse Class	Action
STX2	NA	Ford	Class III	Dependent on LSA Final Agreement.
STX3	NA	Ford	Class III	Dependent on LSA Final Agreement.
STX4	NA	Bridge	Class II	Dependent on LSA Final Agreement.
STX5	NA	Ford	Class III	Dependent on LSA Final Agreement.
STX6	NA	Ford	Class III	Dependent on LSA Final Agreement.
STX7	NA	Ford	Class II	Dependent on LSA Final Agreement.

An LSA Notification has been submitted to CDFW and no instream work shall occur prior to an LSA Final Agreement. All permitted work shall commence during the allowable period specified in the LSA Final Agreement and all appropriate agencies shall be notified prior to and post work completion.

2.5. Legacy Waste Discharges

As evident by the forest composition the property was historically logged with some skid roads present. Historic skid roads were utilized for seasonal access, but the majority are no longer used and are set to be decommissioned as per the LSA Notification. Post logging, the property was used for cattle grazing, which left behind a small 20ft x 20ft x 2ft instream pond (Water Use map). The pond is not used for any beneficial purposes by the landowner. Pond removal is dependent on the LSA Final Agreement and impacts from removal are assumed to be minimal due to its small embankment.

At **MP5** rill erosion was observed to be occurring on the natural slope below CA1. The flat predates the current landownership and based on historic imagery it was established no earlier than 1988. The flat is bermed on both sides and focuses storm water towards **MP5** resulting in an ~120ft rill. To prevent increased erosion the cultivator shall install erosion control features. Examples of erosion control features could include; several check dams to reduce storm flow velocity and encourage sediment deposition, straw wattles staked along contour, heavy mulching along with native vegetation reintroduction to any bare soil areas or creating a swale to divert the flow into an area with established vegetation. Site specific native vegetation could include but are not limited to; *Xerophyllum tenax, Muhlenbergia rigens, Elymus condenstatus, Festuca idahoensis, Juncus patens, carex pragracilis, Ceanothus integerrimus, Ceanothus cordulatus, Ribes roezlii* and *Baccharis pilularis*.

3. Erosion Prevention and Sediment Capture

Map points (**MP**) are used to identify areas of concern and correspond to the Remediation Summary Table found in section 10 of this report. **MP** locations can be seen on the Disturbed Area map. The disturbed areas consisted of the current cultivation areas (**CA1-3**), and unconsolidated, previously cultivated areas (**MP1-4**).

4. Water Uses

Water for cannabis irrigation and domestic use is sourced from the site's groundwater well, permit number 16/17-0682 (WCR2017-002584). The well completion report has APN: 316-015-001 listed as the parcel that contains the well however Humboldt County had two parcels combined to create the current APN: 316-015-006. Two (2) disused initial statements of diversion are held by the landowner (S026961,

S026959). Refer to the Water Use map to see location of water resources on the property. All irrigation infrastructure will be regularly inspected for leaks and immediately repaired if any are found. Weed free mulch or straw will be used in cultivation areas that do not have ground cover to reduce evaporation and conserve water. The cultivator will record daily irrigation water usage and maintain records on site for a minimum of 5 years. Since the site sources water from a confined aquifer there are no forbearance restrictions. The estimated annual water use is summarized below in Table 3.

Table 3. Annual water uses on the parcel.

Source	Use	Start Date	End Date	To Storage (gallons)	To Use (gallons)
Well	Domestic	Apr. 1	Nov. 1	N/A	40,000
Well	Cannabis	Apr. 1	Nov. 1	N/A	107,500

The site has a total of 7,500 gallons of water storage available which is summarized in Table 4. Water meters will be installed to monitor use. To conserve water, a straw or mulch ground cover should be applied to reduce water evaporation. Water conservation methods such as watering method and timing will be employed to ensure water is applied at agronomic rates.

Table 4. Summary of water storage on the parcel.

Water Storage Type	Size (gallons)	Quantity	Total (gallons)
HDPE Tank	2,500	3	7,500
		Total	**7,500**

5. Fertilizers and Pesticides

5.1. Application, Storage and Disposal

All fertilizers and pesticides will be mixed or prepared in locations where they cannot enter a waterbody (surface or groundwater). Fertilizers and pesticides shall be applied at agronomic rates specified on the product label. The enrollee will keep a log of their fertilizers and pesticides use for annual reporting. All labels will be kept, and directions followed when amendments and fertilizers are applied. All liquid chemicals will be stored in separate secondary containment. During the off season all chemicals will be stored in a covered building. Agricultural chemicals will not be applied within 48-hr of a predicted rain event with a 50% or greater chance of 0.25-inches. Disposal of unused products will be consistent with labels on containers. Empty containers will be disposed of at an authorized recycling center. A spill clean-up kit will be stored in the garage/shop. No restricted materials or pesticides will be used or stored on site. The cultivator currently uses 309 pounds of nitrogen per acre per year, which was calculated based on their 14,000 ft^2 of permitted cannabis cultivation. No greater than 319 pounds of nitrogen per acre per year shall be applied. A summary of fertilizers and pesticides used annually are listed below in Table 5.

Table 5. Overview of annual chemical use.

Product Name	Chemical Type	N-P-K or Active Ingredient	Annual Use (lbs. or gallons)
Organicide	Pesticide	Sesame oil	8 gal
Aza Max	Pesticide	Azadirachtin	1 gal
Monterey Bt	Pesticide	*Bacillus thuringiensis*	40 lbs.
Maxsea Grow	Fertilizer	16-16-16	300 lbs.
Maxsea Bloom	Fertilizer	3-20-20	300 lbs.
Flora Bloom	Fertilizer	0-5-4	60 gal
Flora Micro	Fertilizer	5-0-1	50 gal
Maxi Bloom	Fertilizer	5-15-14	150 lbs.
Sonic Bloom	Fertilizer	0-51-34	40 lbs.
Cal-Mag	Fertilizer	2-0-3	50 gal
Flora Nectar	Fertilizer	0-0-1	60 gal

5.2. Spill Prevention and Clean Up

A spill cleanup kit will be located near or made available wherever chemicals, fuels, or amendments are stored or used. In case of a major spill of fertilizers, or any petroleum products, the cannabis cultivator shall immediately notify the California Office of Emergency Services at 1-800-852-7550 and initiate cleanup activities for all spills that could enter a waterbody or degrade groundwater.

6. Petroleum

6.1. Use, Storage, and Disposal

The site is not grid tied and utilizes several generators as its main source of electricity generation. There are no large fuel containers on site. Generators and fuel are stored in the generator shed. At all times generators shall be equipped with secondary drip containment and placed outside of riparian setbacks. Fueling of the generators, as well as any other equipment or vehicles, will also take place outside of the riparian setbacks. All equipment containing petroleum derivatives will be inspected regularly for leaks. When the generators are not in use they will be stored in a covered building. A summary of annual petroleum is listed below in Table 6.

Table 6. Overview annual petroleum usage.

Product	Chemical Type	Annual Use (lbs. or gallons)
Gasoline	Petroleum	98 gallons
Motor Oil	Petroleum	4 gallons

7. Cultivation Waste, Trash/Refuse and Domestic Wastewater

7.1. Trash/Refuse Overview

All trash is contained in a sealed bin on site and is removed on an as needed basis to an authorized landfill/transfer station. No trash or debris will be allowed to enter a watercourse or riparian setback area. Compostable cultivation waste will be stored in a location and manner where it cannot be transported to surface waters. Spent growth medium (e.g. soil) shall either be reused, disposed of at an appropriate waste site, or be spread outside of riparian setbacks and planted with native vegetation.

7.2. Domestic Wastewater BPTC Measures

There is no residence on the site, and the property utilizes chemical toilets during the cultivation season. Additional chemical toilets will be brought onto the site for the seasonal workers if needed. Chemical toilets will be serviced as per the servicer's recommendations based on use and will located outside of riparian setbacks and away from unstable areas.

8. Winterization Measures

8.1. Summary

It is required that winterization measures be completed annually before the onset of the winter rainy season. The SWRCB has defined the winter season as beginning November 1st and concluding April 1st. Winterization measures apply to cultivation areas, any additional disturbed areas including roads, and stream crossings. These measures aim to prepare the site for an extended period of heavy precipitation during which frequent access, monitoring, and maintenance can be challenging or infeasible. The end goal is to reduce the erosion of unstable areas and prevent the delivery of eroded sediment to sensitive waterways. One of the primary techniques of winterization consists of stabilizing all bare soils with straw and seed. Fiber rolls shall additionally be installed at grade breaks and along slopes of disturbed areas to break up flow paths, thereby reducing the speed and erosive energy of runoff. No heavy machinery shall be used during the winter season to avoid the degradation of saturated roadways and unstable surfaces. Soil stock piles shall be guarded before the onset of winter with a cover and/or perimeter controls such as fiber rolls. Culverts shall be inspected and maintained to ensure integrity during winter. This includes clearing inlets and outlets of sediment and/or debris and ensuring that sufficient energy dissipation exists at outlets to reduce bank erosion. Seasonal access roads shall be locked to ensure that roads are not in use during the wet season by trespassers. Aside from the erosion control components to winterization, a general and thorough site cleanup will be performed to remove all refuse from the site. Additionally, all fertilizers and petroleum products to be left on site will be stored in secondary

containment and locked in the shipping container to avoid spillage and discharge to surface or groundwater. Winterization measures for Medium or High-Risk Sites are covered in more detail in the Site Erosion and Sediment Control Plan to be submitted for that site.

9. Monitoring

Monitoring is broken up into 3 reports; Facility Status, Site Maintenance, and Storm Water Runoff Monitoring. For Low Risk sites the only monitoring report required is the Facility Status Report. For Moderate and High-Risk sites all three monitoring reports need to be completed. See "Site Erosion and Sediment Control Plan" for details on the Site Maintenance and Storm Water Runoff Monitoring. Annual reports for the cultivation site will be submitted to the North Coast Regional Water Quality and Control Board (NCRWQCB) prior to March 1 of the following year. The annual report shall include the following: Facility Status, Site Maintenance, and Storm Water Runoff Monitoring; Name and contact information for the person responsible for operation, maintenance, and monitoring. Reporting documents can be emailed to northcoast@waterboards.ca.gov or mailed to 5550 Skylane Blvd., Ste. A, Santa Rosa, CA 95403.

Table 7. Facility status monitoring requirements.

Monitoring Requirement	Description
Winterization Measures Implemented	Report winterization procedures implemented, any outstanding measures, and the schedule for completion.
Tier Status Confirmation	Report any change in tier status. (Stabilization of disturbed areas may change the tier status of a facility. Contact the Regional Water Board if a change in status is appropriate.)
Third Party Identification	Report any change in third party status as appropriate.
Nitrogen Application	Report monthly and annual total nitrogen use for bulk, solid, and liquid forms of nitrogen. Provide the data as lbs./canopy acre/time (month or year) as described in Nitrogen Management Plan.

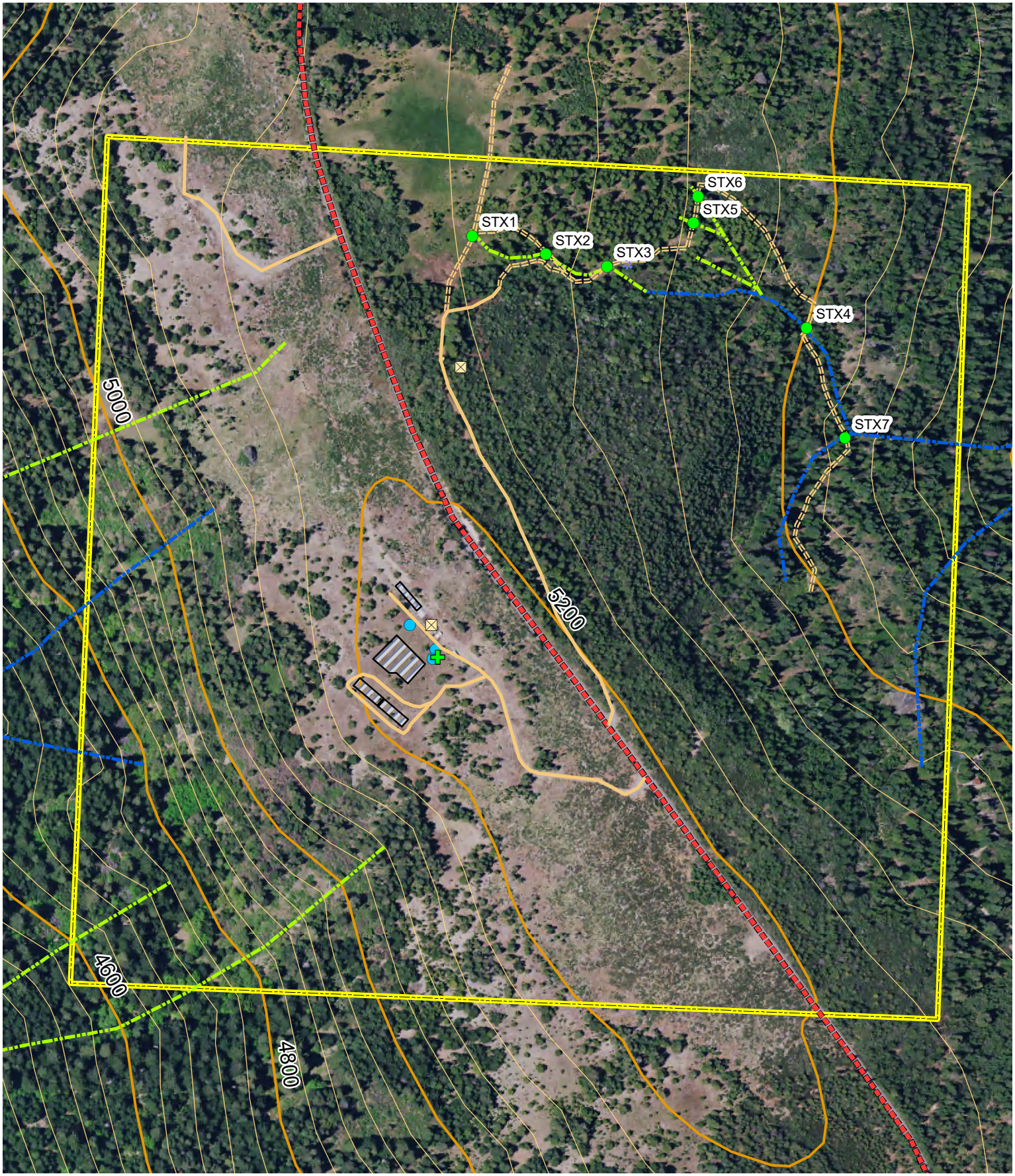
"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Legally Responsible Person_____ Date_____

10. Remediation Summary Table

Map Point (MP)	Topic	Issue	Remediation Measure	Treatment Priority	Expected Completion Date	Actual Completion Date
MP1	**Cleanup, Restoration & Mitigation**	Unconsolidated cultivation area.	All cultivation related waste is to be removed and any bare soil shall be strawed and seeded as part of winterization measures.	**Low**	**October 2019**	
MP2	**Cleanup, Restoration & Mitigation**	Unconsolidated cultivation area.	All cultivation related waste is to be removed and any bare soil shall be strawed and seeded as part of winterization measures.	**Low**	**October 2019**	
MP3	**Cleanup, Restoration & Mitigation**	A historic cultivation area was accessed via eroding roads which intertwined watercourses.	All cultivation related waste is to be removed and any bare soil shall be strawed and seeded as part of winterization measures.	**Moderate**	**October 2019**	
MP4	**Cleanup, Restoration & Mitigation**	Unconsolidated cultivation area.	All cultivation related waste is to be removed and any bare soil shall be strawed and seeded as part of winterization measures.	**Low**	**October 2019**	
MP5	**Erosion Control & Drainage Features**	Rill erosion was observed to be caused by inadequate drainage features on CA1.	Adequate drainage features shall be installed to reduce storm flow velocity and prevent further erosion.	**Moderate**	**October 2020**	

11. Appendices



Site Overview APN 316-015-006

Parcel Boundary
Cultivation Area

Roads
Permanent
Seasonal

Skid
HumCORoads

Watercourses
Class I
Class II
Class III
Pond

Stream Crossing
Water Source (well)
Water Tank

Storage Shed

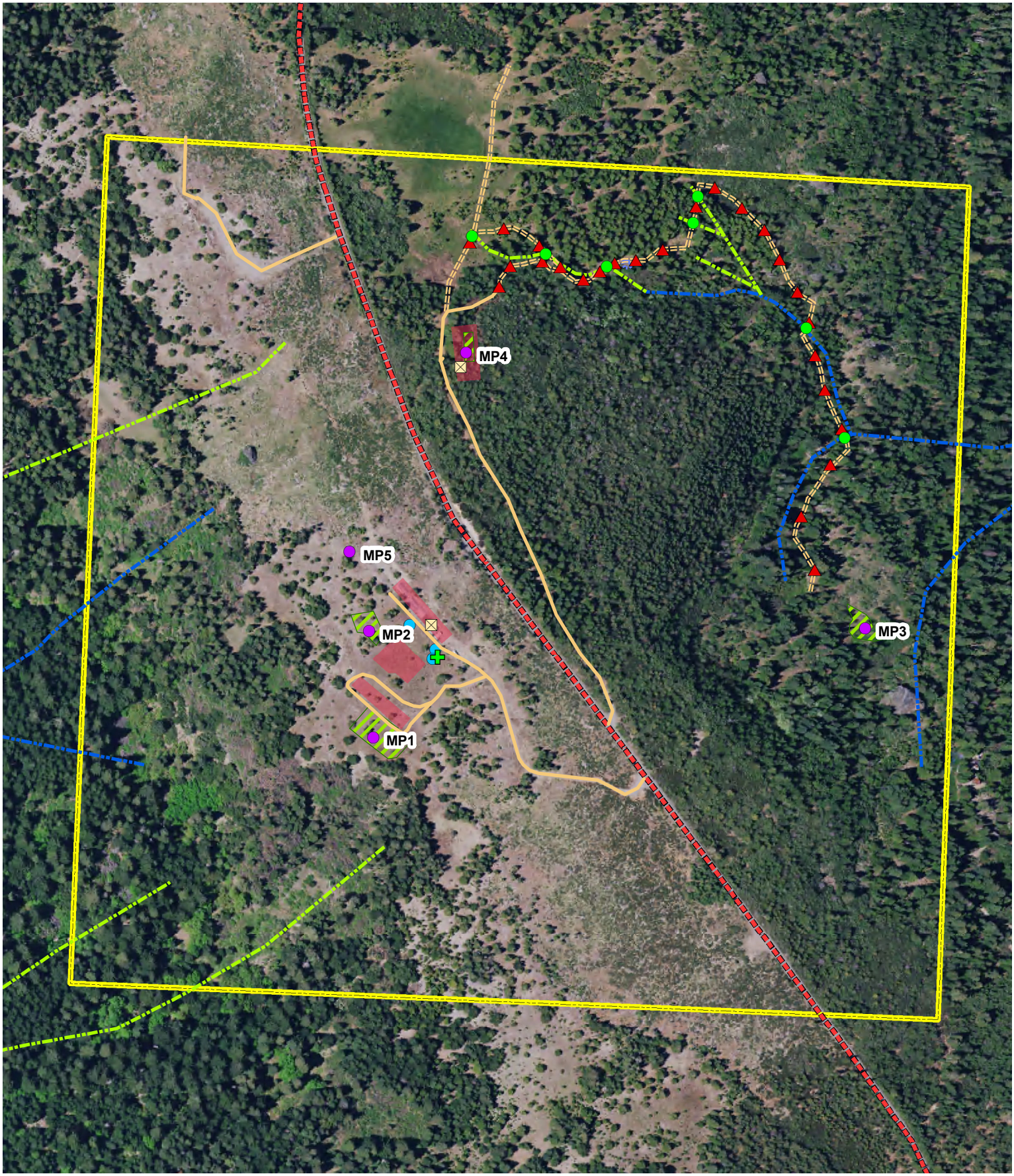
N
W E
S

PLN-11503-CUP J and R Ranch

October 21, 2021

Contour Interval: 40ft
imagery: 2016 NAIP

0 325 650 Feet



Disturbed Area APN 316-015-006

Parcel Boundary
Prior Cultivation Area
Disturbed Area

Roads

Permanent
Seasonal
Skid
HumCORoads
Water Bars

Watercourses

Class I
Class II
Class III
Pond

Stream Crossing
Water Source (well)
Water Tank
Map Points
Storage Shed

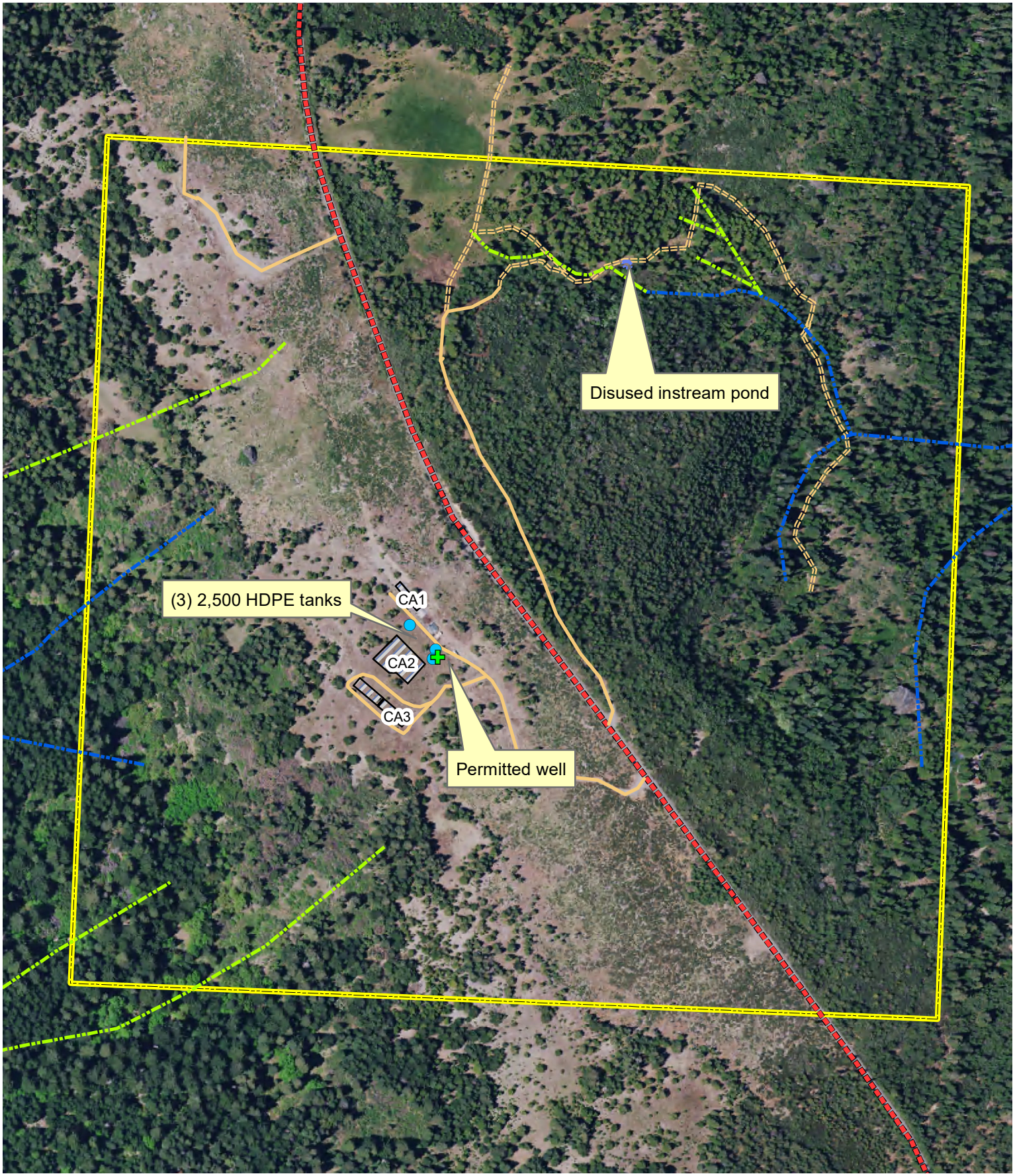
N
W E
S

PLN-11503-CUP J and R Ranch

October 21, 2021

Contour Interval: 40ft
imagery: 2016 NAIP

0 325 650 Feet



Water Use APN 316-015-006

Parcel Boundary
Cultivation Area

Roads
Permanent
Seasonal
Skid
HumCORoads

Watercourses
Class I
Class II
Class III
Pond
Water Source (well)
Water Tank

N
W E
S

PLN-11503-CUP J and R Ranch

October 21, 2021

Contour Interval: 40ft
imagery: 2016 NAIP

0 325 650 Feet

SECTION 2 – REQUIREMENTS RELATED TO WATER DIVERSIONS AND WASTE DISCHARGE FOR CANNABIS CULTIVATION

The following Requirements apply to any water diversion or waste discharge related to cannabis cultivation.

No.	TERM
Land Development and Maintenance, Erosion Control, and Drainage Features	
Limitations on Earthmoving	
1.	Cannabis cultivators shall not conduct grading activities for cannabis cultivation land development or alteration on slopes exceeding 50 percent grade, or as restricted by local county or city permits, ordinances, or regulations for grading, agriculture, or cannabis cultivation; whichever is more stringent shall apply. The grading prohibition on slopes exceeding 50 percent does not apply to site mitigation or remediation if the cannabis cultivator is issued separate WDRs or an enforcement order for the activity by the Regional Water Board Executive Officer.
2.	Finished cut and fill slopes, including side slopes between terraces, shall not exceed slopes of 50 percent and should conform to the natural pre-grade slope whenever possible.
3.	Cannabis cultivators shall not drive or operate vehicles or equipment within the riparian setbacks or within waters of the state unless authorized under 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board. This requirement does not prohibit driving on established, maintained access roads that are in compliance with this Policy.
4.	Cannabis cultivation land development and access road construction shall be designed by qualified professionals. Cannabis cultivators shall conduct all construction or land development activities to minimize grading, soil disturbance, and disturbance to aquatic and terrestrial habitat.
5.	The cannabis cultivator shall control all dust related to cannabis cultivation activities to ensure dust does not produce sediment-laden runoff. The cannabis cultivator shall implement dust control measures, including, but not limited to, pre-watering of excavation or grading sites, use of water trucks, track-out prevention, washing down vehicles or equipment before leaving a site, and prohibiting land disturbance activities when instantaneous wind speeds (gusts) exceed 25 miles per hour. Cannabis cultivators shall grade access roads in dry weather while moisture is still present in soil to minimize dust and to achieve design soil compaction, or when needed use a water truck to control dust and soil moisture.
Construction Equipment Use and Limitations	

6.	Cannabis cultivators shall employ spill control and containment practices to prevent the discharge of fuels, oils, solvents and other chemicals to soils and waters of the state.
7.	Cannabis cultivators shall stage and store equipment, materials, fuels, lubricants, solvents, or hazardous or toxic materials in locations that minimize the potential for discharge to waters of the state. At a minimum, the following measures shall be implemented: 1. Designate an area outside the riparian setback for equipment storage, short-term maintenance, and refueling. Cannabis cultivator shall not conduct any maintenance activity or refuel equipment in any location where the petroleum products or other pollutants may enter waters of the state as per Fish and Game Code section 5650 (a)(1). 2. Frequently inspect equipment and vehicles for leaks. 3. Immediately clean up leaks, drips, and spills. Except for emergency repairs that are necessary for safe transport of equipment or vehicles to an appropriate repair facility, equipment or vehicle repairs, maintenance, and washing onsite is prohibited. 4. If emergency repairs generate waste fluids, ensure they are contained and properly disposed or recycled off-site. 5. Properly dispose of all construction debris off-site. 6. Use dry cleanup methods (e.g., absorbent materials, cat litter, and/or rags) whenever possible. Sweep up, contain, and properly dispose of spilled dry materials.
Erosion Control	
8.	The cannabis cultivator shall use appropriate erosion control measures to minimize erosion of disturbed areas, potting soil, or bulk soil amendments to prevent discharges of waste. Fill soil shall not be placed where it may discharge into surface water. If used, weed-free straw mulch shall be applied at a rate of two tons per acre of exposed soils and, if warranted by site conditions, shall be secured to the ground.
9.	The cannabis cultivator shall not plant or seed noxious weeds. Prohibited plant species include those identified in the California Invasive Pest Plant Council's database, available at: www.cal-ipc.org/paf/. Locally native, non-invasive, and non-persistent grass species may be used for temporary erosion control benefits to stabilize disturbed land and prevent exposure of disturbed land to rainfall. Nothing in this term may be construed as a ban on cannabis cultivation that complies with the terms of this Policy.
10.	Cannabis cultivators shall incorporate erosion control and sediment detention devices and materials into the design, work schedule, and implementation of the cannabis cultivation activities. The erosion prevention and sediment capture measures shall be effective in protecting water quality. • Interim erosion prevention and sediment capture measures shall be implemented within seven days of completion of grading and land disturbance activities, and

	shall consist of erosion prevention measures and sediment capture measures including: ○ Erosion prevention measures are required for any earthwork that uses heavy equipment (e.g., bulldozer, compactor, excavator, etc.). Erosion prevention measures may include surface contouring, slope roughening, and upslope storm water diversion. Other types of erosion prevention measures may include mulching, hydroseeding, tarp placement, revegetation, and rock slope protection. ○ Sediment capture measures include the implementation of measures such as gravel bag berms, fiber rolls, straw bale barriers, properly installed silt fences, and sediment settling basins. • Long-term erosion prevention and sediment capture measures shall be implemented as soon as possible and prior to the onset of fall and winter precipitation. Long-term measures may include the use of heavy equipment to reconfigure access roads or improve access road drainage, installation of properly-sized culverts, gravel placement on steeper grades, and stabilization of previously disturbed land. • Maintenance of all erosion protection and sediment capture measures is required year round. Early monitoring allows for identification of problem areas or underperforming erosion or sediment control measures. Verification of the effectiveness of all erosion prevention and sediment capture measures is required as part of winterization activities.
11.	Cannabis cultivators shall only use geotextiles, fiber rolls, and other erosion control measures made of loose-weave mesh (e.g., jute, coconut (coir) fiber, or from other products without welded weaves). To minimize the risk of ensnaring and strangling wildlife, cannabis cultivators shall not use synthetic (e.g., plastic or nylon) monofilament netting materials for erosion control for any cannabis cultivation activities. This prohibition includes photo- or bio-degradable plastic netting.
12.	Cultivation sites constructed on or near slopes with a slope greater than or equal to 30 percent shall be inspected for indications of instability. Indications of instability include the occurrence of slope failures at nearby similar sites, weak soil layers, geologic bedding parallel to slope surface, hillside creep (trees, fence posts, etc. leaning downslope), tension cracks in the slope surface, bulging soil at the base of the slope, and groundwater discharge from the slope. If indicators of instability are present, the cannabis cultivator shall consult with a qualified professional to design measures to stabilize the slope to prevent sediment discharge to surface waters.
13.	For areas outside of riparian setbacks or for upland areas, cannabis cultivators shall ensure that rock placed for slope protection is the minimum amount necessary and is part of a design that provides for native plant revegetation. If retaining walls or other structures are required to provide slope stability, they shall be designed by a qualified professional.
14.	Cannabis cultivators shall monitor erosion control measures during and after each storm event that produces at least 0.5 in/day or 1.0 inch/7 days of precipitation, and repair or replace, as needed, ineffective erosion control measures immediately.

Access Road/Land Development and Drainage	
15.	Access roads shall be constructed consistent with the requirements of California Code of Regulations Title 14, Chapter 4. The Road Handbook describes how to implement the regulations and is available at <http://www.pacificwatershed.com/PWA-publications-library>. Existing access roads shall be upgraded to comply with the Road Handbook.
16.	Cannabis cultivators shall obtain all required permits and approvals prior to the construction of any access road constructed for cannabis cultivation activities. Permits may include section 404/401 CWA permits, Regional Water Board WDRs (when applicable), CDFW LSA Agreement, and county or local agency permits.
17.	Cannabis cultivators shall ensure that all access roads are hydrologically disconnected to receiving waters to the extent possible by installing disconnecting drainage features, increasing the frequency of (inside) ditch drain relief as needed, constructing out-sloped roads, constructing energy dissipating structures, avoiding concentrating flows in unstable areas, and performing inspection and maintenance as needed to optimize the access road performance.
18.	New access road alignments should be constructed with grades (slopes) of 3- to 8-percent, or less, wherever possible. Forest access roads should generally be kept below 12-percent except for short pitches of 500 feet or less where road slopes may go up to 20-percent. These steeper access road slopes should be paved or rock surfaced and equipped with adequate drainage. Existing access roads that do not comply with these limits shall be inspected by a qualified professional to determine if improvements are needed.
19.	Cannabis cultivators shall decommission or relocate existing roads away from riparian setbacks whenever possible. Roads that are proposed for decommissioning shall be abandoned and left in a condition that provides for long-term, maintenance-free function of drainage and erosion controls. Abandoned roads shall be blocked to prevent unauthorized vehicle traffic.
20.	If site conditions prohibit drainage structures (including rolling dips and ditch-relief culverts) at adequate intervals to avoid erosion, the cannabis cultivator shall use bioengineering techniques[12] as the preferred measure to minimize erosion (e.g., live fascines). If bioengineering cannot be used, then engineering fixes such as armoring (e.g., rock of adequate size and depth to remain in place under traffic and flow conditions) and velocity dissipaters (e.g., gravel-filled "pillows" in an inside ditch to trap sediment) may be used for problem sites. The maximum distance between water breaks shall not exceed those defined in the Road Handbook.
21.	Cannabis cultivators shall have a qualified professional design the optimal access road alignment, surfacing, drainage, maintenance requirements, and spoils handling

[12] A Primer on Stream and River Protection for the Regulator and Program Manager: Technical Reference Circular W.D. 02-#1, San Francisco Bay Region, California Regional Water Board (April 2003) http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stream_wetland/streamprotectioncircular.pdf.

	procedures.
22.	Cannabis cultivators shall ensure that access road surfacing, especially within a segment leading to a waterbody, is sufficient to minimize sediment delivery to the wetland or waterbody and maximize access road integrity. Road surfacing may include pavement, chip-seal, lignin, rock, or other material appropriate for timing and nature of use. All access roads that will be used for winter or wet weather hauling/traffic shall be surfaced. Steeper access road grades require higher quality rock (e.g., crushed angular versus river-run) to remain in place. The use of asphalt grindings is prohibited.
23.	Cannabis cultivators shall install erosion control measures on all access road approaches to surface water diversion sites to reduce the generation and transport of sediment to streams.
24.	Cannabis cultivators shall ensure that access roads are out-sloped whenever possible to promote even drainage of the access road surface, prevent the concentration of storm water flow within an inboard or inside ditch, and to minimize disruption of the natural sheet flow pattern off a hill slope to a stream.
25.	If unable to eliminate inboard or inside ditches, the cannabis cultivator shall ensure adequate ditch relief culverts to prevent down-cutting of the ditch and to reduce water runoff concentration, velocity, and erosion. Ditches shall be designed and maintained as recommended by a qualified professional. To avoid point-source discharges, inboard ditches and ditch relief culverts shall be discharged onto vegetated or armored slopes that are designed to dissipate and prevent runoff channelization. Inboard ditches and ditch relief culverts shall be designed to ensure discharges into natural stream channels or watercourses are prevented.
26.	Cannabis cultivators shall ensure that access roads are not allowed to develop or show evidence of significant surface rutting or gullying. Cannabis cultivators shall use water bars and rolling dips as designed by a qualified professional to minimize access road surface erosion and dissipate runoff.
27.	Cannabis cultivators shall only grade ditches when necessary to prevent erosion of the ditch, undermining of the banks, or exposure of the toe of the cut slope to erosion. Cannabis cultivators shall not remove more vegetation than necessary to keep water moving, as vegetation prevents scour and filters out sediment.
28.	Access road storm water drainage structures shall not discharge onto unstable slopes, earthen fills, or directly to a waterbody. Drainage structures shall discharge onto stable areas with straw bales, slash, vegetation, and/or rock riprap.
29.	Sediment control devices (e.g., check dams, sand/gravel bag barriers, etc.) shall be used when it is not practical to disperse storm water before discharge to a waterbody. Where potential discharge to a wetland or waterbody exists (e.g., within 200 feet of a waterbody) access road surface drainage shall be filtered through vegetation, slash, other appropriate material, or settled into a depression with an outlet with adequate drainage. Sediment basins shall be engineered and properly sized to allow sediment settling, spillway stability, and maintenance activities.

Drainage Culverts (See also Watercourse Crossings)	
30.	Cannabis cultivators shall regularly inspect ditch-relief culverts and clear them of any debris or sediment. To reduce ditch-relief culvert plugging by debris, cannabis cultivators shall use 15- to 24-inch diameter pipes, at minimum. In forested areas with a potential for woody debris, a minimum 18-inch diameter pipe shall be used to reduce clogging. Ditch relief culverts shall be designed by a qualified professional based on site-specific conditions.
31.	Cannabis cultivators shall ensure that all permanent watercourse crossings that are constructed or reconstructed are capable of accommodating the estimated 100-year flood flow, including debris and sediment loads. Watercourse crossings shall be designed and sized by a qualified professional.
Cleanup, Restoration, and Mitigation	
32.	Cannabis cultivators shall limit disturbance to existing grades and vegetation to the actual site of the cleanup or remediation and any necessary access routes.
33.	Cannabis cultivators shall avoid damage to native riparian vegetation. All exposed or disturbed land and access points within the stream and riparian setback with damaged vegetation shall be restored with regional native vegetation of similar native species. Riparian trees over four inches diameter at breast height shall be replaced by similar native species at a ratio of three to one (3:1). Restored areas must be mulched, using at least 2 to 4 inches of weed-free, clean straw or similar biodegradable mulch over the seeded area. Mulching shall be completed within 30 days after land disturbance activities in the areas cease. Revegetation planting shall occur at a seasonally appropriate time until vegetation is restored to pre-cannabis or pre-Legacy condition or better. Cannabis cultivators shall stabilize and restore any temporary work areas with native vegetation to pre-cannabis cultivation or pre-Legacy conditions or better. Vegetation shall be planted at an adequate density and variety to control surface erosion and re-generate a diverse composition of regional native vegetation of similar native species.
34.	Cannabis cultivators shall avoid damage to oak woodlands. Cannabis cultivator shall plant three oak trees for every one oak tree damaged or removed. Trees may be planted in groves in order to maximize wildlife benefits and shall be native to the local county.
35.	Cannabis cultivators shall develop a revegetation plan for: • All exposed or disturbed riparian vegetation areas, • any oak trees that are damaged or removed, and • temporary work areas. Cannabis cultivators shall develop a monitoring plan that evaluates the revegetation plan for five years. Cannabis cultivators shall maintain annual inspections for the purpose of assessing an 85 percent survival and growth of revegetated areas within a five-year period. The presence of exposed soil shall be documented for three years following revegetation work. If the revegetation results in less than an 85 percent success rate, the unsuccessful vegetation areas shall be replanted. Cannabis cultivators shall identify the location and extent of exposed soil associated with the site; pre- and post-revegetation

	work photos; diagram of all areas revegetated, the planting methods, and plants used; and an assessment of the success of the revegetation program. Cannabis cultivators shall maintain a copy of the revegetation plan and monitoring results onsite and make them available, upon request, to Water Boards staff or authorized representatives. An electronic copy of monitoring results is acceptable in Portable Document Format (PDF).
36.	Cannabis cultivators shall revegetate soil exposed as a result of cannabis cultivation activities with native vegetation by live planting, seed casting, or hydroseeding within seven days of exposure.
37.	Cannabis cultivators shall prevent the spread or introduction of exotic plant species to the maximum extent possible by cleaning equipment before delivery to the cannabis cultivation Site and before removal, restoring land disturbance with appropriate native species, and post-cannabis cultivation activities monitoring and control of exotic species. Nothing in this term may be construed as a ban on cannabis cultivation that complies with the terms of this Policy.
Stream Crossing Installation and Maintenance	
Limitations on Work in Watercourses and Permanently Ponded Areas	
38.	Cannabis cultivators shall obtain all applicable permits and approvals prior to doing any work in or around waterbodies or within the riparian setbacks. Permits may include section 404/401 CWA permits, Regional Water Board WDRs (when applicable), and a CDFW LSA Agreement.
39.	Cannabis cultivators shall avoid or minimize temporary stream crossings. When necessary, temporary stream crossings shall be located in areas where erosion potential and damage to the existing habitat is low. Cannabis cultivators shall avoid areas where runoff from access roadway side slopes and natural hillsides will drain and flow into the temporary crossing. Temporary stream crossings that impede fish passage are strictly prohibited on permanent or seasonal fish-bearing streams.
40.	Cannabis cultivators shall avoid or minimize use of heavy equipment[13] in a watercourse. If use is unavoidable, heavy equipment may only travel or work in a waterbody with a rocky or cobbled channel. Wood, rubber, or clean native rock temporary work pads shall be used on the channel bottom prior to use of heavy equipment to protect channel bed and preserve channel morphology. Temporary work pads and other channel protection shall be removed as soon as possible once the use of heavy equipment is complete.
41.	Cannabis cultivators shall avoid or minimize work in or near a stream, creek, river, lake, pond, or other waterbody. If work in a waterbody cannot be avoided, activities and associated workspace shall be isolated from flowing water by directing the water around the work site. If water is present, then the cannabis cultivator shall develop a site-specific plan prepared by a qualified professional. The plan shall consider partial or full stream diversion and dewatering. The plan shall consider the use of coffer dams upstream and downstream of the work site and the diversion of all flow from upstream of the upstream

[13] Heavy equipment is defined as large pieces of machinery or vehicles, especially those used in the building and construction industry (e.g., bulldozers, excavators, backhoes, bobcats, tractors, etc.).

	dam to downstream of the downstream dam, through a suitably sized pipe with intake screens that protect and prevent impacts to fish and wildlife. Cannabis cultivation activities and associated work shall be performed outside the waterbody from the top of the bank to the maximum extent possible.
Temporary Watercourse Diversion and Dewatering: All Live Watercourses	
42.	Cannabis cultivators shall ensure that coffer dams are constructed prior to commencing work and as close as practicable upstream and downstream of the work area. Cofferdam construction using offsite materials, such as clean gravel bags or inflatable dams, is preferred. Thick plastic may be used to minimize leakage, but shall be completely removed and properly disposed of upon work completion. If the coffer dams or stream diversion fail, the cannabis cultivator shall repair them immediately.
43.	When any dam or other artificial obstruction is being constructed, maintained, or placed in operation, the cannabis cultivator shall allow sufficient water at all times to pass downstream to maintain aquatic life below the dam pursuant to Fish and Game Code section 5937.
44.	If possible, gravity flow is the preferred method of water diversion. If a pump is used, the cannabis cultivator shall ensure that the pump is operated at the rate of flow that passes through the cannabis cultivation site. Pumping rates shall not dewater or impound water on the upstream side of the coffer dam. When diversion pipe is used it shall be protected from cannabis cultivation activities and maintained to prevent debris blockage.
45.	Cannabis cultivators shall only divert water such that water does not scour the channel bed or banks at the downstream end. Cannabis cultivator shall divert flow in a manner that prevents turbidity, siltation, and pollution and provides flows to downstream reaches. Cannabis cultivators shall provide flows to downstream reaches during all times that the natural flow would have supported aquatic life. Flows shall be of sufficient quality and quantity, and of appropriate temperature to support fish and other aquatic life both above and below the diversion. Block netting and intake screens shall be sized to protect and prevent impacts to fish and wildlife.
46.	Once water has been diverted around the work area, cannabis cultivators may dewater the site to provide an adequately dry work area. Any muddy or otherwise contaminated water shall be pumped to a settling tank, dewatering filter bag, or upland area, or to another location approved by CDFW or the appropriate Regional Water Board Executive Officer prior to re-entering the watercourse.
47.	Upon completion of work, cannabis cultivators shall immediately remove the flow diversion structure in a manner that allows flow to resume with a minimum of disturbance to the channel substrate and that minimizes the generation of turbidity.
Watercourse Crossings	
48.	Cannabis cultivators shall ensure that watercourse crossings are designed by a qualified professional.
49.	Cannabis cultivators shall ensure that all access road watercourse crossing structures allow for the unrestricted passage of water and shall be designed to accommodate the

	estimated 100-year flood flow and associated debris (based upon an assessment of the streams potential to generate debris during high flow events). Consult CAL FIRE 100 year Watercourse Crossings document for examples and design calculations, available at: http://calfire.ca.gov/resource_mgt/downloads/100%20yr%20revised%208-08-17%20(final-a).pdf.
50.	Cannabis cultivators shall ensure that watercourse crossings allow migration of aquatic life during all life stages supported or potentially supported by that stream reach. Design measures shall be incorporated to ensure water depth and velocity does not inhibit migration of aquatic life. Any access road crossing structure on watercourses that supports fish shall be constructed for the unrestricted passage of fish at all life stages, and should use the following design guidelines: • CDFW's *Culvert Criteria for Fish Passage;* • CDFW's *Salmonid Stream Habitat Restoration Manual, Volume 2, Part IX: Fish Passage Evaluation at Stream Crossings; and* • National Marine Fisheries Service, Southwest Region *Guidelines for Salmonid Passage at Stream Crossings.*
51.	Cannabis cultivators shall conduct regular inspection and maintenance of stream crossings to ensure crossings are not blocked by debris. Refer to California Board of Forestry Technical Rule No. 5 available at: http://www.calforests.org/wp-content/uploads/2013/10/Adopted-TRA5.pdf.
52.	Cannabis cultivators shall only use rock fords for temporary seasonal crossings on small watercourses where aquatic life passage is not required during the time period of use. Rock fords shall be oriented perpendicular to the flow of the watercourse and designed to maintain the range of surface flows that occur in the watercourse. When constructed, rock shall be sized to withstand the range of flow events that occur at the crossing and rock shall be maintained at the rock ford to completely cover the channel bed and bank surfaces to minimize soil compaction, rutting, and erosion. Rock must extend on either side of the ford up to the break in slope. The use of rock fords as watercourse crossings for all-weather access road use is prohibited.
53.	Cannabis cultivators shall ensure that culverts used at watercourse crossings are designed to direct flow and debris toward the inlet (e.g., use of wing-walls, pipe beveling, rock armoring, etc.) to prevent erosion of road fill, debris blocking the culvert, and watercourses from eroding a new channel.
54.	Cannabis cultivators shall regularly inspect and maintain the condition of access roads, access road drainage features, and watercourse crossings. At a minimum, cannabis cultivators shall perform inspections prior to the onset of fall and winter precipitation and following storm events that produce at least 0.5 in/day or 1.0 inch/7 days of precipitation. Cannabis cultivators are required to perform all of the following maintenance: • Remove any wood debris that may restrict flow in a culvert. • Remove sediment that impacts access road or drainage feature performance. Place any removed sediment in a location outside the riparian setbacks and stabilize the sediment. • Maintain records of access road and drainage feature maintenance and consider

	redesigning the access road to improve performance and reduce maintenance needs.
55.	Cannabis cultivators shall compact access road crossing approaches and fill slopes during installation and shall stabilize them with rock or other appropriate surface protection to minimize surface erosion. When possible, cannabis cultivators shall ensure that access roads over culverts are equipped with a critical dip to ensure that, if the culvert becomes blocked or plugged, water can flow over the access road surface without washing away the fill prism. Access road crossings where specific conditions do not allow for a critical dip or in areas with potential for significant debris accumulation, shall include additional measures such as emergency overflow culverts or oversized culverts that are designed by a qualified professional.
56.	Cannabis cultivators shall ensure that culverts used at watercourse crossings are: 1) installed parallel to the watercourse alignment to the extent possible, 2) of sufficient length to extend beyond stabilized fill/sidecast material, and 3) embedded or installed at the same level and gradient of the streambed in which they are being placed to prevent erosion.
Soil Disposal and Spoils Management	
57.	Cannabis cultivators shall store soil, construction, and waste materials outside the riparian setback except as needed for immediate construction needs. Such materials shall not be stored in locations of known slope instability or where the storage of construction or waste material could reduce slope stability.
58.	Cannabis cultivators shall separate large organic material (e.g., roots, woody debris, etc.) from soil materials. Cannabis cultivators shall either place the large organic material in long-term, upland storage sites, or properly dispose of these materials offsite.
59.	Cannabis cultivators shall store erodible soil, soil amendments, and spoil piles to prevent sediment discharges in storm water. Storage practices may include use of tarps, upslope land contouring to divert surface flow around the material, or use of sediment control devices (e.g., silt fences, straw wattles, etc.).
60.	Cannabis cultivators shall contour and stabilize stored spoils to mimic natural slope contours and drainage patterns (as appropriate) to reduce the potential for fill saturation and slope failure.
61.	For soil disposal sites cannabis cultivators shall: • revegetate soil disposal sites with a mix of native plant species, • cover the seeded and planted areas with mulched straw at a rate of two tons per acre, and • apply non-synthetic netting or similar erosion control fabric (e.g., jute) on slopes greater than 2:1 if the site is erodible.
62.	Cannabis cultivators shall haul away and properly dispose of excess soil and other debris as needed to prevent discharge to waters of the state.

Riparian and Wetland Protection and Management	
63.	Cannabis cultivators shall not disturb aquatic or riparian habitat, such as pools, spawning sites, large wood, or shading vegetation unless authorized under a CWA section 404 permit, CWA section 401 certification, Regional Water Board WDRs (when applicable), or a CDFW LSA Agreement.
64.	Cannabis cultivators shall maintain existing, naturally occurring, riparian vegetative cover (e.g., trees, shrubs, and grasses) in aquatic habitat areas to the maximum extent possible to maintain riparian areas for streambank stabilization, erosion control, stream shading and temperature control, sediment and chemical filtration, aquatic life support, wildlife support, and to minimize waste discharge.
Water Storage and Use	
Water Supply, Diversion, and Storage	
65.	Cannabis cultivators shall only install, maintain, and destroy wells in compliance with county, city, and local ordinances and with California Well Standards as stipulated in California Department of Water Resources Bulletins 74-90 and 74-81.[14]
66.	All water diversions for cannabis cultivation from a surface stream, subterranean stream flowing through a known and definite channel (e.g., groundwater well diversions from subsurface stream flows), or other surface waterbody are subject to the surface water Numeric and Narrative Instream Flow Requirements. This includes lakes, ponds, and springs (unless the spring is deemed exempt by the Deputy Director). See Section 3. Numeric and Narrative Instream Flow Requirements of this Attachment A for more information.
67.	Groundwater diversions may be subject to additional requirements, such as a forbearance period, if the State Water Board determines those requirements are reasonably necessary to implement the purposes of this Policy.
68.	Cannabis cultivators are encouraged to use appropriate rainwater catchment systems to collect from impermeable surfaces (e.g., roof tops, etc.) during the wet season and store storm water in tanks, bladders, or off-stream engineered reservoirs to reduce the need for surface water or groundwater diversions.
69.	Cannabis cultivators shall not divert surface water unless it is diverted in accordance with an existing water right that specifies, as appropriate, the source, location of the point of diversion, purpose of use, place of use, and quantity and season of diversion. Cannabis cultivators shall maintain documentation of the water right at the cannabis cultivation site. Documentation of the water right shall be available for review and inspection by the Water Boards, CDFW, and any other authorized representatives of the Water Boards or CDFW.

[14] California Well Standards are available at: http://www.water.ca.gov/groundwater/well_info_and_other/california_well_standards/well_standards_content.html.

70.	Cannabis cultivators shall ensure that all water diversion facilities are designed, constructed, and maintained so they do not prevent, impede, or tend to prevent the passing of fish, as defined by Fish and Game Code section 45, upstream or downstream, as required by Fish and Game Code section 5901. This includes but is not limited to the supply of water at an appropriate depth, temperature, and velocity to facilitate upstream and downstream aquatic life movement and migration. Cannabis cultivators shall allow sufficient water at all times to pass past the point of diversion to keep in good condition any fish that may be planted or exist below the point of diversion as defined by Fish and Game Code section 5937. Cannabis cultivators shall not divert water in a manner contrary to or inconsistent with these Requirements.
71.	Cannabis cultivators issued a Cannabis SIUR by the State Water Board shall not divert surface water unless in compliance with all additional Cannabis SIUR conditions required by CDFW.
72.	Water diversion facilities shall include satisfactory means for bypassing water to satisfy downstream prior rights and any requirements of policies for water quality control, water quality control plans, water quality certifications, waste discharge requirements, or other local, state or federal instream flow requirements. Cannabis cultivators shall not divert in a manner that results in injury to holders of legal downstream senior rights. Cannabis cultivators may be required to curtail diversions should diversion result in injury to holders of legal downstream senior water rights or interfere with maintenance of downstream instream flow requirements.
73.	Fuel powered (e.g., gas, diesel, etc.) diversion pumps shall be located in a stable and secure location outside of the riparian setbacks unless authorized under a 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board. Use of non-fuel powered diversion pumps (solar, electric, gravity, etc.) is encouraged. In all cases, all pumps shall: 1. be properly maintained, 2. have suitable containment to ensure any spills or leaks do not enter surface waterbodies or groundwater, and 3. have sufficient overhead cover to prevent exposure of equipment to precipitation.
74.	No water shall be diverted unless the cannabis cultivator is operating the water diversion facility with a CDFW-approved water-intake screen (e.g. fish screen). The water intake screen shall be designed and maintained in accordance with screening criteria approved by CDFW. The screen shall prevent wildlife from entering the diversion intake and becoming entrapped. The cannabis cultivator shall contact the regional CDFW Office, LSA Program for information on screening criteria for diversion(s).[15] The cannabis cultivator shall provide evidence that demonstrates that the water intake screen is in good condition whenever requested by the Water Boards or CDFW. Points of re-diversion from off-stream storage facilities that are open to the environment shall have a water intake screen, as required by CDFW.

[15] CDFW's Lake and Streambed program information is available at: https://www.wildlife.ca.gov/Conservation/LSA .

75.	Cannabis cultivators shall inspect, maintain, and clean water intake screens and bypass appurtenances as directed by CDFW to ensure proper operation for the protection of fish and wildlife.
76.	Cannabis cultivators shall not obstruct, alter, dam, or divert all or any portion of a natural watercourse prior to obtaining all applicable permits and approvals. Permits may include a valid water right, 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board.
77.	Cannabis cultivators shall plug, block, cap, disconnect, or remove the diversion intake associated with cannabis cultivation activities during the surface water forbearance period, unless the diversion intake is used for other beneficial uses, to ensure no water is diverted during that time.
78.	Cannabis cultivators shall not divert from a surface water or from a subterranean stream for cannabis cultivation at a rate more than a maximum instantaneous diversion rate of 10 gallons per minute, unless authorized under an existing appropriative water right.
82.	Onstream storage reservoirs are prohibited unless either: • The cannabis cultivator has an existing water right with irrigation as a designated use, issued prior to October 31, 2017, that authorizes the onstream storage reservoir, or • The cannabis cultivator obtains an appropriative water right permit with irrigation as a designated use prior to diverting water from an onstream storage reservoir for cannabis cultivation. Cannabis cultivators with a pending application or an unpermitted onstream storage reservoir shall not divert for cannabis cultivation until the cannabis cultivator has obtain a valid water right.
83.	Cannabis cultivators are encouraged to install separate storage systems for water diverted for cannabis irrigation and water diverted for any other beneficial uses,[16] or otherwise shall install separate measuring devices to quantify diversion to and from each storage facility, including the quantity of water diverted and the quantity, place, and purpose of use (e.g., cannabis irrigation, other crop irrigation, domestic, etc.) for the stored water.
84.	The cannabis cultivator shall install and maintain a measuring device(s) for surface water or subterranean stream diversions. The measuring device shall be, at a minimum equivalent to the requirements for direct diversions greater than 10 acre-feet per year in California Code of Regulations, Title 23, Division 3, Chapter 2.7[17]. The measuring device(s) shall be located as close to the point of diversion as reasonable. Cannabis cultivators shall maintain daily diversion records for water diverted for cannabis cultivation.

[16] Other beneficial uses of water include: domestic, irrigation, power, municipal, mining, industrial, fish and wildlife preservation and enhancement, aquaculture, recreational, stockwatering, water quality, frost protection, and heat control. (California Code of Regulations, Title 23 sections 659-672).

[17] Additional information on measuring devices may be found at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/water_use.shtml#measurement

	Cannabis cultivators shall maintain separate records that document the amount of water used for cannabis cultivation separated out from the amount of water used for other irrigation purposes and other beneficial uses of water (e.g., domestic, fire protection, etc.). Cannabis cultivators shall maintain daily diversion records at the cultivation site and shall make the records available for review or by request by the Water Boards CDFW, or any other authorized representatives of the Water Boards or CDFW. Daily diversion records shall be retained for a minimum of five years. Compliance with this term is required for any surface water diversion for cannabis cultivation, even those under 10 acre-feet per year.
85.	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 Requirement.
86.	Cannabis cultivators shall not use off-stream storage reservoirs and ponds to store water for cannabis cultivation unless they are sited and designed or approved by a qualified professional in compliance with Division of Safety of Dams (DSOD), county, and/or city requirements, as applicable. If the DSOD, county, and/or city do not have established requirements they shall be designed consistent with the Natural Resource Conservation Service National Engineering Manual. Reservoirs shall be designed with an adequate overflow outlet that is protected and promotes the dispersal and infiltration of flow and prevents channelization. All off-stream storage reservoirs and ponds shall be designed, managed, and maintained to accommodate average annual winter period precipitation and storm water inputs to reduce the potential for overflow. Cannabis cultivators shall plant native vegetation along the perimeter of the reservoir in locations where it does not impact the structural integrity of the reservoir berm or spillway. The cannabis cultivator shall control vegetation around the reservoir berm and spillway to allow for visual inspection of berm and spillway condition and control burrowing animals as necessary.
87.	Cannabis cultivators shall implement an invasive species management plan prepared by a Qualified Biologist for any existing or proposed water storage facilities that are open to the environment. The plan shall include, at a minimum, an annual survey for bullfrogs and other invasive aquatic species. If bullfrogs or other invasive aquatic species are identified, eradication measures shall be implemented under the direction of a qualified biologist, if appropriate after consultation with CDFW (pursuant to Fish and Game Code section 6400). Eradication methods can be direct or indirect. Direct methods may include hand-held dip net, hook and line, lights, spears, gigs, or fish tackle under a fishing license (pursuant to Fish and Game Code section 6855). An indirect method may involve seasonally timed complete dewatering and a drying period of the off-stream storage facility under a Permit to Destroy Harmful Species (pursuant to Fish and Game Code section 5501) issued by CDFW.
88.	Water storage bladders are not encouraged for long-term use. If bladders are used, the cannabis cultivator shall ensure that the bladder is designed and properly installed to store water and that the bladder is sited to minimize the potential for water to flow into a

	watercourse in the event of a catastrophic failure. If a storage bladder has been previously used, the cannabis cultivator shall carefully inspect the bladder to confirm its integrity and confirm the absence of any interior residual chemicals prior to resuming use. Cannabis cultivators shall periodically inspect water storage bladders and containment features to ensure integrity. Water storage bladders shall be properly disposed of or recycled and not resold when assurance of structural integrity is no longer guaranteed.
89.	Cannabis cultivators shall not use water storage bladders unless the bladder is safely contained within a secondary containment system with sufficient capacity to capture 110 percent of a bladder's maximum possible contents in the event of bladder failure (i.e., 110 percent of bladder's capacity). Secondary containment systems shall be of sufficient strength and stability to withstand the forces of released contents in the event of catastrophic bladder failure. In addition, secondary containment systems that are open to the environment shall be designed and maintained with sufficient capacity to accommodate precipitation and storm water inputs from a 25-year, 24-hour storm event.
90.	Cannabis cultivators shall not cause or allow any overflow from off-stream water storage facilities that are closed to the environment (e.g., tanks and bladders) if the off-stream facilities are served by a diversion from surface water or groundwater. Cannabis cultivators shall regularly inspect for and repair all leaks of the diversion and storage system.
91.	Water storage tanks, bladders, and other off-stream water storage facilities that are closed to the environment shall not be located in a riparian setback or next to equipment that generates heat. Cannabis cultivators shall place water storage tanks, bladders, and other off-stream water storage facilities that are closed to the environment in areas that allow for ease of installation, access, maintenance, and minimize road development.
92.	Cannabis cultivators shall install vertical and horizontal tanks according to manufacturer's specifications and shall place tanks on properly compacted soil that is free of rocks and sharp objects and capable of bearing the weight of the tank and its maximum contents with minimal settlement. Tanks shall not be located in areas of slope instability. Cannabis cultivators shall install water storage tanks capable of containing more than 8,000 gallons only on a reinforced concrete pad providing adequate support and enough space to attach a tank restraint system (anchor using the molded-in tie down lugs with moderate tension, being careful not to over-tighten) per the recommendations of a qualified professional.
93.	To prevent rupture or overflow and runoff, cannabis cultivators shall only use water storage tanks and bladders equipped with a float valve, or equivalent device, to shut off diversion when storage systems are full. Cannabis cultivators shall install any other measures necessary to prevent overflow of storage systems to prevent runoff and the diversion of more water than can be used and/or stored.
94.	Cannabis cultivators shall ensure that all vents and other openings on water storage tanks are designed to prevent the entry and/or entrapment of wildlife.

95.	Cannabis cultivators shall retain, for a minimum of five years, appropriate documentation for any hauled water[18] used for cannabis cultivation. Documentation for hauled water shall include, for each delivery, all of the following: 1. A receipt that shows the date of delivery and the name, address, license plate number, and license plate issuing state for the water hauler, 2. A copy of the Water Hauler's License (California Health and Safety Code section 111120), 3. A copy of proof of the Water Hauler's water right, groundwater well, or other authorization to take water, and the location of the water source, and 4. The quantity of water delivered or picked up from a water source, in gallons. Documentation shall be made available, upon request, to Water Boards or CDFW staff and any other authorized representatives of the Water Boards or CDFW.
Water Conservation and Use	
96.	Cannabis cultivators shall regularly inspect their entire water delivery system for leaks and immediately repair any leaky faucets, pipes, connectors, or other leaks.
97.	Cannabis cultivators shall use weed-free mulch in cultivation areas that do not have ground cover to conserve soil moisture and minimize evaporative loss.
98.	Cannabis cultivators shall implement water conserving irrigation methods (e.g., drip or trickle irrigation, micro-spray, or hydroponics).
99.	Cannabis cultivators shall maintain daily records of all water used for irrigation of cannabis. Daily records may be calculated by the use of a measuring device or, if known, by calculating the irrigation system rates and duration of time watered (e.g., irrigating for one hour twice per day using 50 half-gallon drips equates to 50 gallons per day (1*2*50*0.5) of water used for irrigation). Cannabis cultivators shall retain, for a minimum of 5 years, irrigation records at the cannabis cultivation site and shall make all irrigation records available for review by the Water Boards, CDFW and any other authorized representatives of the Water Boards or CDFW.
Irrigation Runoff	
100.	Cannabis cultivators shall regularly inspect for leaks in mainlines[19], laterals[20], in irrigation connections, sprinkler heads, or at the ends of drip tape and feeder lines and immediately repair any leaks found upon detection.
101.	The irrigation system shall be designed to include redundancy (e.g., safety valves) in the event that leaks occur, so that waste of water and runoff is prevented and minimized.
102.	Cannabis cultivators shall regularly replace worn, outdated, or inefficient irrigation system components and equipment to ensure a properly functioning, leak-free irrigation system at

[18] Water hauler means any person who hauls water in bulk by any means of transportation.
[19] Mainlines are pipes that go from the water source to the control valves.
[20] Laterals are the pipes between the control valve and the sprinkler heads.

	all times.
103.	Cannabis cultivators shall minimize irrigation deep percolation[21] by applying irrigation water at agronomic rates.
Fertilizers, Pesticides, and Petroleum Products	
104.	Cannabis cultivators shall not mix, prepare, over apply, or dispose of agricultural chemicals/products (e.g., fertilizers, pesticides[22], and other chemicals as defined in the applicable water quality control plan) in any location where they could enter the riparian setback or waters of the state. The use of agricultural chemicals inconsistently with product labeling, storage instructions, or DPR requirements for pesticide applications[23] is prohibited. Disposal of unused product and containers shall be consistent with labels.
105.	Cannabis cultivators shall keep and use absorbent materials designated for spill containment and spill cleanup equipment on-site for use in an accidental spill of fertilizers, petroleum products, hazardous materials, and other substances which may degrade waters of the state. The cannabis cultivator shall immediately notify the California Office of Emergency Services at 1-800-852-7550 and immediately initiate cleanup activities for all spills that could enter a waterbody or degrade groundwater.
106.	Cannabis cultivators shall establish and use a separate storage area for pesticides, and fertilizers, and another storage area for petroleum or other liquid chemicals (including diesel, gasoline, oils, etc.). All such storage areas shall comply with the riparian setback Requirements, be in a secured location in compliance with label instructions, outside of areas of known slope instability, and be protected from accidental ignition, weather, and wildlife. All storage areas shall have appropriate secondary containment structures, as necessary, to protect water quality and prevent spillage, mixing, discharge, or seepage.

[21] Deep percolation occurs when excess irrigation water is applied and percolates below the plant root zone.

[22] Pesticide is defined as follows:

- Per California Code of Regulations Title 3. Division 6. Section 6000:

  (a) Any substance or mixture of substances that is a pesticide as defined in the Food and Agricultural Code and includes mixtures and dilutions of pesticides;

  (b) As the term is used in Section 12995 of the California Food and Agricultural Code, includes any substance or product that the user intends to be used for the pesticidal poison purposes specified in Sections 12753 and 12758 of the Food and Agricultural Code.

- Per California Food and Agricultural Code section 12753(b), the term "Pesticide" includes any of the following: Any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined in Section 12754.5, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever.
- In laymen's terms: "pesticide" includes: rodenticides, herbicides, insecticides, fungicides, and disinfectants.

[23] More information on DPR requirements is available at: http://www.cdpr.ca.gov/docs/legbills/laws_regulations.htm, http://www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2017/2017atch/attach0301.pdf, and http://www.cdpr.ca.gov/docs/cannabis/index.htm

	Storage tanks and containers must be of suitable material and construction to be compatible with the substances stored and conditions of storage, such as pressure and temperature.
107.	Throughout the wet season, Cannabis Cultivators shall ensure that any temporary storage areas have a permanent cover and side-wind protection or be covered during non-working days and prior to and during rain events.
108.	Cannabis cultivators shall only use hazardous materials[24] in a manner consistent with the product's label.
109.	Cannabis cultivators shall only keep hazardous materials in their original containers with labels intact, and shall store hazardous materials to prevent exposure to sunlight, excessive heat, and precipitation. Cannabis cultivators shall provide secondary containment for hazardous materials to prevent possible exposure to the environment. Disposal of unused hazardous materials and containers shall be consistent with the label.
110.	Cannabis cultivators shall only mix, prepare, apply, or load hazardous materials outside of the riparian setbacks.
111.	Cannabis cultivators shall not apply agricultural chemicals within 48 hours of a predicted rainfall event of 0.25 inches or greater with a probability greater than 50-percent. In the Lake Tahoe Hydrologic Unit, cannabis cultivators shall not apply agricultural chemicals within 48 hours of any weather pattern that is forecast to have a 30 percent or greater chance of precipitation greater than 0.1 inch per 24 hours. This requirement may be updated based on amendments to the Lahontan Regional Water Board construction storm water general order.
Fertilizers and Soils	
112.	To minimize infiltration and water quality degradation, Cannabis cultivators shall irrigate and apply fertilizer to consistent with the crop need (i.e., agronomic rate).
113.	When used, cannabis cultivators shall apply nitrogen to cannabis cultivation areas consistent with crop need (i.e., agronomic rate). Cannabis cultivators shall not apply nitrogen at a rate that may result in a discharge to surface water or groundwater that causes or contributes to exceedance of water quality objectives, and no greater than 319 pounds/acre/year unless plant tissue analysis performed by a qualified individual demonstrates the need for additional nitrogen application. The analysis shall be performed by an agricultural laboratory certified by the State Water Board's Environmental Laboratory Accreditation Program.
114.	Cannabis cultivators shall ensure that potting soil or soil amendments, when not in use, are placed and stored with covers, when needed, to protect from rainfall and erosion, to prevent discharge to waters of the state, and to minimize leaching of waste constituents into

[24] A hazardous material is any item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.

	groundwater.
Pesticides and Herbicides	
115.	Cannabis cultivators shall not apply restricted materials, including restricted pesticides, or allow restricted materials to be stored at the cannabis cultivation site.
116.	Cannabis cultivators shall implement integrated pest management strategies where possible to reduce the need and use of pesticides and the potential for discharges to waters of the state.[25]
Petroleum Products and Other Chemicals	
117.	Cannabis cultivators shall only refuel vehicles or equipment outside of riparian setbacks. Cannabis cultivators shall inspect all equipment using oil, hydraulic fluid, or petroleum products for leaks prior to use and shall monitor equipment for leakage. Stationary equipment (e.g., motors, pumps, generators, etc.) and vehicles not in use shall be located outside of riparian setbacks. Spill and containment equipment (e.g., oil spill booms, sorbent pads, etc.) shall be stored onsite at all locations where equipment is used or staged.
118.	Cannabis cultivators shall store petroleum, petroleum products, and similar fluids in a manner that provides chemical compatibility, provides secondary containment, and protection from accidental ignition, the sun, wind, and rain.
119.	Use of an underground storage tank(s) for the storage of petroleum products is allowed if compliant with all applicable federal, state, and local laws; regulations; and permitting requirements.
Cultivation-Related Waste	
120.	Cannabis cultivators shall contain and regularly remove all debris and trash associated with cannabis cultivation activities from the cannabis cultivation site. Cannabis cultivators shall only dispose of debris and trash at an authorized landfill or other disposal site in compliance with state and local laws, ordinances, and regulations. Cannabis cultivators shall not allow litter, plastic, or similar debris to enter the riparian setback or waters of the state. Cannabis plant material may be disposed of onsite in compliance with any applicable CDFA license conditions.
121.	Cannabis cultivators shall only dispose or reuse spent growth medium (e.g., soil and other organic media) in a manner that prevents discharge of soil and residual nutrients and chemicals to the riparian setback or waters of the state. Spent growth medium shall be covered with plastic sheeting or stored in water tight dumpsters prior to proper disposal or reuse. Spent growth medium should be disposed of at an authorized landfill or other disposal site in compliance with state and local laws, ordinances, and regulations. Proper reuse of spent growth medium may include incorporation into garden beds or spreading on a stable surface and revegetating the surface with native plants. Cannabis cultivators shall use erosion control techniques, as needed, for any reused or stored spent growth medium

[25] https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles

	to prevent polluted runoff.
Refuse and Domestic Waste	
122.	Cannabis cultivators shall ensure that debris, soil, silt, bark, slash, sawdust, rubbish, creosote-treated wood, raw cement and concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to any life stage of fish and wildlife or their habitat (includes food sources) does not contaminate soil or enter the riparian setback or waters of the state.
123.	Cannabis cultivators shall not dispose of domestic wastewater unless it meets applicable local agency and/or Regional Water Board requirements. Cannabis cultivators shall ensure that human or animal waste is disposed of properly. Cannabis cultivators shall ensure onsite wastewater treatment systems (e.g., septic system) are permitted by the local agency or applicable Regional Water Board.
124.	If used, chemical toilets or holding tanks shall be maintained in a manner appropriate for the frequency and conditions of usage, sited in stable locations, and comply with the riparian setback Requirements.
Winterization	
125.	Cannabis cultivators shall implement all applicable Erosion Control and Soil Disposal and Spoils Management Requirements in addition to the Winterization Requirements below by the onset of the winter period.
126.	Cannabis cultivators shall block or otherwise close any temporary access roads to all motorized vehicles no later than the onset of the winter period each year.
127.	Cannabis cultivators shall not operate heavy equipment of any kind at the cannabis cultivation site during the winter period, unless authorized for emergency repairs contained in an enforcement order issued by the State Water Board, Regional Water Board, or other agency having jurisdiction.
128.	Cannabis cultivators shall apply linear sediment controls (e.g., silt fences, wattles, etc.) along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow length[26] at the frequency specified below.

Slope (percent)	Sheet Flow Length Not to Exceed (feet)
0 – 25	20
25 – 50	15
>50	10

[26] Sheet flow length is the length that shallow, low velocity flow travels across a site.

129.	Cannabis cultivators shall maintain all culverts, drop inlets, trash racks and similar devices to ensure they are not blocked by debris or sediment. The outflow of culverts shall be inspected to ensure erosion is not undermining the culvert. Culverts shall be inspected prior to the onset of fall and winter precipitation and following precipitation events that produce at least 0.5 in/day or 1.0 inch/7 days of precipitation to determine if maintenance or cleaning is required.
130.	Cannabis cultivators shall stabilize all disturbed areas and construction entrances and exits to control erosion and sediment discharges from land disturbance.
131.	Cannabis cultivators shall cover and berm all loose stockpiled construction materials (e.g., soil, spoils, aggregate, etc.) that are not actively (scheduled for use within 48 hours) being used as needed to prevent erosion by storm water. The cannabis cultivator shall have adequate cover and berm materials available onsite if the weather forecast indicates a probability of precipitation.
132.	Cannabis cultivators shall apply erosion repair and control measures to the bare ground (e.g., cultivation area, access paths, etc.) to prevent discharge of sediment to waters of the state.
133.	As part of the winterization plan approval process, the Regional Water Board may require cannabis cultivators to implement additional site-specific erosion and sediment control requirements if the implementation of the Requirements in this section do not adequately protect water quality.

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HUMBOLDT CO. DIVISION
OF ENVIRONMENTAL HEALTH

State of California

Well Completion Report

WCR Form - DWR 188 Submitted 07/21/2017

WCR2017-002584

Owner's Well Number 1 Date Work Began 07/13/2017 Date Work Ended 07/14/2017

Local Permit Agency Humboldt County Department of Health & Human Services - Land Use Program

Secondary Permit Agency Permit Number 16/17-0682 Permit Date 01/25/2017

Well Owner (must remain confidential pursuant to Water Code 13752)

Name [redacted]

Mailing Address [redacted]

City [redacted] State [redacted] Zip [redacted]

Planned Use and Activity

Activity New Well

Planned Use Water Supply Domestic

Well Location

Address [redacted] APN 316-015-001

City Willow Creek Zip 95573 County Humboldt Township

Range

Section

Latitude Deg. Min. Sec. N Longitude Deg. Min. Sec. W Baseline Meridian

Dec. Lat. Dec. Long. Ground Surface Elevation

Vertical Datum Horizontal Datum WGS84 Elevation Accuracy

Location Accuracy Location Determination Method Elevation Determination Method

Borehole Information

Orientation Vertical Specify

Drilling Method Downhole Hammer Drilling Fluid Air

Total Depth of Boring 310 Feet

Total Depth of Completed Well 295 Feet

Water Level and Yield of Completed Well

Depth to first water 110 (Feet below surface)

Depth to Static Water Level 107 (Feet) Date Measured 07/14/2017

Estimated Yield* 25 (GPM) Test Type Air Lift

Test Length 4 (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	40	Brown Clay
40	290	Black Shale
290	310	Green Serpentine

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specifications	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	20	Blank	Low Carbon Steel	N/A	0.188	8.625			
2	0	95	Blank	PVC	N/A	0.291	4.95			
2	95	115	Screen	PVC	N/A	0.291	4.95	Milled Slots	0.035	
2	115	155	Blank	PVC	N/A	0.291	4.95			
2	155	175	Screen	PVC	N/A	0.291	4.95	Milled Slots	0.035	
2	175	195	Blank	PVC	N/A	0.291	4.95			
2	195	215	Screen	PVC	N/A	0.291	4.95	Milled Slots	0.035	
2	215	235	Blank	PVC	N/A	0.291	4.95			
2	235	255	Screen	PVC	N/A	0.291	4.95	Milled Slots	0.035	
2	255	275	Blank	PVC	N/A	0.291	4.95			
2	275	295	Screen	PVC	N/A	0.291	4.95	Milled Slots	0.035	

ENTERED

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2017

Primary Owner: JAKE MCCARTY
Statement Number: S026959
Date Submitted: 05/11/2018

1. Water is used under	Riparian Claim
2. Year diversion commenced	2016

3. Purpose of Use	
Domestic	4 people
Irrigation	

Irrigated Crops			
	Multiple Crops	**Area Irrigated (Acres)**	**Primary Irrigation Method**
Other	No	cannabis	Low-volume (example: micro-sprinkler, drip)

4. Changes in Method of Diversion

Special Use Categories	
C1. Are you using any water diverted under this right for the cultivation of cannabis?	Yes
C2. Total amount of water used under this water right for cannabis cultivation	0.356605 acre-feet
C3. Total irrigated acreage of cannabis cultivated	15395 square feet
C4. Amount of cannabis cultivated by lighting condition type	
Outdoor Cultivated Canopy Size	10895 square feet
Outdoor Total Number of Plants Harvested	200
Outdoor Number of Harvests	1
Indoor Cultivated Canopy Size	
Indoor Total Number of Plants Harvested	
Indoor Number of Harvests	
Mixed Light Cultivated Canopy Size	4500 square feet
Mixed Light Total Number of Plants Harvested	350
Mixed Light Number of Harvests	2
C5. Irrigation methods that are used to cultivate cannabis	Drip/micro spray irrigation

C6. Is your cultivation of cannabis a commercial cannabis activity?	Yes

5-6. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used				
Month	**Rate of diversion (GPD)**	**Amount directly diverted (Acre-Feet)**	**Amount diverted or collected to storage (Acre-Feet)**	**Amount beneficially used (Acre-Feet)**
January	0	0	7672	0
February	0	0	7672	0
March	0	0	7672	0
April	460	0.038668	0	0.038668
May	520	0.054319	0	0.758015
June	660	0.116925	0	0.131502
July	780	0.147613	0	0.147613
August	785	0.155286	0	0.173699
September	660	0.139634	0	0.139634
October	0	0.1203	0	0.1203
November	0	0	7672	0
December	0	0	7672	0
Total		0.772745	38360	1.509431
Type of Diversion	Both Direct Diversion and Diversion to Storage			
Comments				

Water Transfers	
6d. Water transfered	No
6e. Quantity transfered (Acre-Feet)	
6f. Dates which transfer occurred	/ to /
6g. Transfer approved by	

Water Supply Contracts	
6h. Water supply contract	No
6i. Contract with	
6j. Other provider	
6k. Contract number	
6l. Source from which contract water was diverted	
6m. Point of diversion same as identified water right	
6n. Amount (Acre-Feet) authorized to divert under this contract	

6o. Amount (Acre-Feet) authorized to be diverted in 2017	
6p. Amount (Acre-Feet) projected for 2018	
6q. Exchange or settlement of prior rights	
6r. All monthly reported diversion claimed under the prior rights	
6s. Amount (Acre-Feet) of reported diversion solely under contract	

7. Water Diversion Measurement	
a. Required to measure as of the date this report is submitted	No
b. Is diversion measured?	No
c. An alternative compliance plan was submitted to the division of water rights on	
d. A request for additional time was submitted to the division of water rights on	

8. Conservation of Water		
a.	Are you now employing water conservation efforts?	Yes
	Describe any water conservation efforts you have initiated	drip irrigation
b.	Amount of water conserved	
	I have data to support the above surface water use reductions due to conservation efforts.	No

9. Water Quality and Wastewater Reclamation		
a.	Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b.	Amount of reduced diversion	
	Type of substitute water supply	
	Amount of substitute water supply used	
	I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjuctive Use of Surface Water and Groundwater		
a.	Are you now using groundwater in lieu of surface water?	Yes
b.	Amount of groundwater used	323000 Gallons
	I have data to support the above surface water use reductions due to the use of groundwater.	No

Additional Remarks
Applicant will be using groundwater well

Attachments		
File Name	**Description**	**Size**
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	kelly
Last Name	hollreiser
Relation to Water Right	Other: consultant
The information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2017

Primary Owner: JAKE MCCARTY
Statement Number: S026961
Date Submitted: 05/11/2018

1. Water is used under	Riparian Claim
2. Year diversion commenced	2016

3. Purpose of Use	
Domestic	4 people
Irrigation	

Irrigated Crops			
	Multiple Crops	**Area Irrigated (Acres)**	**Primary Irrigation Method**
Other	No	cannabis	Low-volume (example: micro-sprinkler, drip)

4. Changes in Method of Diversion

Special Use Categories	
C1. Are you using any water diverted under this right for the cultivation of cannabis?	Yes
C2. Total amount of water used under this water right for cannabis cultivation	0.379928 acre-feet
C3. Total irrigated acreage of cannabis cultivated	15395 square feet
C4. Amount of cannabis cultivated by lighting condition type	
Outdoor Cultivated Canopy Size	10895 square feet
Outdoor Total Number of Plants Harvested	200
Outdoor Number of Harvests	1
Indoor Cultivated Canopy Size	
Indoor Total Number of Plants Harvested	
Indoor Number of Harvests	
Mixed Light Cultivated Canopy Size	4500 square feet
Mixed Light Total Number of Plants Harvested	350
Mixed Light Number of Harvests	2
C5. Irrigation methods that are used to cultivate cannabis	Drip/micro spray irrigation

C6. Is your cultivation of cannabis a commercial cannabis activity?	Yes

5-6. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used				
Month	**Rate of diversion (GPD)**	**Amount directly diverted (Acre-Feet)**	**Amount diverted or collected to storage (Acre-Feet)**	**Amount beneficially used (Acre-Feet)**
January	0	0	0.007672	0
February	0	0	0.007672	0
March	0	0	0.007672	0
April	460	0.038668	0	0.038668
May	520	0.032837	0	0.032837
June	660	0.102347	0	0.102347
July	780	0.147613	0	0.147613
August	785	0.155286	0	0.155286
September	660	0.139634	0	0.139634
October	0	0.1203	0	0.1203
November	0	0	0.007672	0
December	0	0	0.007672	0
Total		0.736685	0.03836	0.736685
Type of Diversion	Both Direct Diversion and Diversion to Storage			
Comments				

Water Transfers	
6d. Water transfered	No
6e. Quantity transfered (Acre-Feet)	
6f. Dates which transfer occurred	/ to /
6g. Transfer approved by	

Water Supply Contracts	
6h. Water supply contract	No
6i. Contract with	
6j. Other provider	
6k. Contract number	
6l. Source from which contract water was diverted	
6m. Point of diversion same as identified water right	
6n. Amount (Acre-Feet) authorized to divert under this contract	

6o. Amount (Acre-Feet) authorized to be diverted in 2017	
6p. Amount (Acre-Feet) projected for 2018	
6q. Exchange or settlement of prior rights	
6r. All monthly reported diversion claimed under the prior rights	
6s. Amount (Acre-Feet) of reported diversion solely under contract	

7. Water Diversion Measurement	
a. Required to measure as of the date this report is submitted	No
b. Is diversion measured?	No
c. An alternative compliance plan was submitted to the division of water rights on	
d. A request for additional time was submitted to the division of water rights on	

8. Conservation of Water		
a.	Are you now employing water conservation efforts?	Yes
	Describe any water conservation efforts you have initiated	Groundwater well
b.	Amount of water conserved	
	I have data to support the above surface water use reductions due to conservation efforts.	No

9. Water Quality and Wastewater Reclamation		
a.	Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b.	Amount of reduced diversion	
	Type of substitute water supply	
	Amount of substitute water supply used	
	I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjuctive Use of Surface Water and Groundwater		
a.	Are you now using groundwater in lieu of surface water?	Yes
b.	Amount of groundwater used	323000 Gallons
	I have data to support the above surface water use reductions due to the use of groundwater.	No

Additional Remarks
now using groundwater well.

Attachments		
File Name	**Description**	**Size**
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	kelly
Last Name	hollreiser
Relation to Water Right	Other: consultant
The information in the report is true to the best of his/her knowledge and belief	Yes

Biological Resource Assessment for APN 316-015-006

June 2019

Prepared For:

Ryan Simas

Prepared By:

TransTerra Consulting
INTEGRATED ENVIRONMENTAL SERVICES

Introduction

This Biological Resource Assessment was prepared to provide data concerning the type and extent of biological resources under the jurisdiction of the California Department of Fish and Wildlife (CDFW) and US Fish and Wildlife Service (USFWS) that are currently or potentially present at the project location. The project includes commercial cannabis cultivation and associated activities. If required after agency review of the preliminary habitat assessment, protocol level surveys will be completed per recommendations by the Final Environmental Impact Report (FEIR) amendments to the Humboldt County Code Regulating Commercial Cannabis Activities. [1]

Environmental Setting

Project Location

The property is located off Friday Ridge Road in Willow Creek of Humboldt County, California (Section 26, T5N, R4E). Aspect is primarily northeast and southwest facing, 155-acre parcel within the U.S. Geological Survey's (USGS) Grouse Mountain 7.5-minute quadrangle map. Elevation is approximately 5200-5300 feet above sea level. Property is located in both the South Fork Trinity Watershed and Redwood Creek Watershed (bisected by Friday Ridge Road. The regional climate is Mediterranean in nature with warm summers and cool winters.

Two (2) soil types are mapped in the project areas on the Web Soil Survey.[2] The property area is primarily composed of Laketwin-Madbuttes (690) complex and Deadman-Rogue (922) association. These soils are not considered hydric and are on deep, well drained soils that formed in colluvium and residuum derived from schist, diorite, and/or granite.

The Laketwin series consists of very deep, well drained soils formed in residuum and colluvium derived from metamorphic rocks. These soils occur on mountain summits and upper mountain slopes with slopes of 9 to 50 percent. They are on convex slope positions at elevations of 992 to 1626 m. Laketwin has 10 to 18 percent clay and 35-55 percent gravel and channers rock fragments under the particle size control section. The mean annual precipitation of this series is 2540 mm and the mean annual temperature is 7 degrees C.

The Madbuttes series consists of very deep, well drained soils formed in residuum and colluvium derived from schist. These soils occur on mountain summits and upper mountain slopes with slopes of 9 to 50 percent. They are on convex slope positions at elevations of 992 to 1646 meters. Madbuttes particle size control section is comprised of 25 to 35 percent clay and 5 to 35 percent

[1] Final Environmental Impact Report :Amendments to the Humboldt County Code Regulating Commercial Cannabis Activities. January 2018. Prepared by Ascent Environmental. (Accessed via https://humboldtgov.org/DocumentCenter/View/62689/Humboldt-County-Cannabis-Program-Final-EIR-60mb-PDF)

[2] Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. (Accessed via https://websoilsurvey.sc.egov.usda.gov/.)

rock fragments. The mean annual precipitation of this series is 2540 mm and the mean annual temperature is 7 degrees C.

The Deadman series consists of deep, well or somewhat excessively drained soils formed in material weathered from dioritic rock. Deadman soils are on broad ridges and mountain sideslopes that have slopes of 20 to 65 percent at elevations of 4,500 to 6,500 ft. The mean annual precipitation of this soil is about 70 in and the mean annual temperature is about 48 degrees F.

The Rogue series consists of deep, somewhat excessively drained soils that formed in colluvium and residuum weathered from granitic rocks. Rogue soils are on broad ridgetops and side slopes of mountains with slopes of 12 to 80 percent and elevations of 3,000 to 6,000 ft. The mean annual precipitation of this series is about 50 in and mean annual temperature is about 43 degrees F.

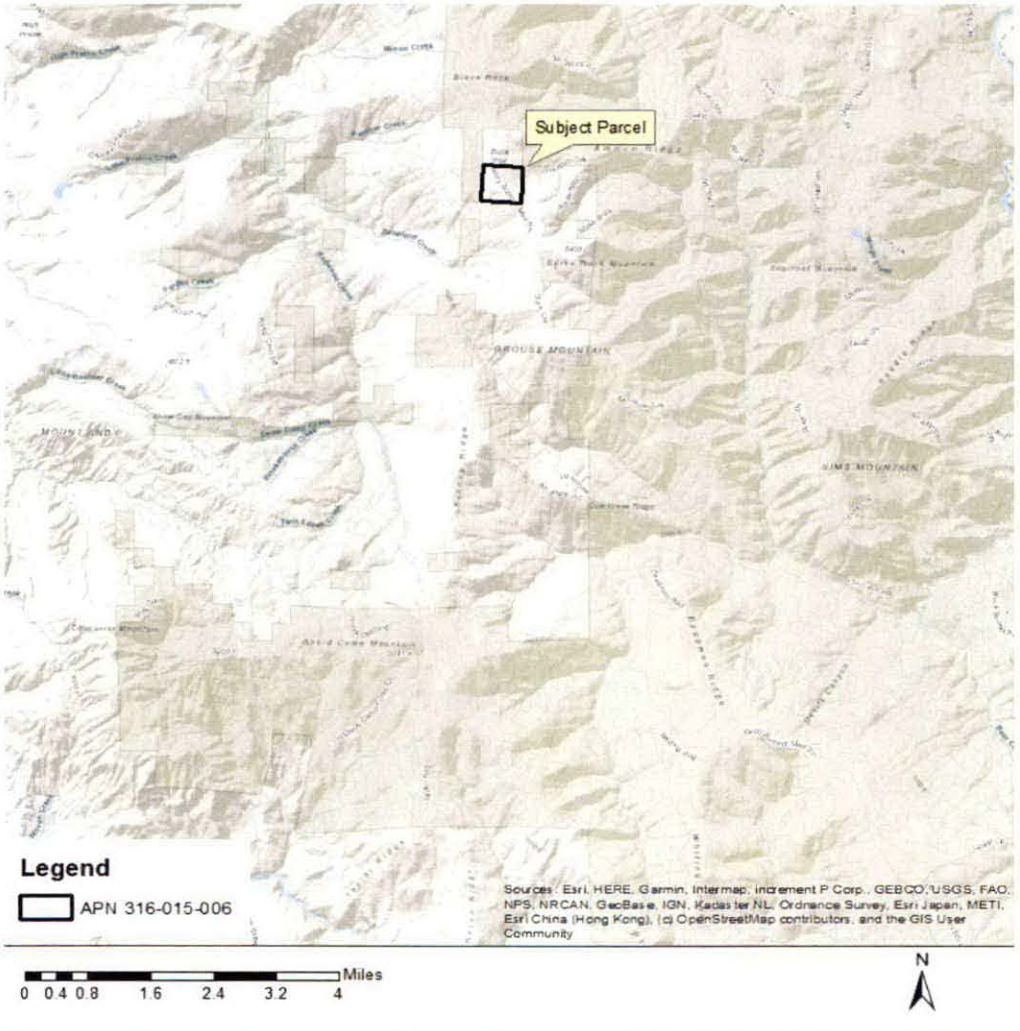

Figure 1. Project Location. Map created using ArcMap 10.6 and Humboldt County GIS layers.

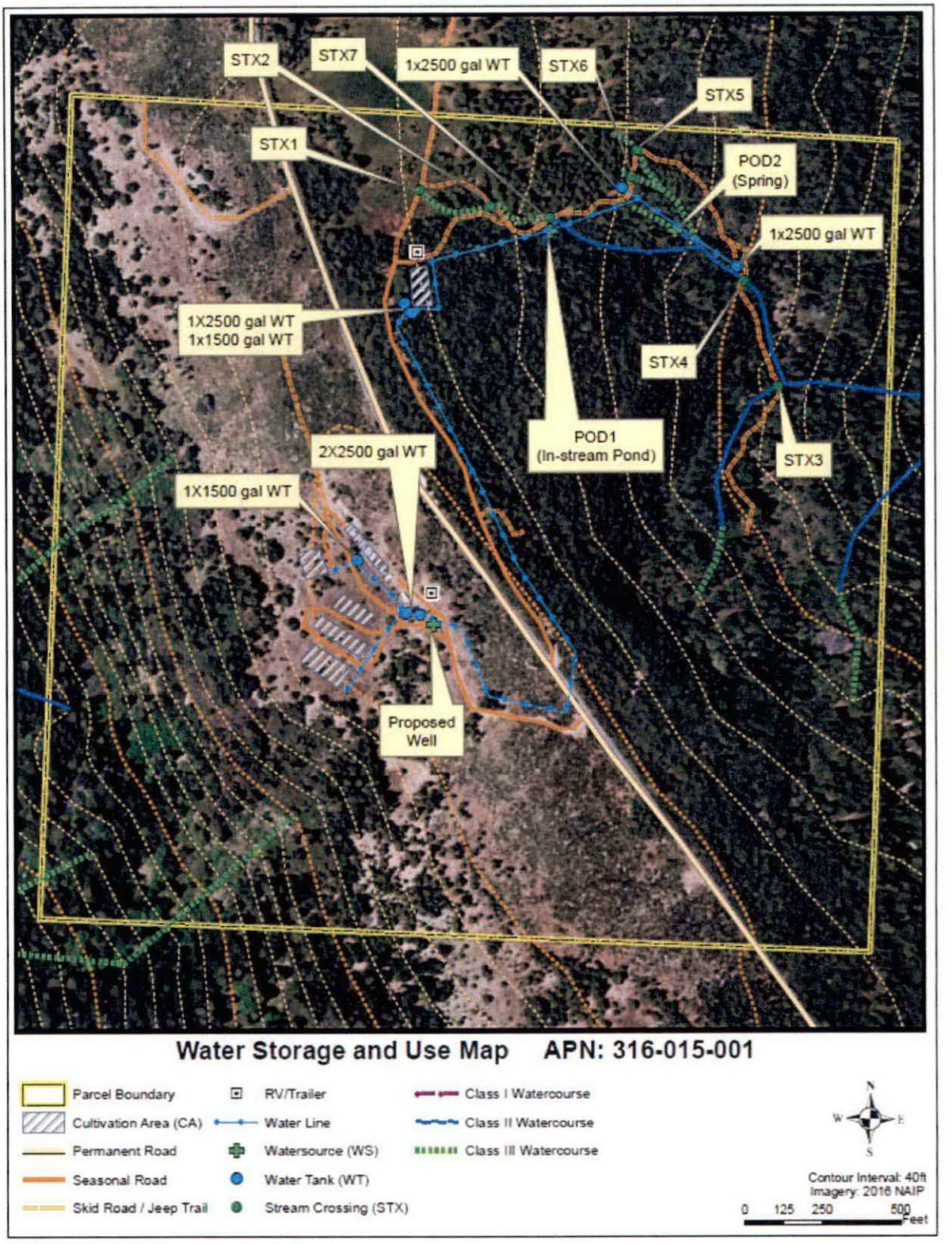

Figure 2. Proposed Project (prepared by Green Road Consulting)

The property is situated between the Old Campbell Creek and Noisy Creek-Redwood Creek watershed which are in the South Fork Trinity watershed and the Redwood Creek (designated cannabis impacted) watershed respectively. Per the Humboldt County GIS layer, there is not Streamside Management Area within 800 ft of the property. The NWI and Humboldt GIS layers do not show wetlands on the property (Figure 3). Field investigations show various Class II watercourses converging towards the western boundary of the property flowing towards Madden Creek and a pond near the western boundary and historic cultivation area. There are Class III watercourses flowing into the Class II watercourses. There are also small sections of Class II and III watercourses flowing towards the southwestern corner of the property and Bradford Creek. (Figure 2)

The project area is mapped as having moderate levels of instability. Historic landslides, potential liquefaction, fault lines and other hazards are not mapped in or adjacent to the parcel on the Humboldt GIS database.

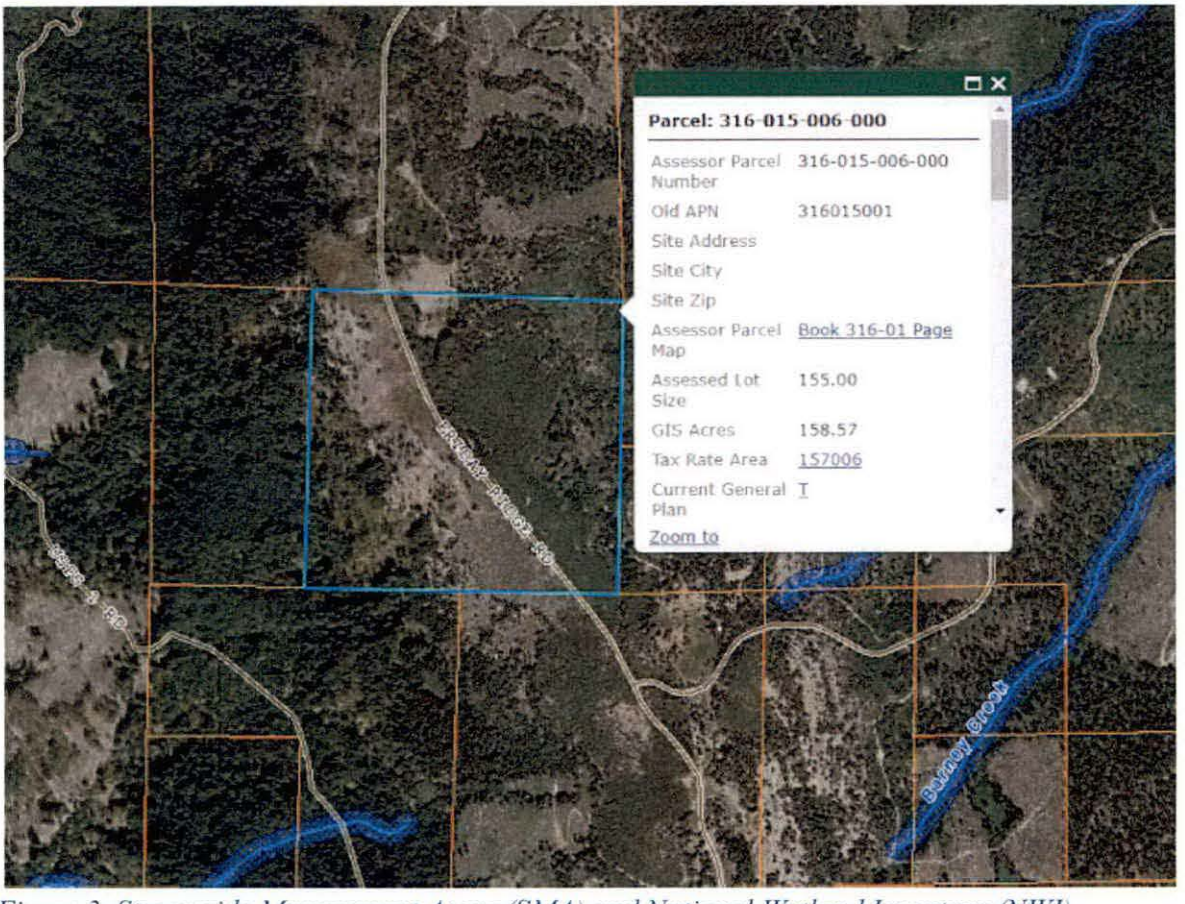

Figure 3. Streamside Management Areas (SMA) and National Wetland Inventory (NWI) wetlands are not mapped in or adjacent to project site[3]

[3] Humboldt County GIS layer. (Accessed via: http://webgis.co.humboldt.ca.us/HCEGIS2.0/)

Methods

The California Natural Diversity Database (CNDDB) RareFind and Spotted Owl Database, and California Native Plant Society (CNPS) databases were used to assess potential rare species. A habitat assessment was conducted by TransTerra Consulting Associate Biologists Megan Nibbelink, Margaux Karp and Adrian Macedo on May 31, 2019. The assessment area included proposed and existing activities associated with the project and did not cover the entire parcel.

The assessment evaluated listed species and species of special concern (SOC). The study area was scanned for wildlife sign including tracks, scat, tree habitat (cavities, nests scrapes or accumulated vegetation) as well as special habitat types and habitats associated with rare plant species and amphibians. The areas of focus were concentrated around cultivation sites, roads and watercourses. The CNDDB 9-Quad area was queried to generate occurrences of special-status animal species.

The assessment was conducted due to mandatory requirements for cannabis permitting, however the timing of the field visit did not coincide with ideal survey seasons based on phenology and life history cycles for all potential species. Full floristic surveys and/or protocol-level surveys were not conducted in the project area. Based on the timing of the survey, all plant species growing within the study area may not have been observed due to varying flowering phenologies and life forms, such as bulbs, biennials, and annuals. Other potentially dominant species within vegetation communities on site may be present during other times of the year. Therefore, the present study is not floristic in nature. Some of the plant species identified in this report are tentative due to the absence of morphological characters, resulting from immature reproductive structures or seasonal desiccation, which is required to make species-level determinations. Species-specific surveys will be conducted as appropriate and are further discussed below.

Results and Discussion

Vegetation

The project area is generally conifer forest with scattered woodlands and open grassland areas. Areas cleared for cultivation host a variety of herbs, notably *Calochortus tolmiei* (Pussy ears), *Rumex acetosella* (Sheep sorel) and *Calyptridium monospermum* (One-seeded pussypaws). On the forested, west-facing slope near the cultivation site, several species of arborescent hardwoods and conifers created an open canopy and consisted of *Calocedrus decurrens* (Incense cedar), *Arctostaphylos sp.* (Manzanita), *Abies concolor* (White fir), *Pseudotsuga menziesii* (Douglas fir), *Pinus jeffreyi* (Jeffrey pine), *Alnus rubra* (Red alder), and *Quercus garryana* (Black oak). The understory contained both herbs and shrubs including *Maianthemum stellatum* (Starry false lily of the valley), *Hydrophyllum occidentale* (California waterleaf), *Pyrola picta* (White veined wintergreen), *Prunus virginiana* (Chokecherry), *Marah oregana* (Coast manroot), *Corylus cornuta* (Hazelnut), *Monardella villosa* (Coyote mint), *Vicia* sp. (Vetch), *Amelanchier alnifolia* (Service-berry), *Ribes menziesii* (Canyon gooseberry), *Berberis aquifolium* (Oregon grape), *Iris sp.* (Iris), *Notholithocarpus densiflorus* (tanoak), *Vancouveria planipetala* (Inside-out flower), and *Oxalis californica* (Redwood sorel). Open grassy areas consist of several grasses, herbs, and

shrubs such as *Ribes sanguineum* (Red currant), *Trillium ovatum* (Western trillium), *Nemophila menziesii* (Baby blue eyes), *Camassia squamash* (Camas), *Delphinium decorum* (Tracy's larkspur), *Dicentra sp.* (Bleeding heart), *Rosa sp.* (Rose), *Chrysolepis chrysophylla* (Chinquapin), and *Ceanothus velutinus* (Tobacco brush). Streamside in the eastern plot were large populations of *Viola sempervirens* (Evergreen violet) and *Trillium albidum* (Giant white trillium). *Sidalcea sp.* (Checkerbloom) leaves were observed however the plants were lacking flowers and could not be identified. Impacts are not expected for the area it occupied.

Wetlands and SMA areas

As stated previously, there are numerous watercourses in the area, as well as natural and manmade wetlands. A jurisdictional wetland delineation was not requested nor conducted for this assessment. The regulatory background for wetlands in Humboldt County is presented below. Stream and wetland work including decommissioning crossings and points of diversion is addressed in the WRPP and LSAA documents for the project.

U.S. Army Corps of Engineers (USACE)

The USACE Regulatory Branch regulates activities that may discharge dredged or fill materials into "waters of the U.S." under Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. This permitting authority applies to all "waters of the U.S." where the material (1) replaces any portion of a "waters of the U.S." with dry land or (2) changes the bottom elevation of any portion of any "waters of the U.S.". These fill materials include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in these waters. The selection of disposal sites for dredged or fill material is done in accordance with guidelines specified in Section 404(b)(1) of the CWA, which were developed by the U.S. Environmental Protection Agency (USEPA).

Regional Water Quality Control Board (RWQCB)

The RWQCB is the primary agency responsible for protecting water quality in California through the regulation of discharges to surface waters under the CWA and the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The RWQCB's jurisdiction extends to all "waters of the State" and to all "waters of the U.S.," including wetlands (isolated and non-isolated).

Section 401 of the CWA provides the RWQCB with the authority to regulate, through a Water Quality Certification, any proposed, federally permitted activity that may affect water quality. Among such activities are discharges of dredged or fill material permitted by the USACE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide certification that there is reasonable assurance an activity with the potential for discharge into navigable waters will not violate water quality standards. Water Quality Certification must be based on findings that the proposed discharge will comply with water quality standards, which contain numeric and narrative objectives found in each of the nine RWQCBs' Basin Plans.

California Department of Fish and Wildlife

The CDFW has jurisdictional authority over wetland resources associated with rivers, streams, and lakes pursuant to the California Fish and Game Code (§§1600–1616). Activities of state and local agencies, as well as public utilities that are project proponents, are regulated by the CDFW under Section 1602 of the California Fish and Game Code.

Because the CDFW includes streamside habitats under its jurisdiction that, under the federal definition, may not qualify as wetlands on a project site, its jurisdiction may be broader than that of the USACE. Riparian forests in California often lie outside the plain of ordinary high water regulated under Section 404 of the CWA, and often do not have all three parameters (wetland hydrology, hydrophytic vegetation, and hydric soils) sufficiently present to be regulated as a wetland.

However, riparian forests are frequently included within CDFW regulatory jurisdiction under Section 1602 of the California Fish and Game Code.

The CDFW jurisdictional limits are not as clearly defined by regulation as those of the USACE. While they closely resemble the limits described by USACE regulations, they include riparian habitat supported by a river, stream, or lake regardless of the presence or absence of hydric and saturated soils conditions. In general, the CDFW extends jurisdiction from the top of a stream bank or to the outer limits of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place within or near a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish and other aquatic plant and/or wildlife species. It also includes watercourses that have a surface or subsurface flow that support or have supported riparian vegetation.

Humboldt County-Streamside Management Area

"Streamside Management Areas" (SMAs) [Section 3432(5) of the Humboldt County 1984 General Plan] are defined in the Humboldt County General Plan (Page G-8) and include a natural resource area along both sides of streams containing the channel and adjacent land. Updates to the SMA guidance for cannabis activities are defined in the Environmental Impact Assessment Biological Resources Section[4].

Project applicants proposing development activities within a SMA or wetland areas are required to include a site-specific biological report prepared consistent with these regulations. The written report prepared by a qualified biologist is subsequently referred to CDFW for review and comment. If required, after agency review of the preliminary habitat assessment, protocol level surveys will be completed per recommendations by the Final Environmental Impact Report

[4] https://humboldtgov.org/DocumentCenter/View/58840/Section-311-Biological-Resources-Revised-DEIRPDF

(FEIR) amendments to the Humboldt County Code Regulating Commercial Cannabis Activities[5].

Additional Laws and Policies

In addition to the above-mentioned policies, numerous other policies exist to protect wetlands, waters and biological resources including the California Environmental Quality Act (CEQA), California Endangered Species Act (CESA) and the Z'berg-Nejedly Forest Practice Act.

Northern Spotted Owl

In 2016, the California Fish and Game Commission approved the listing of the Northern Spotted Owl (*Strix occidentalis caurina*) as Threatened under the California Endangered Species Act. It has been listed as Threatened under the federal Endangered Species Act since 1990. Owl pairs typically nest in broken-top trees, tree cavities, debris accumulations or nests built by other wildlife (abandoned raptor nests or rodent nests). Females generally lay one to two eggs in spring and chicks fledge and leave nests in early fall. Generally older forests with dense canopy closure are preferred for nesting and roosting, however younger stands with similar structure are also utilized. Structural components of high-quality stands include multiple canopy layers, higher species density, larger overstory trees, live trees with deformities and woody debris in the understory. Prey species include flying squirrels, woodrats, rabbits, voles, shrews, gophers, smaller birds, bats and insects. Owls are threatened by Barred Owls, habitat loss, climate change and pathogens. [6]

Northern Spotted Owl was recorded in the CDFW database within 1 mile. Habitat was present on-site for nesting spotted owls due to stand age and structure. The HUM0473 activity center is located approximately 0.69 miles southwest of the project and the most recent positive observations of an owl were made by Mantel in 2007. While the activity centers of HUM0494 and HUM0087 are noted further than 1 mile of the property both contained positive observations within the 1-mile buffer. Critical habitat for NSO is located approximately 1 mile to the northeast.

CNDDB and other Database Results

The CDFW CNDDB, BIOS, Rarefind and CNPS databases were scoped before and after field site visit to determine habitat potential and known occurrences of rare or listed species of concern in or around the project area. Known reference populations near the site were visited to confirm phenology. The following species were observed within the database within 1 miles of the project site.

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[5] Final Environmental Impact Report :Amendments to the Humboldt County Code Regulating Commercial Cannabis Activities. January 2018. Prepared by Ascent Environmental. Accessed via https://humboldtgov.org/DocumentCenter/View/62689/Humboldt-County-Cannabis-Program-Final-EIR60mb-PDF. Accessed [January 2019]

[6] Northern Spotted Owls in California. California Department of Fish and Wildlife (Accessed via https://www.wildlife.ca.gov/Conservation/Birds/Northern-Spotted-Owl

Sedum laxum ssp. *flavidum* (pale yellow stonecrop) categorized as a 4.2 by the CNPS, denoting it a watchlist species. It occupies broadleafed upland forest, chaparral, cismontane woodland, as well as, lower and upper montane coniferous forest. This species is found in serpentine or basalt outcrops around elevations of 455-2000 m.

Erethizon dorsatum (North American porcupine) occupy a wide variety of coniferous and mixed woodland habitat. They are found in these forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges.

Erythronium oregonum (giant fawn lily) is ranked as 2B.2 by CNPS, meaning low populations are present in California, being more prevalent outside the state. It occupies cismontane woodland, meadows, and seeps. This species can be found ranging from 300-1435 m in elevation in openings, while sometimes on serpentine or rocky sites.

Bombus occidentalis (western bumble bee) while once common & widespread, the species has declined precipitously from central CA to southern B.C., perhaps from disease.

Erythronium revolutum (coast fawn lily) is ranked as 2B.2 by CNPS, meaning low populations are present in California, being more prevalent outside the state. It inhabits bogs, fens, broadleafed upland forest, and north coast coniferous forest. It can be found in mesic sites and streambanks around 60-1405 m.

Sidalcea oregana ssp. *eximia* (coast checkerbloom) is categorized as a 1B.2 species by the CNPS, meaning it is eligible for state listing. It inhabits meadows, seeps, north coast coniferous forest, and lower montane coniferous forest. This species can be found near meadows, in gravelly soil at elevations of 5-1805 m. Vegetative *Sidalcea* sp. was observed outside of the project area but was not identifiable. Impacts are not expected for the area it occupied.

Sidalcea malviflora ssp. *patula* (Siskiyou checkerbloom) has a CNPS ranking of 1B.2, meaning they are rare throughout their range. They are found in coastal bluff scrub, coastal prairie, and north coast coniferous forest. They occupy open coastal forest and roadcuts at 5-1255 m. Vegetative *Sidalcea* sp. was observed outside of the project area but was not identifiable. Impacts are not expected for the area it occupied.

The project area contains habitat for various rare or listed species. (See site photos for general habitat types) A complete list of occurrences of rare and species of concern are listed below in Table 1 and Table 2.

Potential Direct and Indirect Impacts

The potential direct, indirect, and cumulative effects of the land clearing, residential development, and cultivation activities include removal of vegetation and canopy cover, disturbance and compaction of soil, alteration of hydrologic regime, sedimentation and erosion, increase in invasive species, and noise, solid and chemical waste pollution, visual impacts, and air quality impacts.

The proposed project will most likely include work on water crossings, which could impact aquatic species. These impacts will be addressed through the Lake and Streambed Alteration Agreement (LSAA) and Water Resource Protection Plan (WRPP).

Tree clearing is not currently proposed, nor is additional grading or expansion of facilities. The ambient conditions from cannabis cultivation are similar to the impacts of historic logging/grazing. The site was well maintained, and solid waste or other hazardous materials were not observed. Generators are shown on the map provided by Green Road Consulting dated February 7, 2019.

Agency personnel from CDFW and USFWS can further analyze the potential impacts and provide technical assistance for any listed species if additional activities are proposed that may result in take of a listed species including Northern Spotted Owl.[7] If required, pre-construction reconnaissance surveys should follow the guidelines set forth in the Humboldt County Cannabis Program EIR, CDFW Survey and Monitoring Protocols and Guidelines[8], USFWS Endangered Species Program[9] and CNPS Botanical Survey Guidelines[10]

Recommendations

Follow all recommendations outlined by existing agency policies for minimizing impacts to natural resources. Impacts from light, noise and chemicals can be addressed in the operations plan and best management practices can be employed to minimize impacts. Additional disturbance, clearing, and road cuts would likely modify existing groundwater, and surface water patterns and could impact water quality and/or hydrophytic species.

Please contact me with any comments or concerns regarding this memorandum or future work required for your project. I can be reached at tami@trans-terra.com or (707) 845-7483. I have staff experience as an attachment to this memorandum as it is often requested by agency personnel reviewing work of this nature. (Appendix A)

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[7] Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelet in Northwestern California: (Accessed via https://www.fws.gov/arcata/es/birds/nso/documents/MAMUNSO%20Harassment%20Guidance%20NW%20CA%202006Jul31.pdf)

[8] California Department of Fish and Wildlife Survey and Monitoring Protocols and Guidelines (Accessed via https://www.wildlife.ca.gov/conservation/survey-protocols)

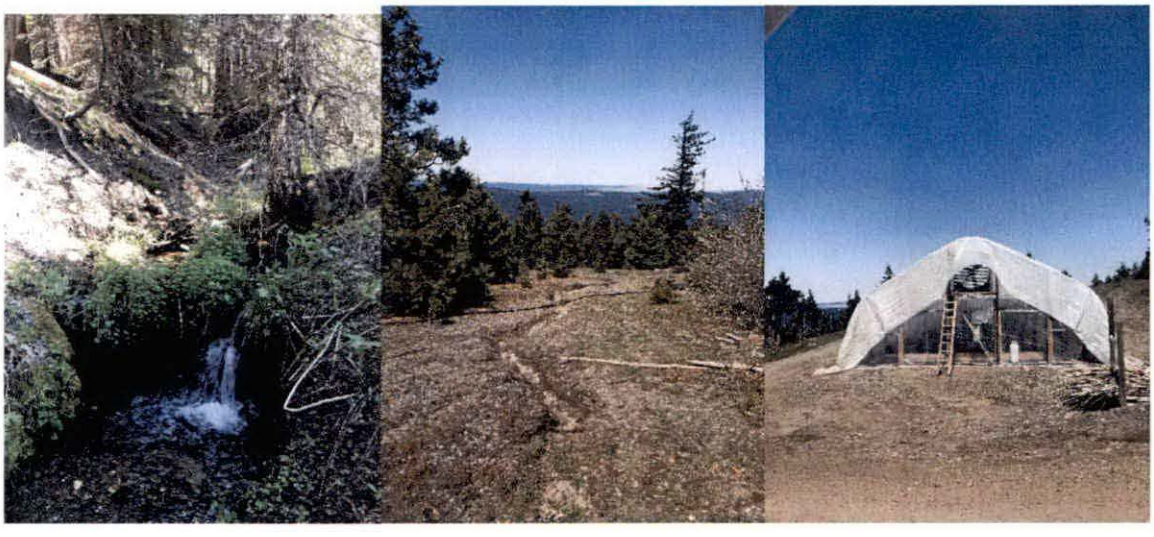
[9] USFWS Arcata Fish and Wildlife Office Endangered Species Program (Accessed via https://www.fws.gov/arcata/es/default.htm)

[10] California Native Plant Society (CNPS) Botanical Survey Guidelines (Accessed via https://cnps.org/wp-content/uploads/2018/03/cnps_survey_guidelines.pdf)

Site Photographs

Wetland on subject parcel (not associated with cultivation area)

Other drainages and riparian areas



Stream where POD was removed, erosion near cultivation, greenhouse and fans.

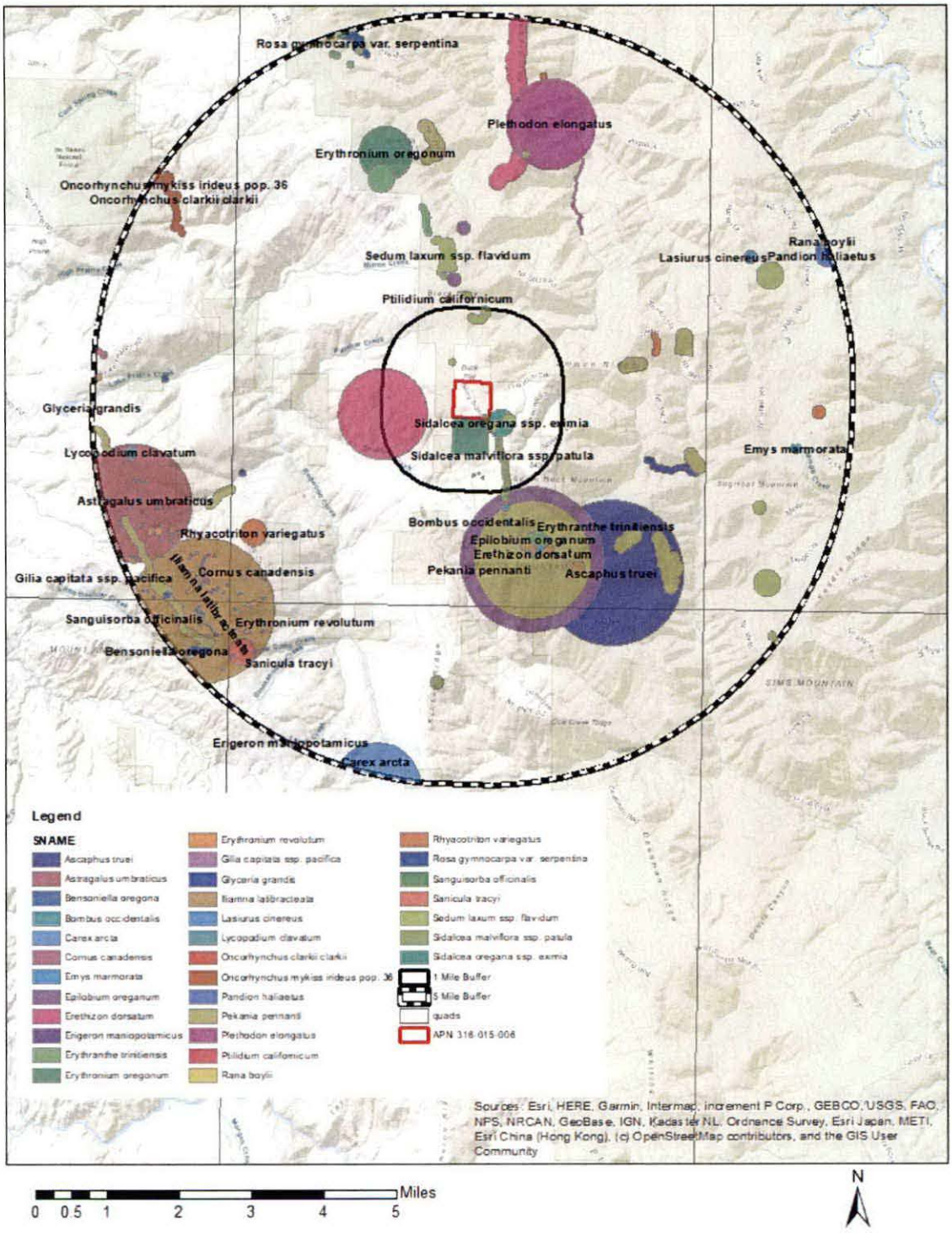


Figure 4 – CNDDB search results of observed rare plant and sensitive animal occurrences within five miles of property.

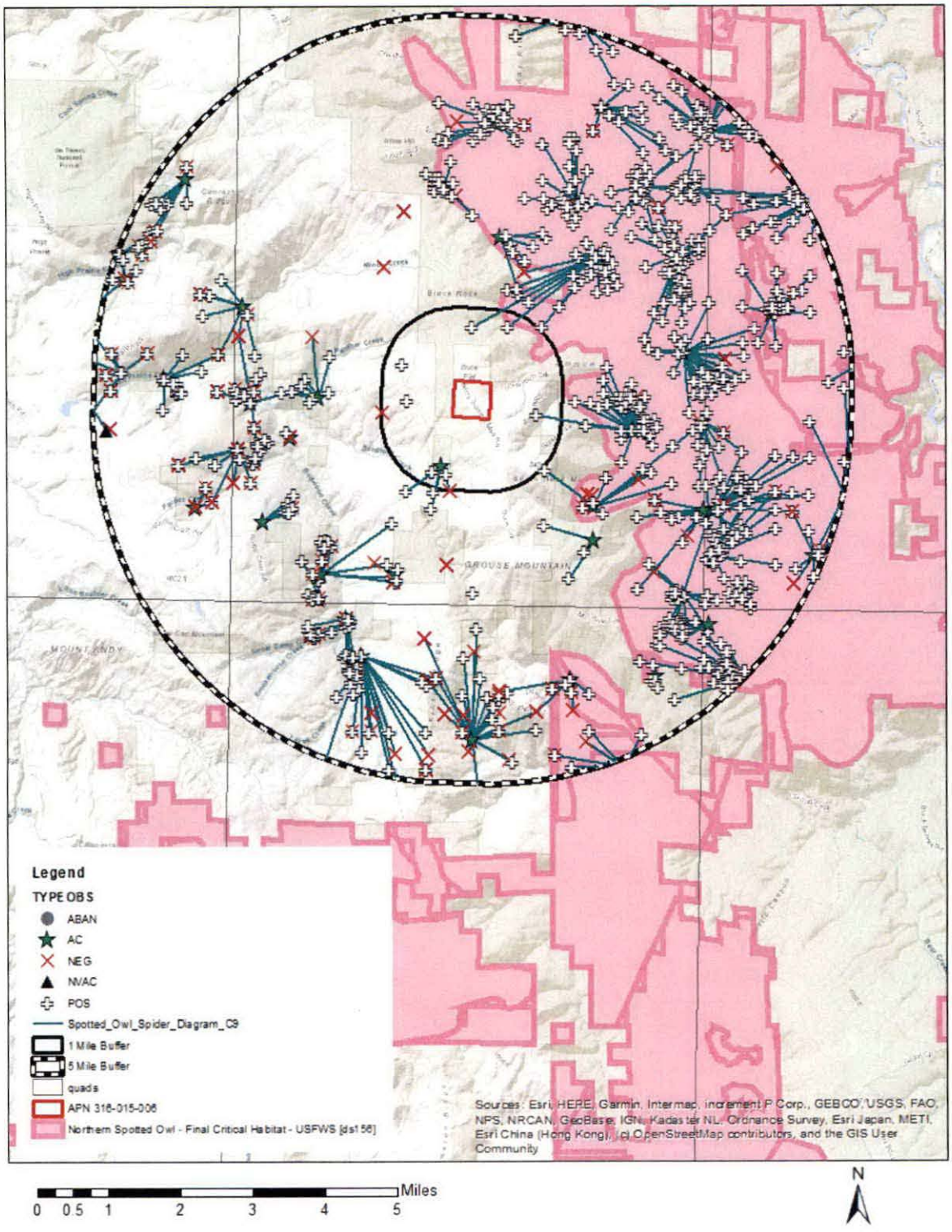


Figure 5. Northern Spotted Owls database entries within 5 miles of property

Table 1-CNDDB nine-quad database results for the Grouse Mountain 7.5' quadrangle (plants listed in CNPS results; C=Candidate Species, E=Endangered, T=Threatened, D=Delisted, N=None).

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat
Accipiter cooperii	Cooper's hawk	N	N	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.
Accipiter gentilis	northern goshawk	N	N	Within, and in vicinity of, coniferous forest. Uses old nests, and maintains alternate sites.	Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.
Ancotrema voyanum	hooded lancetooth	N	N	Occurs mostly in the Shasta-Trinity National forests in the northern half of Trinity County. Associated with limestone substrates, mostly in an elevation range of 168-960 meters.	All known occurrences are near streams or in draws (intermittent stream channel). Needs permanent dampness. Late successional conditions provide suitable habitat conditions.
Aquila chrysaetos	golden eagle	N	N	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.
Arborimus pomo	Sonoma tree vole	N	N	North coast fog belt from Oregon border to Somona County. In Douglas-fir, redwood & montane hardwood-conifer forests.	Feeds almost exclusively on Douglas-fir needles. Will occasionaly take needles of grand fir, hemlock or spruce.
Ardea herodias	great blue heron	N	N	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes.	Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.
Ascaphus truei	Pacific tailed frog	N	N	Occurs in montane hardwood-conifer, redwood, Douglas-fir & ponderosa pine habitats.	Restricted to perennial montane streams. Tadpoles require water below 15 degrees C.
Bombus caliginosus	obscure bumble bee	N	N	Coastal areas from Santa Barabara county to north to Washington state.	Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.
Bombus occidentalis	western bumble bee	N	N	Once common & widespread, species has declined precipitously from central CA to	

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat
				southern B.C., perhaps from disease.	
Corynorhinus townsendii	Townsend's big-eared bat	N	N	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.
Emys marmorata	western pond turtle	N	N	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.
Erethizon dorsatum	North American porcupine	N	N	Forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges.	Wide variety of coniferous and mixed woodland habitat.
Gulo gulo	California wolverine	P T	T	Found in the north coast mountains and the Sierra Nevada. Found in a wide variety of high elevation habitats.	Needs water source. Uses caves, logs, burrows for cover and den area. Hunts in more open areas. Can travel long distances.
Haliaeetus leucocephalus	bald eagle	D	E	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.
Helminthoglypta talmadgei	Trinity shoulderband	N	N	Limestone rockslides, litter in coniferous forests, old mine tailings, and along shaded streams in the Klamath Mountains.	
Klamath/North Coast Fall/Winter Run Chinook Salmon River		N	N		
Lasionycteris noctivagans	silver-haired bat	N	N	Primarily a coastal and montane forest dweller, feeding over streams, ponds & open brushy areas.	Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.
Lasiurus cinereus	hoary bat	N	N	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding.	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.
Margaritifera falcata	western	N	N	Aquatic.	Prefers lower velocity waters.

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat
	pearlshell				
Martes caurina humboldtensis	Humboldt marten	N	E	Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County.	Associated with late-successional coniferous forests, prefer forests with low, overhead cover.
Myotis evotis	long-eared myotis	N	N	Found in all brush, woodland and forest habitats from sea level to about 9000 ft. Prefers coniferous woodlands and forests.	Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.
Myotis thysanodes	fringed myotis	N	N	In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer.	Uses caves, mines, buildings or crevices for maternity colonies and roosts.
Myotis volans	long-legged myotis	N	N	Most common in woodland and forest habitats above 4000 ft. Trees are important day roosts; caves and mines are night roosts.	Nursery colonies usually under bark or in hollow trees, but occasionally in crevices or buildings.
Myotis yumanensis	Yuma myotis	N	N	Optimal habitats are open forests and woodlands with sources of water over which to feed.	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.
Oncorhynchus clarkii clarkii	coast cutthroat trout	N	N	Small coastal streams from the Eel River to the Oregon border.	Small, low gradient coastal streams and estuaries. Needs shaded streams with water temperatures <18C, and small gravel for spawning.
Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	N	N	No. Calif coastal streams south to Middle Fork Eel River. Within range of Klamath Mtns province DPS & No. Calif DPS.	Cool, swift, shallow water & clean loose gravel for spawning, & suitably large pools in which to spend the summer.
Oncorhynchus tshawytscha pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU	N	C E	Spring-run chinook in the Trinity River and the Klamath River upstream of the mouth of the Trinity River.	Major limiting factor for juvenile chinook salmon is temperature, which strongly effects growth and survival.
Pandion haliaetus	osprey	N	N	Ocean shore, bays, freshwater lakes, and larger streams.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.
Pekania pennanti	fisher - West Coast DPS	N	T	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure.	Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.

Scientific Name	Common Name	FESA	CESA	General Habitat	Microhabitat
Plethodon elongatus	Del Norte salamander	N	N	Old-growth associated species with optimum conditions in the mixed conifer/hardwood ancient forest ecosystem.	Cool, moist, stable microclimate, a deep litter layer, closed multi-storied canopy, dominated by large, old trees.
Rana aurora	northern red-legged frog	N	N	Humid forests, woodlands, grasslands, and streamsides in northwestern California, usually near dense riparian cover.	Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.
Rana boylii	foothill yellow-legged frog	N	C T	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.
Rhyacotriton variegatus	southern torrent salamander	N	N	Coastal redwood, Douglas-fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats. Old growth forest.	Cold, well-shaded, permanent streams and seepages, or within splash zone or on moss-covered rocks within trickling water.
Upland Douglas Fir Forest	Upland Douglas Fir Forest	N	N		

Table 2-CNPS nine-quad database results for the Grouse Mountain 7.5' quadrangle

Scientific Name	Common Name	CRPR	Habitat
Allium siskiyouense	Siskiyou onion	4.3	Lower montane coniferous forest, Upper montane coniferous forest
Antennaria suffrutescens	evergreen everlasting	4.3	Lower montane coniferous forest (serpentinite)
Arnica cernua	serpentine arnica	4.3	Lower montane coniferous forest (serpentinite)
Astragalus rattanii var. rattanii	Rattan's milk-vetch	4.3	Chaparral, Cismontane woodland, Lower montane coniferous forest
Astragalus umbraticus	Bald Mountain milk-vetch	2B.3	Cismontane woodland, Lower montane coniferous forest
Bensoniella oregona	bensoniella	1B.1	Bogs and fens, Lower montane coniferous forest (openings), Meadows and seeps
Botrypus virginianus	rattlesnake fern	2B.2	Bogs and fens, Lower montane coniferous forest (mesic), Meadows and seeps, Riparian forest
Buxbaumia viridis	buxbaumia moss	2B.2	Lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest
Carex arcta	northern clustered sedge	2B.2	Bogs and fens, North Coast coniferous forest (mesic)
Carex geyeri	Geyer's sedge	4.2	Great Basin scrub, Lower montane coniferous forest
Carex praticola	northern meadow sedge	2B.2	Meadows and seeps (mesic)
Chrysosplenium glechomifolium	Pacific golden saxifrage	4.3	North Coast coniferous forest, Riparian forest
Collomia diversifolia	serpentine collomia	4.3	Chaparral, Cismontane woodland
Collomia tracyi	Tracy's collomia	4.3	Broadleafed upland forest, Lower montane coniferous forest
Coptis laciniata	Oregon goldthread	4.2	Meadows and seeps, North Coast coniferous forest (streambanks)
Cornus canadensis	bunchberry	2B.2	Bogs and fens, Meadows and seeps, North Coast coniferous forest
Cypripedium californicum	California lady's-slipper	4.2	Bogs and fens, Lower montane coniferous forest
Cypripedium montanum	mountain lady's-slipper	4.2	Broadleafed upland forest, Cismontane woodland, Lower montane coniferous forest, North Coast coniferous forest
Epilobium oreganum	Oregon fireweed	1B.2	Bogs and fens, Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest
Epilobium septentrionale	Humboldt County fuchsia	4.3	Broadleafed upland forest, North Coast coniferous forest
Erigeron maniopotamicus	Mad River fleabane daisy	1B.2	Lower montane coniferous forest, Meadows and seeps (open, dry)

Scientific Name	Common Name	CRPR	Habitat
Erythranthe trinitiensis	pink-margined monkeyflower	1B.3	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest
Erythronium citrinum var. citrinum	lemon-colored fawn lily	4.3	Chaparral, Lower montane coniferous forest
Erythronium oregonum	giant fawn lily	2B.2	Cismontane woodland, Meadows and seeps
Erythronium revolutum	coast fawn lily	2B.2	Bogs and fens, Broadleafed upland forest, North Coast coniferous forest
Eucephalus glabratus	Siskiyou aster	4.3	Lower montane coniferous forest, Upper montane coniferous forest
Eucephalus vialis	wayside aster	1B.2	Lower montane coniferous forest, Upper montane coniferous forest
Gilia capitata ssp. pacifica	Pacific gilia	1B.2	Coastal bluff scrub, Chaparral (openings), Coastal prairie, Valley and foothill grassland
Glyceria grandis	American manna grass	2B.3	Bogs and fens, Meadows and seeps, Marshes and swamps (streambanks and lake margins)
Hosackia yollabolliensis	Yolla Bolly Mtns. bird's-foot trefoil	1B.2	Meadows and seeps, Upper montane coniferous forest (openings)
Iliamna latibracteata	California globe mallow	1B.2	Chaparral (montane), Lower montane coniferous forest, North Coast coniferous forest (mesic), Riparian scrub (streambanks)
Kopsiopsis hookeri	small groundcone	2B.3	North Coast coniferous forest
Lilium kelloggii	Kellogg's lily	4.3	Lower montane coniferous forest, North Coast coniferous forest
Lilium pardalinum ssp. vollmeri	Vollmer's lily	4.3	Bogs and fens, Meadows and seeps (mesic)
Lilium rubescens	redwood lily	4.2	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest
Listera cordata	heart-leaved twayblade	4.2	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest
Lupinus elmeri	South Fork Mountain lupine	1B.2	Lower montane coniferous forest
Lycopodium clavatum	running-pine	4.1	Lower montane coniferous forest (mesic), Marshes and swamps, North Coast coniferous forest (mesic)
Micranthes marshallii	Marshall's saxifrage	4.3	Riparian forest
Microseris borealis	northern microseris	2B.1	Bogs and fens, Lower montane coniferous forest, Meadows and

Scientific Name	Common Name	CRPR	Habitat
			seeps
Mielichhoferia elongata	elongate copper moss	4.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Subalpine coniferous forest
Mitellastra caulescens	leafy-stemmed mitrewort	4.2	Broadleafed upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest
Montia howellii	Howell's montia	2B.2	Meadows and seeps, North Coast coniferous forest, Vernal pools
Oenothera wolfii	Wolf's evening-primrose	1B.1	Coastal bluff scrub, Coastal dunes, Coastal prairie, Lower montane coniferous forest
Packera bolanderi var. bolanderi	seacoast ragwort	2B.2	Coastal scrub, North Coast coniferous forest
Piperia candida	white-flowered rein orchid	1B.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest
Pityopus californicus	California pinefoot	4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest
Platanthera stricta	slender bog-orchid	4.2	Lower montane coniferous forest, Meadows and seeps
Pleuropogon refractus	nodding semaphore grass	4.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest
Ptilidium californicum	Pacific fuzz wort	4.3	Lower montane coniferous forest, Upper montane coniferous forest
Ramalina thrausta	angel's hair lichen	2B.1	North Coast coniferous forest
Ribes laxiflorum	trailing black currant	4.3	North Coast coniferous forest
Rosa gymnocarpa var. serpentina	Gasquet rose	1B.3	Chaparral, Cismontane woodland
Sanguisorba officinalis	great burnet	2B.2	Bogs and fens, Broadleafed upland forest, Meadows and seeps, Marshes and swamps, North Coast coniferous forest, Riparian forest
Sanicula tracyi	Tracy's sanicle	4.2	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest
Sedum laxum ssp. flavidum	pale yellow stonecrop	4.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest
Sidalcea malachroides	maple-leaved checkerbloom	4.2	Broadleafed upland forest, Coastal prairie, Coastal scrub, North

Scientific Name	Common Name	CRPR	Habitat
			Coast coniferous forest, Riparian woodland
Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	1B.2	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest
Sidalcea oregana ssp. eximia	coast checkerbloom	1B.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest
Thermopsis robusta	robust false lupine	1B.2	Broadleafed upland forest, North Coast coniferous forest
Tiarella trifoliata var. trifoliata	trifoliate laceflower	3.2	Lower montane coniferous forest, North Coast coniferous forest
Vaccinium scoparium	little-leaved huckleberry	2B.2	Subalpine coniferous forest (rocky)
Wyethia longicaulis	Humboldt County wyethia	4.3	Broadleafed upland forest, Coastal prairie, Lower montane coniferous forest

APPENDIX A-ALL SPECIES OBSERVED

Animal Species Observed

- *Diving Beetle-Acilius abbreviatus*
- *Diving Beetle-Dytiscus sp.*
- *Giant Stonefly-Pteronarcys*
- *American Robin-Turdus migratorius*
- *Sooty Grouse-Dendragapus fuliginosus*
- *Turkey Vulture-Cathartes aura*
- *Dark-eyed Junco-Junco hyemalis*
- *Stellar's Jay-Cyanocitta stelleri*
- *Western Fence Lizard-Sceloporus occidentalis*

Plant Species Observed

Scientific Name_Jeps93	Scientific Name_Jeps12	Common Name	Origin	WMVC Wetland Indicator 2014
Herb Layer				
Achillea millefolium	*Achillea millefolium*	Common yarrow	native	FACU
Aquilegia sp	*Aquilegia sp*		native	
Artemisia douglasiana	*Artemisia douglasiana*	Mugwort		FACW
Bryoria sp	*Bryoria sp*			
Bryum sp	*Bryum sp*		native	
Calochortus tolmiei	*Calochortus tolmiei*	Pussy ears	native	UPL
Calyptridium monospermum	*Calyptridium monospermum*		native	UPL
Camassia quamash	*Camassia quamash*	Common camas	native	FACW
Delphinium decorum subsp. tracyi	*Delphinium decorum subsp. tracyi*	Tracy's larkspur	native	UPL
Dicentra sp.	*Dicentra sp.*		native	UPL
Fragaria sp	*Fragaria sp*	Strawberry	native	
Gayophytum sp.	*Gayophytum sp.*	Gayophytum		
Heuchera sp.	*Heuchera sp.*		native	
Hydrophyllum occidentale	*Hydrophyllum occidentale*	California waterleaf	native	FACW
Hypogymnia imshaugii	*Hypogymnia imshaugii*	Imshaug's tube lichen		
Iris sp.	*Iris sp.*	Iris	native	
Juncus sp.	*Juncus sp.*	Rush	native	
Letharia sp	*Letharia sp*			

Scientific Name_Jeps93	Scientific Name_Jeps12	Common Name	Origin	WMVC Wetland Indicator 2014
Herb Layer				
Lomatium dissectum var. dissectum	*Lomatium dissectum var. dissectum*		native	UPL
Lupinus sp.	*Lupinus sp.*	Lupine	native	
Marah oreganus	*Marah oregana*	Coast man-root	native	UPL
Monardella villosa subsp. villosa	*Monardella villosa subsp. villosa*	Coyote mint	native	NL
Nemophila menziesii	*Nemophila menziesii*	Baby blue-eyes	native	UPL
Oxalis californica	*Oxalis californica*	Californica wood sorel	native	
Parmelia sp	*Parmelia sp*		native	
Pogonatum sp	*Pogonatum sp*			
Polystichum munitum	*Polystichum munitum*	Western sword fern	native	FACU
Pyrola picta	*Pyrola picta*	White-veined wintergreen	native	UPL
Ramalina sp	*Ramalina sp*			
Ranunculus sp.	*Ranunculus sp.*	Buttercup		
Rubus ursinus	*Rubus ursinus*	California blackberry	native	FACU
Rumex acetosella	*Rumex acetosella*	Sheep sorrel	invasive	FACU
Senecio integerrimus	*Senecio integerrimus*		native	
Sidalcea sp.	*Sidalcea sp.*	checkerbloom		
Smilacina stellata	*Maianthemum stellatum*	Starry false lily of the valley	native	FAC
Sphaerophorous sp	*Sphaerophorous sp*			
Stachys sp.	*Stachys sp.*	Hedge-nettle		
Trillium albidum	*Trillium albidum*	Giant white trillium	native	FACU
Trillium ovatum	*Trillium ovatum*	Western trillium	native	FACU
Trillium sp.	*Trillium sp.*			
Umbilicaria phaea	*Umbilicaria phaea*			
Usnea sp	*Usnea sp*			
Vancouveria planipetala	*Vancouveria planipetala*	Redwood ivy	native	UPL
Vicia sp.	*Vicia sp.*	Vetch		
Viola hallii	*Viola hallii*	Oregon Violet	native	
Viola sempervirens	*Viola sempervirens*	Evergreen violet	native	UPL
Viola sempervirens	*Viola sempervirens*	Evergreen violet	native	UPL
Woodwardia sp.	*Woodwardia sp.*			FACW
Shrub Layer				
Amelanchier alnifolia	*Amelanchier alnifolia*	Service-berry	native	FACU
Arctostaphylos sp.	*Arctostaphylos sp.*	manzanita		
Berberis aquifolium	*Berberis aquifolium*	Tall Oregon-grape	native	UPL
Ceanothus velutinus	*Ceanothus velutinus*	Tobacco brush	native	UPL

Scientific Name_Jeps93	Scientific Name_Jeps12	Common Name	Origin	WMVC Wetland Indicator 2014
Herb Layer				
Cornus nuttallii	*Cornus nuttallii*	Mountain dogwood	native	FACU
Corylus cornuta var. californica	*Corylus cornuta subsp. californica*	California hazelnut	native	FACU
Lithocarpus densiflorus var. densiflorus	*Notholithocarpus densiflorus var. densiflorus*	Tanoak	native	UPL
Ribes menziesii	*Ribes menziesii*	Canyon gooseberry	native	UPL
Ribes sanguineum var. sanguineum	*Ribes sanguineum var. sanguineum*	Red-flowering currant	native	FACU
Rosa sp.	*Rosa sp.*	Rose		
Sambucus sp.	*Sambucus sp.*			
Symphoricarpos albus	*Symphoricarpos albus*	common nowberry		FACU
Vaccinium uliginosum	*Vaccinium uliginosum*	Blueberry	native	
Tree Layer				
Alnus rubra	*Alnus rubra*	Red alder	native	FAC
Abies concolor	*Abies concolor*	White fir	native	UPL
Calocedrus decurrens	*Calocedrus decurrens*	Incense cedar	native	UPL
Chrysolepis chrysophylla	*Chrysolepis chrysophylla*	Giant chinquapin	native	UPL
Pinus jeffreyi	*Pinus jeffreyi*	Jeffrey pine	native	UPL
Prunus virginiana	*Prunus virginiana*	Choke cherry	native	FACU
Pseudotsuga menziesii var. menziesii	*Pseudotsuga menziesii var. menziesii*	Douglas-fir	native	FACU
Quercus garryana	*Quercus garryana*	Oregon oak	native	FACU
Salix sitchensis	*Salix sitchensis*	Sitka willow	native	FACW
Umbellularia californica	*Umbellularia californica*	California-bay	native	FAC

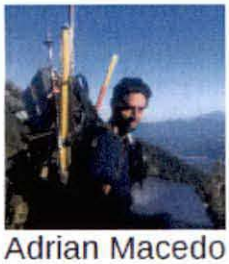
APPENDIX B-QUALIFICATIONS

Tami Camper
Owner-Founder

Tami is the founder of TransTerra Consulting LLC. She obtained a B.S. in Environmental Science from Western Washington University and M.S. in Biology from Humboldt State University. She has worked on publications including a rare plant guide for timberlands of Mendocino County published by MCRCD. She has worked as a professional biologist and planner for 18 years, specializing in wetland/stream surveys, wildlife/vegetation mapping, rare species surveys, biological assessments, impact assessments, mitigation and monitoring plans, CEQA/NEPA and land-use planning. Though she has worked as an independent consultant for most of her career, she has also worked for HSU, Caltrans, Mendocino Redwood Company, Campbell Timberland Management and Streamline Planning (now SHN) to round out her experience. Her desire is to implement her diverse background and passion for the natural world to aid clients through the environmental process. She also is also a member of the Arcata Sunrise Rotary Club, California Native Plant Society, The Wildlife Society, The Society of Wetland Scientists and other local non-profits and professional organizations.

Margaux Karp
Staff Biologist

Margaux received her Bachelor's Degree in Molecular Biology from the California State University of Monterey Bay in 2018. She grew up in Humboldt and is very familiar with the unique geological and political landscape. Her experience encompasses restoration, environmental education, and lab techniques. She strives to utilize her molecular background to share an in depth understanding of the environmental field to promote policy and preservation.



Adrian Macedo
Staff Biologist

Adrian obtained a Bachelors of Science degree in Wildlife and a minor in Botany from Humboldt State University in 2017. He is currently finishing up a Masters of Science in Biological Sciences at Humboldt State. He has worked with the California Department of Fish and Wildlife for the past 5 years, specializing in fish, amphibian, and reptile research and restoration in the high mountain lakes of the Trinity Alps and Marble Mountain wilderness. His extensive resume includes his current phylogenetic work on Coastal Trailed Frog (Ascaphus truei), Mountain Lion (Puma concolor) tracking, bat mist-netting, electrofishing/dive counts, research specimen preparation, PIT tagging of amphibians, invasive species removal, native plant cultivation and landscaping, and much more. In addition, he has worked on six publications in various journals and three conference presentations.

Megan Nibbelink
Staff Botanist

Megan received her Bachelor's degree in Botany from Humboldt State University in 2019. She will be returning to HSU to pursue her Master's degree in Biology with a thesis focusing on fossil plants from the lower Devonian of Québec, Canada. Her previous work experience includes curation and care of an extensive living collection of plants from around the world, state-of-the-art biological lab facility and research equipment maintenance, and education. Currently, she is working on a diversity survey of ancient plants and will be presenting an oral paper at the Botanical Society of America conference this summer.

Guerilla Grow Remediation

APN: 316-015-006

APPS NO: 11503

Prepared by

GREEN ROAD CONSULTING

1650 Central Ave, Suite C

Mckinleyville CA, 95519

707-630-5041

www.greenroadconsulting.com

August 5th, 2019

1. Introduction

The site is located in Northeastern Humboldt County approximately 21 miles Southwest of the City of Willow Creek and can be accessed from Friday Ridge Road. The site is on the top of a ridge, at approximately 5,100-feet above sea level. An unnamed, spring-fed Class-II watercourse starts on the East facing portion of the ridge and flows into Madden Creek, a tributary to the South Fork Trinity River. Cannabis cultivation has occurred on the property prior to January 1, 2016 in the form of outdoor guerrilla grows.

2. Remediation Measures

On July 12th, 2018 Green Road Consulting preformed a field investigation with the intent to identify evidence of historic guerilla grow onsite. As a result of the field investigation, Green Road Consulting was able to identify substantial evidence of a historic guerilla grow. At the time of the field investigation it was apparent that the area of the historic guerilla grow had been decommissioned for some time. There was no evidence of any major grading (over 50 cubic yards) or large-scale vegetation removal. Due to these facts much of the vegetation had returned to its natural state. At this time Green Road Consulting recommends the Applicant remove any remaining cultivation related waste including but not limited to, plastic pots, irrigation lines, and potting soil. In addition, any remaining areas of bare soil shall be covered with straw and seeded for stability.

3. Environmental Superiority

A large portion of the historic guerilla grow was located within a stream buffer. Thus, rendering a large portion of the former grow area unsuitable for cannabis cultivation. In addition, the new location has a slope of approximately 1.82%-8.92% while the former grow area has a slope of approximately 12.5%-39.33%.

Photo shown was taken from the Applicants guerilla grow report (7/12/18).

Photo shown was taken from the Applicants guerilla grow report (7/12/18).

Photo shown was taken from the Applicants guerilla grow report (7/12/18).

Photo shown was taken from the Applicants guerilla grow report (7/12/18).

HUMBOLDT COUNTY DEPARTMENT OF PUBLIC WORKS
ROAD EVALUATION REPORT

PART A: *Part A may be completed by the applicant*

Applicant Name: J & R Ranch APN: 316-015-006

Planning & Building Department Case/File No.: Apps No. 11503

Road Name: Friday Ridge Road *(complete a separate form for each road)*

From Road (Cross street): US FS 5N01 Rd.

To Road (Cross street): Property Entrance

Length of road segment: .1 miles Date Inspected: 7/21/19

Road is maintained by: ☐ County ☒ Other Private
(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.

Ryan Simas 7/22/19
Signature Date

Ryan Simas
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.

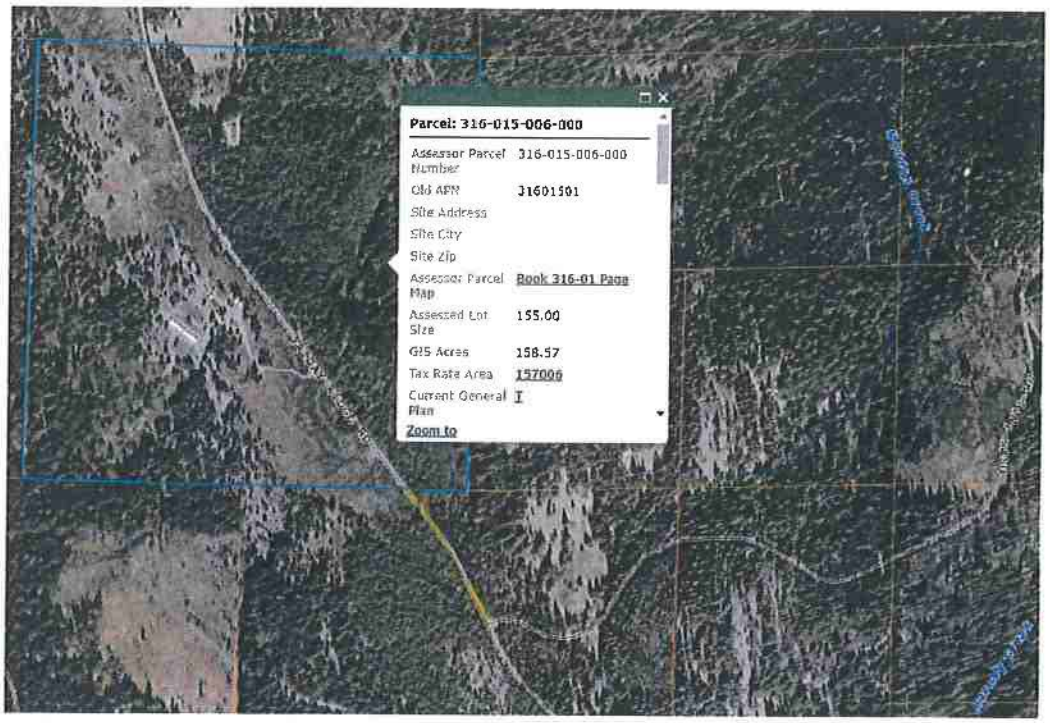
u:\pwrk_landdevprojects\referrals\forms\road evaluation report form (02-24-2017).docx

GREEN ROAD CONSULTING

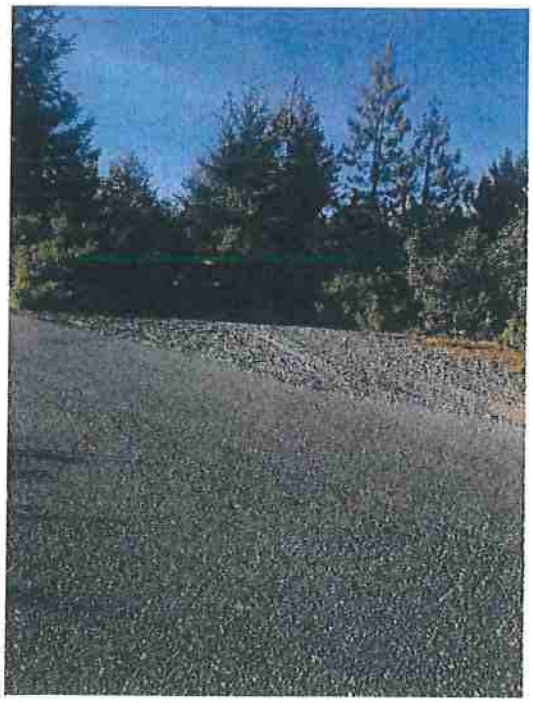
Road Eval Photos/Access Route Map

Apps No: 11503

APN: 316-015-006

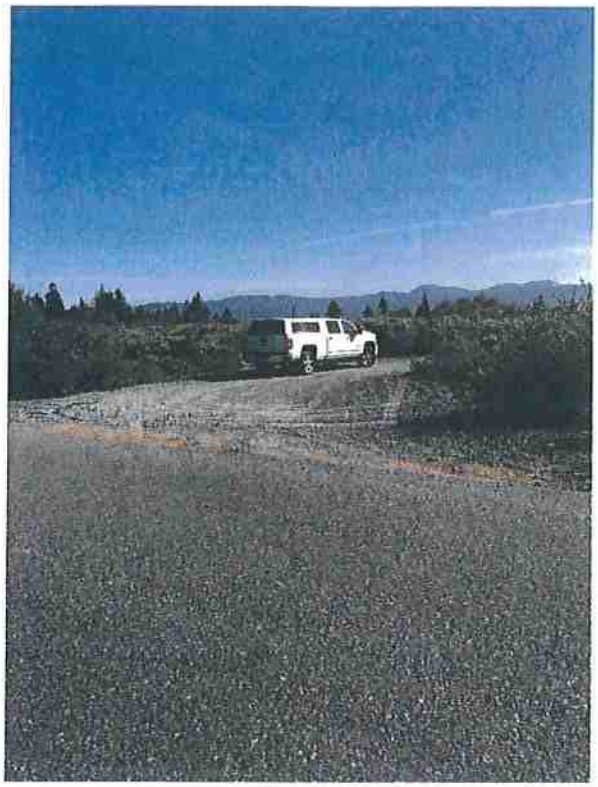


Access Road Map

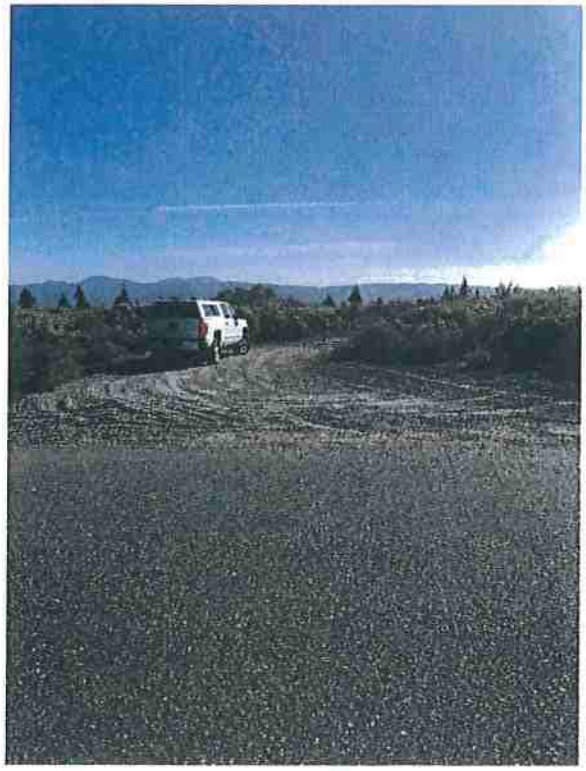


Road Photo#1

Page **1** of **2**



Road Photo#2



Road Photo#3

LEGEND

SCALE: 1" = 500'

BOUNDARY LINES OF McCARTY PROPERTY

ADJACENT BOUNDARY LINES

FOUND SURVEY MONUMENT FROM BOOK 44 OF SURVEYS, PAGES 50–55

FOUND SURVEY MONUMENT FROM BOOK 73 OF SURVEYS, PAGE 86

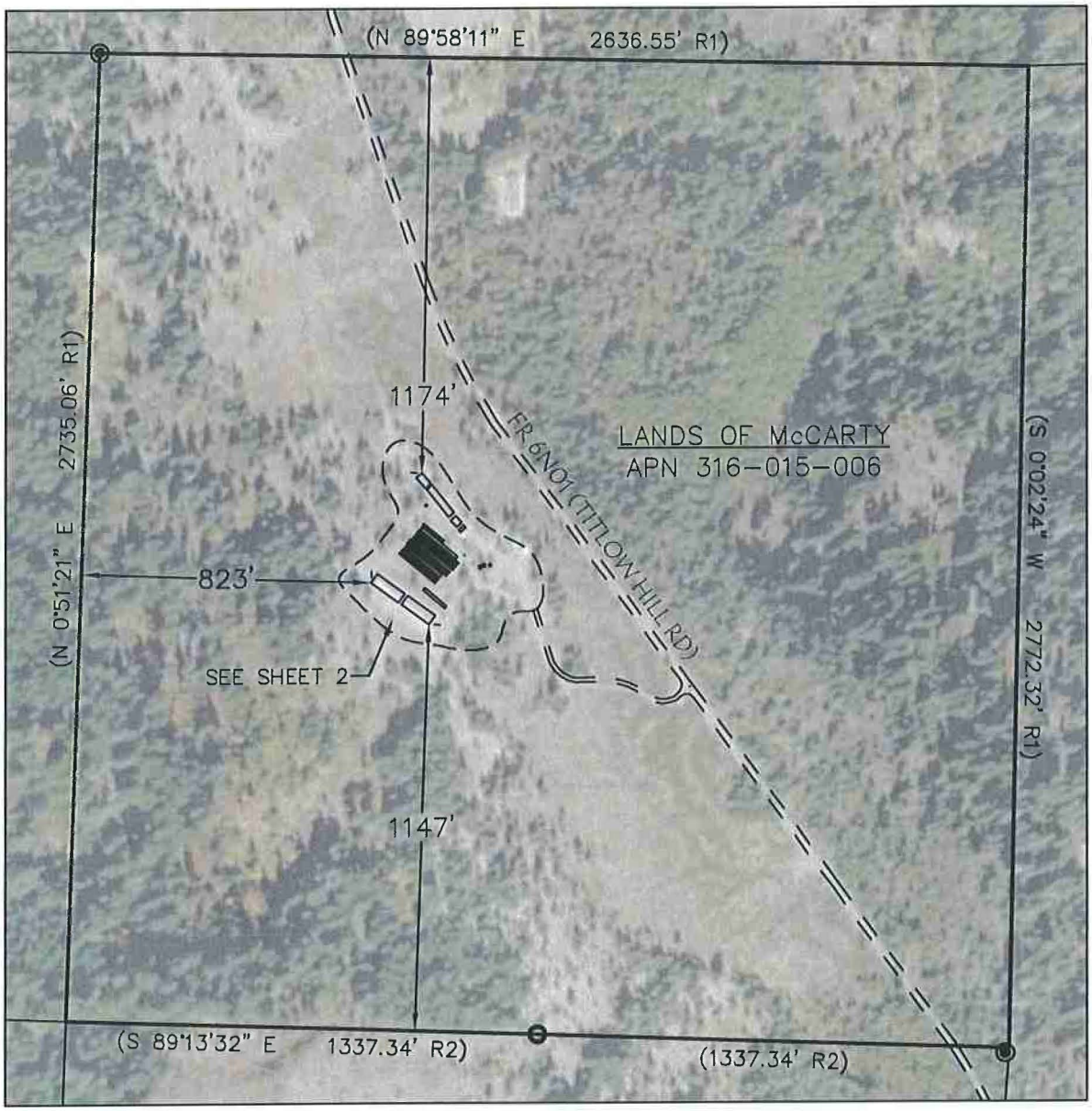
(N 89°58'11" E 2636.55' R1)

APN

RECORD DATA PER BOOK 44 OF SURVEYS, PAGES 50–55 (R1) OR BOOK 73 OF SURVEYS, PAGE 86 (R2), HUMBOLDT COUNTY RECORDS

ASSESSOR'S PARCEL NUMBER

N



NOTE

THIS EXHIBIT PREPARED BY DYLAN KOLSTAD, PLS 8152, JULY 24, 2019 BASED ON FIELD SURVEY ON JUNE 28, 2019. BOUNDARY LINES SHOWN BASED ON FOUND SURVEY MONUMENTS SET BY BOOK 44 OF SURVEYS, PAGES 50–55 AND BOOK 73 OF SURVEYS, PAGE 86, HUMBOLDT COUNTY RECORDS. BACKGROUND IMAGERY, IF APPLICABLE, IS FROM HUMBOLDT COUNTY GIS ALIGNED APPROXIMATELY TO FIELD SURVEY.

LICENSED LAND SURVEYOR
DYLAN L. KOLSTAD
LS 8152
STATE OF CALIFORNIA

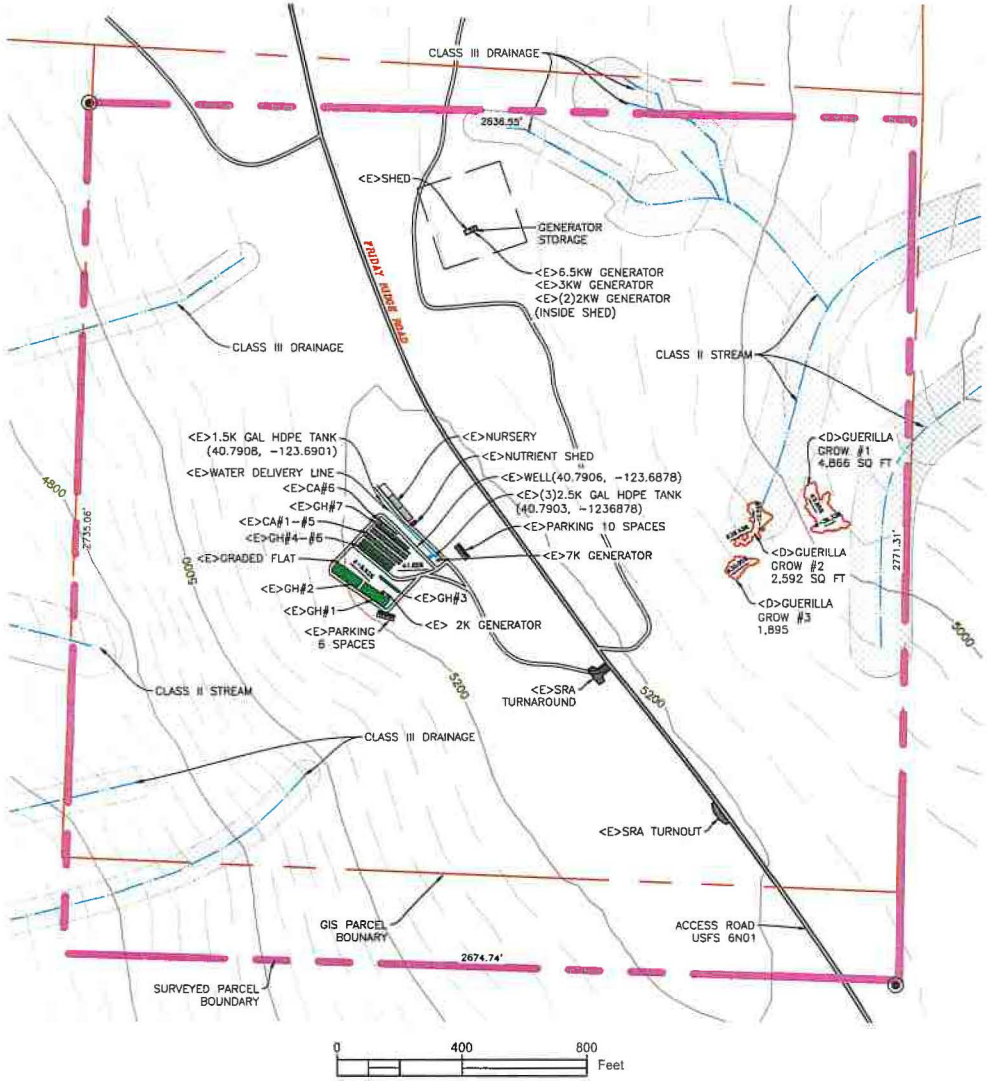
BOUNDARY EXHIBIT

SHEET 1 OF 2

KOLSTAD LAND SURVEYORS
PO BOX 594
BAYSIDE, CA 95524
VOICE (707) 822–2718
FAX (707) 822–5636

PARCEL OVERVIEW

APN: 316-015-006



NOTE:
PARCEL BOUNDARIES PROVIDED BY CLIENT ARE FROM BOUNDARY EXHIBIT PREPARED BY KOLSTAD LAND SURVEYORS.

CULTIVATION INFORMATION

LIGHT DEPRAVATION (OUTDOOR) CULTIVATION AREA

GH	LENGTH		WIDTH	SQ FT
1	96	X	30	2,880
2	96	X	30	2,880
3	80	X	7.5	600
4	130	X	7	910
5	130	X	7	910
6	130	X	7	910
7	130	X	7	910

TOTAL LIGHT DEPRAVATION CULTIVATION AREA = 10,000 SQ FT

FULL-TERM (OUTDOOR) CULTIVATION AREA

CA	LENGTH		WIDTH	SQ FT
1	145	X	5	725
2	145	X	5	725
3	145	X	5	725
4	145	X	5	725
5	145	X	5	725
6	75	X	5	375

TOTAL FULL CULTIVATION AREA = 4,000 SQ FT

***TOTAL OUTDOOR CULTIVATION=**
14,000FT²

CULTIVATION BUILDINGS AND USE

BUILDINGS	USE	SIZE	YEAR
SHED	HARVEST&GENERATOR STORAGE	40'x14'	2015
NUTRIENT SHED	PESTICIDE/NUTRIENT STORAGE	20'x8'	2015
NURSERY	IMMATURE PLANT AREA	145'x20'(100'x20' USED FOR IMMATURE PLANT AREA)	2015

WATER STORAGE AND USE

TYPE	YEAR OF INSTALLATION	QUANTITY	GALLONS	TOTAL GALLONS
HDPE TANK	2018	3	2,500	7,500
HDPE TANK	2018	1	1,500	1,500

TOTAL AMOUNT OF WATER STORAGE= 9,000 GALLONS

WATER SOURCE

TYPE
WELL

POWER SOURCE

6.5KW GENERATOR
3KW GENERATOR
(3)2KW GENERATOR
7KW GENERATOR

UNNAMED CLASS II STREAM WITH REQUIRED 100 FT BUFFER
UNNAMED CLASS III DRAINAGE WITH REQUIRED 50 FT BUFFER

SURROUNDING BUILDINGS
THERE ARE NO SCHOOLS, BUS STOPS, PLACES OF WORSHIP, PUBLIC PARKS OR TRIBAL CULTURAL RESOURCES WITHIN 600 FEET OF THE CULTIVATION SITE.
THERE ARE NO OFF SITE RESIDENCES WITHIN 300 FEET OF THE CULTIVATION SITE.

NOTE:
PROCESSING/PACKAGING/LABELING OCCURS OFFSITE BY A LICENSED 3RD PARTY

N

GREEN ROAD CONSULTING

PROJECT INFORMATION
PROPERTY OWNER MAX McCARTY
ADDRESS APN: 316-015-006
SHEET INFO PARCEL OVERVIEW

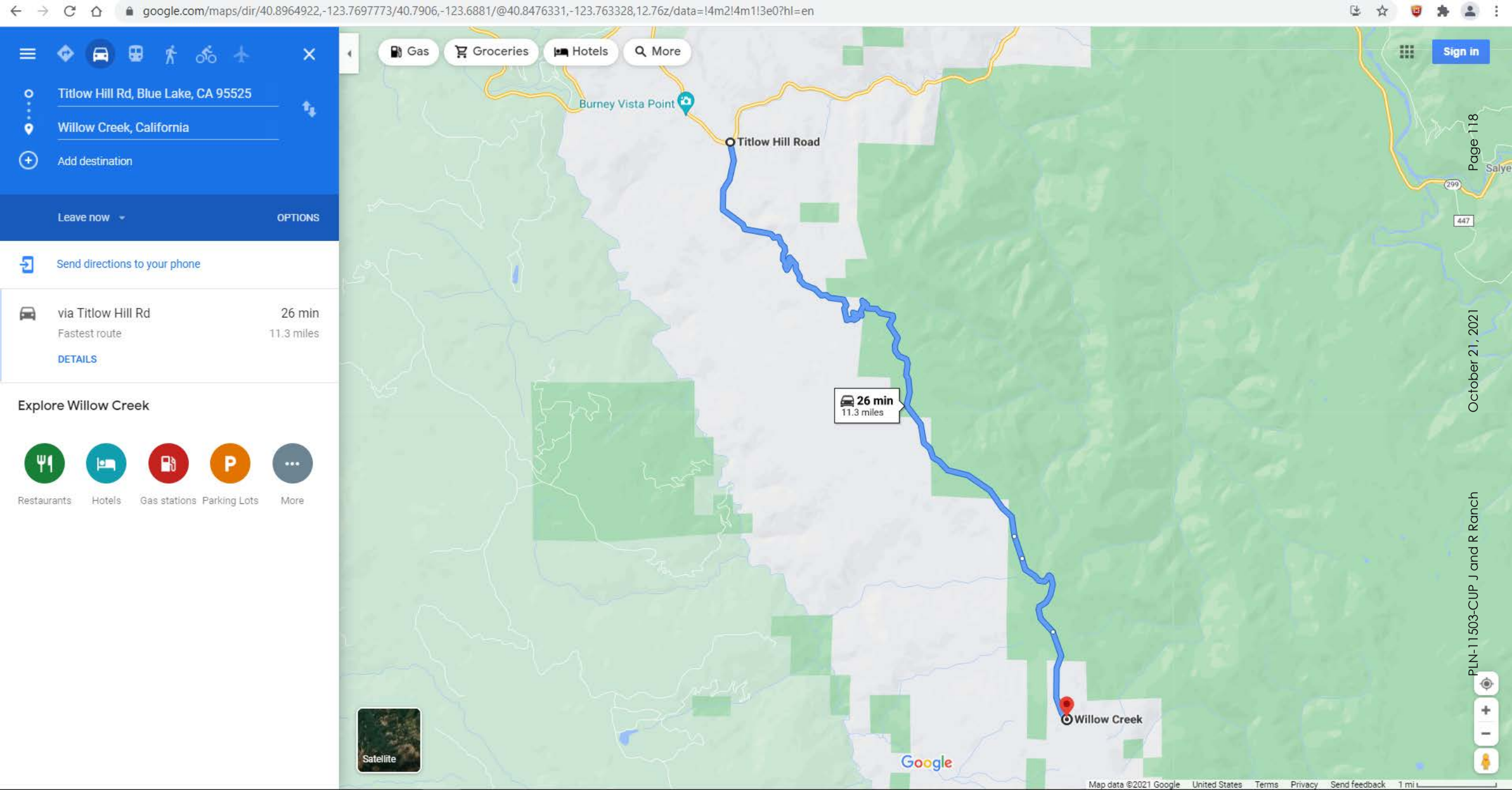
REVISIONS

NO.	NOTES	DATE
1	NOTES-INITIALS	00-00-00
2	NOTES-INITIALS	00-00-00
3	NOTES-INITIALS	00-00-00
4	NOTES-INITIALS	00-00-00
5	NOTES-INITIALS	00-00-00
6	NOTES-INITIALS	00-00-00

DATE 8/8/19
DRAFTER DDV
SCALE AS SHOWN
SHEET C2

PLN-11503-CUP J and R Ranch October 21, 2021

11503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Titlow Hill Rd, Blue Lake, CA 95525
Willow Creek, California
Add destination
Leave now
OPTIONS
Send directions to your phone
via Titlow Hill Rd
26 min
Fastest route
11.3 miles
DETAILS
Explore Willow Creek
Restaurants
Hotels
Gas stations
Parking Lots
More
Gas
Groceries
Hotels
More
Sign in
Burney Vista Point
Titlow Hill Road
26 min
11.3 miles
Willow Creek
Satellite
Google
Map data ©2021 Google
United States
Terms
Privacy
Send feedback
1 mi
Page 118
October 21, 2021
PLN-11503-CUP J and R Ranch

ATTACHMENT 4

REFERRAL AGENCY COMMENTS AND RECOMMENDATIONS

The project was referred to the following referral agencies for review and comment. Those agencies that provided written comments are checked off.

Referral Agency	Response	Recommendation	Location
Six Rivers National Forest: USFS	✓	Recommend Denial due to Federal Legal Status of Cannabis	**Attached**
Division Environmental Health	✓	Conditional Approval	**Attached**
Public Works, Land Use Division	✓	Further Study	**Attached**
Cal Fire	✓	Standard Comments	**Attached**
Northwest Information Center	✓	Further Study	On file and confidential
Bear River Band of the Rohnerville Rancheria		No Response	
Building Inspection Division		No Response	
Hoopa Valley Tribe		No Response	
Tsnungwe Council		No Response	
California Department of Fish & Wildlife		No Response	
Klamath-Trinity Joint Unified School District		No Response	
County Counsel		No Response	
Humboldt County Sheriff		No Response	
Humboldt County Agricultural Commissioner		No Response	
Humboldt County District Attorney		No Response	
North Coast Regional Water Quality Control Board		No Response	
North Coast Unified Air Quality Management District		No Response	
State Water Resources Control Board – Division of Water Rights		No Response	

COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING
3015 H STREET, EUREKA, CA 95501 ~ PHONE (707) 445-7245

RECEIVED
JUN 24 2019
Humboldt County
Planning Dept.

6/18/2019

Project Referred To The Following Agencies:

Environmental Health, NWIC, Building Inspections, County Counsel, Cal Fish & Wildlife, Bear River Band, Hoopa Valley Tribe, Tsnungwe Council, RWQCB, NCUAQMD, District Attorney, AG Commissioner, CA Division of Water Rights, Sheriff, Klamath-Trinity JUSD:School District, PW Land Use, CalFire, Six Rivers National Forest :US Forest Service

Applicant Name J and R Ranch **Key Parcel Number** 316-015-006-000

Application (APPS#) PLN-11503-CUP Historic Planning **Assigned Planner** Misael Ramos

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: 7/3/2019

Planning Commission Clerk
County of Humboldt Planning and Building Department
3015 H Street
Eureka, CA 95501
Email: PlanningClerk@co.humboldt.ca.us **Fax**: (707) 268 - 3792

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: Transportation of Cannabis over National Forest Lands is illegal - see enclosed letter. Therefore recommend denial of application request as access is over Forest Service Route #1

DATE: 20 June 2019 PRINT NAME: George Frey - Lands & Minerals Specialist

USDA United States Department of Agriculture
Forest Service
Pacific Southwest Region
Six Rivers National Forest
1330 Bayshore Way
Eureka, CA 95501
707-442-1721
TDD: 707-442-1721
Fax: 707-442-9242

File Code: 1500
Date: August 29, 2018

Michelle Nelson
Planning and Building Department
Humboldt County
3015 H Street
Eureka, CA 95501

Dear Ms. Nelson:

Thank you for providing the USDA Forest Service with the opportunity to provide input to Humboldt County's land use regulations governing cannabis cultivation on private property as they relate to National Forest System (NFS) lands.

The use, cultivation and transportation of cannabis on Forest Service lands is illegal. The Comprehensive Drug Abuse Protection and Control Act of 1970, and more specifically Title II of the act (the Controlled Substances Act), lists cannabis as a Schedule 1 drug. The Forest Service does not have discretion to permit activities on NFS lands that will violate the Controlled Substances Act or any other federal law. The Forest Service cannot authorize any activities related to cannabis operations on public land, such as the cultivation, production, transportation, or distribution of supplies or product.

We recommend that applicants for county cannabis permits who are adjacent to or near Forest Service lands have their parcels surveyed by a professional land surveyor to ensure their operations are not trespassing upon or causing impacts to federal lands. Individuals that cause resource damage, including soil erosion and contamination to Forest Service administered lands from illicit acts including the manufacture of cannabis, may be subject to federal criminal and/or civil action. Permit applicants should be aware that transporting cannabis across an existing right of way on federal lands to access a private parcel, is also illegal under federal law, and violators could face federal criminal action.

We appreciate the opportunity to comment on the county's cannabis-use regulations. If you need further information on this subject, please contact me at (707) 441-3531.

Sincerely,

MICHAEL A. GREEN
Acting Forest Supervisor

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 839-3596
AVIATION 839-5401

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

ADMINISTRATION	445-7491	NATURAL RESOURCES	445-7741
BUSINESS	445-7652	NATURAL RESOURCES PLANNING	267-9540
ENGINEERING	445-7377	PARKS	445-7651
FACILITY MAINTENANCE	445-7493	ROADS & EQUIPMENT MAINTENANCE	445-7421

CLARK COMPLEX
HARRIS & H ST., EUREKA
FAX 445-7388
LAND USE 445-7205

LAND USE DIVISION INTEROFFICE MEMORANDUM

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

FROM: Kenneth M. Freed, Assistant Engineer

DATE: 08-14-2018

RE:

Applicant Name	J and R Ranch
APN	316-015-006
APPS#	11503 CUP16-268 SP17-06

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; [redacted].
No re-refer is required.

*Note: Exhibits are attached as necessary.

Additional comments/notes:

Review Item #2 on Exhibit "C". THIS PROJECT ACCESSES FROM A SERIES OF US FOREST SERVICE ROADS.

// END //

Exhibit "C"

Additional Review is Required by Planning & Building Staff

APPS # 11503

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 take 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 take 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.

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:

   - 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.
   - 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.
   - 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.
   - 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 //

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

DEH received 11-17-17

PROJECT REFERRAL TO: Health and Human Services Environmental Health Division

Project Referred To The Following Agencies: 17/18-1089
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, Hoopa Valley Tribe, Tsnungwe Council, Regional Water Quality Control Board, North Coast Unified Air Quality Management District, Humboldt County District Attorney, Humboldt County Agriculture Commissioner, SWRCB, Division of Water Rights, Humboldt County Sheriff, Klamath-Trinity Joint Unified School District

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Applicant Name J and R Ranch **Key Parcel Number** 316-015-006-000

Application (APPS#) 11503 **Assigned Planner** Zsofia Odry (707) 268-3727 **Case Number(s)** CUP16-268
SP17-106

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 7-30-18

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: 7/30/2018 **Recommendation By:** Adam Molofsky

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: November 20, 2017

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

Attention: Cannabis Planner
Applicant: J and R Ranch
APN: 316-015-006-000
Area: Willow Creek
Case Numbers: CUP16-268, SP17-106

Humboldt County Application #: 11503
Type of Application: Conditional Use Permit, Special Permit
Date Received: 11/20/2017
Due Date: 12/2/2017

Project Description: Conditional Use Permit for an existing 30,100 square foot cannabis cultivation operation in two (2) full term outdoor cultivation areas and five (5) greenhouses, one (1) of which is used solely for ancillary propagation/vegetative purposes. A Special Permit for water source and storage work completed within Stream Management Areas (SMA). Applicant proposes decommissioning the full term outdoor cultivation areas in 2018 and installing seven (7) greenhouses as replacement. Irrigation water is sourced from a spring diversion and permitted well. Total water storage is 15,500 gallons in seven (7) tanks. Drying occurs onsite in an existing dry shed and processing occurs offsite by a 3rd party licensed processor. Generators provide power to the operation. The previous APN was 316-015-001 and changed to APN: 316-015-006 in 2017.

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 eve 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 PROJECTS

Local Responsibility Areas:
CAL FIRE is the primary command and control dispatch center for many local agency fire districts and departments. Potential life hazard threats associated with a project must be identified and documented for the protection of the public and first responders. Projects which include timber harvesting or conversion of timberland are subject to the Forest Practices Act and Rules, regardless of wildland fire responsibility area.

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

Conversion of timberland to a non-timber producing use is subject to permit from CAL FIRE. Commercial timber harvesting operations to facilitate cannabis cultivation and processing are subject to permitting and regulation under the Forest Practice Act and Rules. Please refer to the RESOURCE MANAGEMENT comments.

General Recommendations:
The following recommendations are made by CAL FIRE with the understanding that most areas of Humboldt County do not have a paid fire department providing fire prevention services.

1. Cannabis growing operations shall have easily accessible safety data sheets (SDS) for all chemicals and hazardous materials on site. Commercial operations must have a current Hazardous Materials Business Plan on file with Humboldt County Environmental Health, where applicable.

2. California Health and Safety Code (HSC 11362.769.) Requires that 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.

3. Cannabis growing and extraction shall be in accordance with Chapter N101.1 of the International Fire Code, the International Building Code, and the International Mechanical Code. Hazardous materials shall comply with Chapter 50. Compressed gases shall comply with Chapter 53. Cryogenic fluids shall comply with Chapter 55. Flammable and combustible liquids shall comply with Chapter 57. 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 and processing of cannabis is generally an agricultural operation. However, manufacture of marijuana extracts and concentrates are commercial or industrial activities, and may be subject to the county's SRA Fire Safe Ordinance. Any new residential units associated with cannabis cultivation and processing may also be subject to the SRA Fire Safe Ordinance. All materials hazardous and non-hazardous associated with the extraction process shall be utilized in conformance of the law and fire safe codes.

5. Humboldt County Ordinance 55.4.11(u) (a) states; "Those cultivators using artificial lighting for mixed-light cultivation shall shield greenhouses so that little to no light escapes. Light shall not escape at a level that is visible from neighboring properties between sunset and sunrise." Failure to shield artificial light during the night creates a light pollution that is easily mistaken for a fire. As a result, a CAL FIRE wildland fire response may be initiated and ultimately terminated as a false alarm. This false alarm may result in citation and/or fine to the violator.

From: Poli, Chris@CALFIRE
To: HUU CEQA@CALFIRE
Cc: Planning Clerk
Subject: CUP; APN 316-015-006-000; APPS#11503; willow creek; J and R Ranch
Date: Wednesday, November 29, 2017 9:36:42 AM

No comments at this time

Chris Poli
Forester I - RPF #2930
CAL FIRE
Trinidad Resource Management
Humboldt-Del Norte Unit
P.O. Box 749
Trinidad, CA 95570
Office (707) 677-0761
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Every Californian should conserve water. Find out how at:
SaveOurWater.com · Drought.CA.gov