

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:	April 15, 2021	
То:	Humboldt County Planning Commission	
From:	John H. Ford, Director of Planning and Building Department	
Subject:	Maple Creek Ranch Corp. Conditional Use Permit and Zoning Clear Certificate Record Numbers: PLN-12154-CUP and PLN-2018-15197 Assessor's Parcel Number (APN): 313-145-006 Maple Creek Road Korbel, CA	ance
Table of Contents		Page
Agenda Item Trans Recommended Ac Draft Resolution	mittal tion and Executive Summary	2 3 9
Maps Topo Map Zoning Map Aerial Map Site and Utility P	lan	19 20 21 22
Attachment 2: Attachment 3: A. B. Attachment 4: Attachment 5: Attachment 6:	Recommended Conditions of Approval (1A) and Mitigation Monitoring Report (1B) Initial Study/Mitigated Negative Declaration Applicant's Evidence in Support of the Required Findings Cultivation and Operations Manual Light Pollution Control Plan Referral Agency Comments and Recommendations CEQA Comments Public Comment Supplemental Information from 3.18.2021 Planning Commission	27 33 Separate 38 Separate Separate 46 49 66 71

Please contact Cliff Johnson, Supervising Planner, at 707-445-7451 or by email at cjohnson@co.humboldt.ca.us, if you have any questions about the scheduled public hearing item.

AGENDA ITEM TRANSMITTAL

Hearing Date	Subject	Contact
April 15, 2021	Conditional Use Permit and Zoning Clearance Certificate	Cliff Johnson

Project Description: An application for a total of 4.6 acres of new, full sun outdoor commercial cannabis cultivation. This involves four Conditional Use Permits for new outdoor commercial cannabis cultivation under the CMMLUO, totaling 4-acres (174,240 square feet) of cultivation on a 420-acre legal parcel in the Korbel area as well as a Zoning Clearance Certificate under the CCLUO for the relocation of 27,000 square feet of outdoor cannabis from APN 315-011-009. Water will be sourced from a groundwater well and from rainwater catchment. The total existing and proposed water storage capacity on the parcel will be 250,000 gallons. Water will be delivered to the cannabis plants using a pump-driven drip irrigation system with adjustable emitters and in-line meters. The applicant's estimated annual water use is 800,000 gallons. The power sources for the project are a proposed solar system and 25 kw whisper watt diesel generators. The project includes a proposed ancillary nursery of 6,600 square feet and a proposed ancillary support facility of 4,800 square feet to be used for onsite drying and processing. Four full time and a maximum of 10 seasonal employees will work on the site.

Project Location: The project is located in Humboldt County, in the Korbel area, on the east side of Maple Creek Rd, approximately 5200 feet north from the intersection of Maple Creek Rd and Powerline Rd, on the property known to be in Section 30 of Township 05N, Range 03E, Humboldt Base & Meridian.

Present Plan Land Use Designations: Timberland (T), Humboldt County General Plan (HCGP), Density: 40-160 acres/unit, Slope Stability: Moderate Instability/High Instability (E).

Present Zoning: Agriculture Exclusive (AE), Timberland Production (TPZ)

Record Numbers: PLN-12154-CUP and PLN-2018-15197

Assessor's Parcel Number: 313-145-006

Applicant	Owner	Agent
Maple Creek Ranch Corp. PO Box 1212 Eureka, CA 95502	Same as Applicant	Six River Development, LLC Attn: Brian Shields PO Box 4215 Arcata, CA 95518

Environmental Review: An Initial Study/Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (CEQA) Statute (Public Resources Code 21000–21189) and Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387).

State Appeal Status: Project is located outside the Coastal Zone and is therefore NOT appealable to the California Coastal Commission

Major Issues: None

Record Numbers: PLN-12154-CUP and PLN-2018-15197 Assessor's Parcel Number: 313-145-006

Recommended Commission Action

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

Move to adopt the resolution to take the following actions:

(a) Adopt the Mitigated Negative Declaration for the Maple Creek Ranch project pursuant to Section §15074 of the State CEQA Guidelines,

(b) Make all of the required findings for approval of the Conditional Use Permits and Zoning Clearance Certificate; and

(c) Approve the Maple Creek Ranch Conditional Use Permit and Zoning Clearance Certificate as recommended by staff subject to the recommended conditions.

Executive Summary: Maple Creek Ranch Corporation proposes a project for 4.6 acres of new cannabis cultivation on APN 313-145-006 (APPS# 12154). The project includes 4 Conditional Use Permits (CUPs) for 4 acres or 174,240 square feet of outdoor cannabis cultivation as defined in Humboldt County's Commercial Medical Marijuana Land Use Ordinance (CMMLUO) Section 55.4.5 – 55.4.14. MCR also proposes development of new ancillary support facilities, including a nursery for propagation of immature plants and a commercial building for drying and processing of harvested cannabis.

Further, MCR proposes the relocation of 27,000 square feet of outdoor cannabis cultivation from APN 315-011-009/ APPS#-15197 to the subject parcel through a Zoning Clearance Certificate under Section 55.4.6.5.9 of the Commercial Cannabis Land Use Ordinance (CCLUO). This 27,000 square feet was originally applied for under a Special Permit that was denied by the Planning Commission and appealed to the Board of Supervisors. At the Board of Supervisors hearing, the neighboring property owners and Board of Supervisors all agreed that relocating the 27,000 square feet to the Maple Creek Ranch property was preferential to locating it on APN 315-011-009. Many property owners and other members of the public specifically requested that the 27,000 square feet be moved up to the Maple creek Ranch property and suggested that the Maple Creek Ranch property was the appropriate place to establish a cultivation site.

Project details

The project includes the following elements:

• 4 Conditional Use Permits (CUPs) each for 43,560 square feet (1-acre) of new outdoor cannabis cultivation in accordance with CMMLUO section(s) 55.4.5 - 55.4.14.

•A 4,800-square foot ancillary support facility for drying and processing of harvested cannabis in accordance with CMMLUO section(s) 55.4.5 - 55.4.14. The facility will require a commercial building permit and will be constructed in accordance with the requirements established in the CMMLUO and the current adopted building code.

• 6,600 square feet of ancillary nursery facilities for propagation of immature plants.

• Approval for a 25k MQ whisper watt diesel generator with 500-gallons of diesel storage to be used as primary power source for cultivation under the CMMLUO. A solar array will be used as a backup power source and as the primary power source for cultivation under the CCLUO.

• Approval for a 200,000-gallon rainwater catchment storage tank, four 50,000 gallon hard-sided water tanks and the installation of a new well.

• A Zoning Clearance Certificate the relocation of 27,000 square feet of outdoor cannabis cultivation from APN 315-011-009 to the subject parcel in accordance with CCLUO section

55.4.6.5.9.

Total cultivation proposed is 201,240 square feet of full sun, outdoor cannabis cultivation.

The Project is anticipated to require up to a maximum of 10 employees at certain parts of the cultivation season. The farm will be operated typically between April 1st and November 1st of each year and will be closed and winterized between November 1st and April 1st. Up to two harvests may occur each year.

Water Resources

Irrigation will be provided by an existing, permitted groundwater well located on an adjacent parcel under common ownership. The applicant is also proposing to develop a new irrigation well in the same area as the cultivation operation. The projected annual water usage for the site is approximately 800,000 gallons which is low for the amount of cultivation area but is accomplished due to a drip tape irrigation style and in-ground plantings. Water conservation techniques will be implemented to utilize water efficiently. The total water storage capacity on the site will be 250,000 gallons in the form of a 200,000-gallon rain catchment tank and ten 5,000-gallon hard tanks. Water will be conveyed to the cannabis plants via a drip irrigation system with in-line commercial-grade analog water meters Irrigation of the site will occur in the early morning or evening, as to provide maximum soil saturation and to limit evaporation due to excessive heat caused by daytime temperatures. The applicant will accurately monitor and report their water usage in accordance with State regulations. On site water usage logs will be maintained and recorded daily. The water usage logs will be transposed digitally monthly and provided to PWA for monitoring and recoding requirements for the SWQCRB and NCRWQRB.

Access Roads

Currently the site is serviced by two County-maintained roads, Maple Creek Road or Butler Valley Road. A short driveway entrance from each road is rocked and gated. A Road Assessment has been performed and the County-maintained access roads have the functional capacity of a Category 4 Road capable of accommodating the traffic from this site and other commercial cannabis cultivation sites in the area. In addition to existing access to the site, MCR proposes to improve existing legacy ranch roads on the subject parcel that serve as access to the cultivation site. Minimal grading and rocking is required to accomplish this work. With the exception of one portion of the cultivation access road, all other roads are existing ranch roads that will be improved. In one location the existing ranch road is located within the buffer of two seasonal wetlands..

Soils Management Plan

MCR plans to cultivate cannabis within the native soils on the project site using standard cultivation techniques Upon approval, minimal excavation, grading and tillage of the proposed cultivation site will be conducted to maximize the sites potential.

All soils originating from the excavation and grading process will be evenly distributed throughout the proposed cultivation area alleviating the need to remove and or dispose of the soils during the earth working process. During the initial development process, amendments will be purchased from local providers and applied to the cultivation area at agronomic rates to condition the native soils and to promote healthy crop growth. Periodically, as needed, additional amendments will be added. The amendments and frequency of application will be cataloged and recorded manually onsite. Records will be transposed digitally at the end of the growing cycle. Disposal of any spent soils will occur at an approved waste management facility within the County of Humboldt.

Energy Sources

The proposed power sources for the components of the project occurring under the CMMLUO is a 25kw Whisper Watt diesel generator. Power will also be supplied by a solar power system installed on the roof of the proposed drying/processing facility.

The proposed power source for the 27,000 square feet of cannabis cultivation to be relocated under the CCLUO will be the solar power system, in accordance with the requirement that cannabis cultivated under the CCLUO have a renewable energy source. The generator will only provide power to support this cultivation as a backup power source.

Biological Resources

A wetlands delineation was prepared for the project by Kyle Wear June 2019 and Updated in August of 2019. Wetland mapping for this report relies on information provided by this report, maps provided by North Point Consulting and available databases including the National Wetlands Inventory (NWI). The wetland delineation establishes that the wetlands on-site are seasonal wetlands, which require a 50 foot setback under the Humboldt County General Plan (2017). All proposed new development will observe a minimum 100 foot setback from the wetlands, with the exception of a small portion of the existing ranch road that provides access to the proposed cultivation site. This existing road encroaches into the 50 foot setback from two seasonal wetlands and adding rock to the existing road is proposed. Such addition of rock is routine maintenance of the existing ranch road and will not result in a substantial adverse impact on the seasonal wetlands. Such road maintenance is exempt from the wetland setbacks under the Humboldt County Streamside Management and Wetland Ordinance due to its presumption of limited adverse impact.

A Biological Analysis was prepared for the project by TransTerra Consulting and was incorporated completely into the Draft Initial Study and Mitigated Negative Declaration prepared for the project. The area adjacent to proposed cultivation activities contains suitable nesting and/or foraging habitat for several raptor species, and other special status bird species. All of these species are fully protected under California Fish and Game Code. Project implementation associated with potential impacts to habitat and vegetation removal could disturb nesting birds if they are present, potentially resulting in nest abandonment, nest failure, or mortality of chicks or eggs. Additionally, human presence associated with construction of cultivation sites, roads, and cultivation activities (generators and other equipment) could result in increased noise and visual disturbance to nesting birds. The potential loss of birds and their nests resulting from the cumulative impact of cannabis project in the county would be a potentially significant impact were any of them to be impacted. Northern Spotted Owl have been observed historically within one mile, with the closest NSO activity center being approximately 0.40 miles to the east across Maple creek Road from the project site. Northern Spotted Owl surveys were conducted by Blair Forestry Consultants for the Maple Creek Ranch NTMP, occurring between 2018 and 2020. There were no spotted owl detections for any of these years.

Mitigation Measures

A total of six mitigation measures have been proposed in IS/MND to ensure that potential significant impacts to biological resources are mitigated to a less than significant level. These mitigation measures as follows, and also included in Attachment 1A to this staff report.

BIO-1: Preconstruction surveys for western pond turtle and special-status amphibian species shall be conducted throughout the proposed construction area and a 400-foot buffer around the proposed development area. Surveys shall consist of "walk and turn" surveys of areas beneath surface objects (e.g., rocks, leaf litter, moss mats, coarse woody debris) for newts and salamanders, and visual searches for frogs.

• If western pond turtle, red-bellied newt or southern torrent salamander or special status frogs are detected during the preconstruction survey, the proposed development shall not occur within 200 feet from the occurrence(s) measured as a horizontal line perpendicular to, and moving away from, the SMA until such time as surveys demonstrate that the species are not present.

BIO-2: No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting raptors that identifies that there are no active nests within 500 feet of the proposed development area.

BIO-3: No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting special status bird species that identifies that there are no active nests within 100 feet of the proposed development area.

BIO-4: The generator supplying power to the project shall be kept in an enclosed structure or otherwise muffled such that project-generated sound does not exceed 50 decibels at 100 feet from the generator or at the edge of forest habitat, whichever is closer.

BIO-5: No additional road work or rocking of the access road shall occur until a seasonally appropriate (March to Mid-April) survey for Howell's montia is performed. If any Howell's montia would be affected by the road work the applicant shall relocate and restoration the impacted area at a 2:1 ratio on -site. Successful relocation and restoration shall include the following:

- A mitigation plan that includes the details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long- term protection, and management, monitoring and reporting requirements and success criteria.
- Success criteria for preserved and compensatory populations shall include:
 - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat.
 - Compensatory and preserved populations shall be self-producing. Populations will be considered self- producing when:
 - Plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
 - Reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.

BIO-6: Rodenticides are prohibited from use associated with the project

Environmental review for the proposed project included the preparation of an Initial Study/Mitigated Negative Declaration (IS/MND) pursuant to the California Environmental Quality Act (CEQA) Statute (Public Resources Code 21000–21189) and Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387). The IS/MND was circulated from February 2, 2021 to March 3, 2021 at the State Clearinghouse (SCH#2021020037). Comments were received during the circulation period from the California Department of Fish and Wildlife (CDFW). These comments and county responses are summarized below:

<u>Comment 1.</u> Northern Spotted Owl. CDFW states that a mitigation measure for noise and light to be attenuated should be included to ensure no impacts to Northern Spotted Owl and that this should include a requirement to comply with International Dark Sky Standards.

County Response: Humboldt County Code requires compliance with International Dark Sky standards for all artificial lighting associated with cannabis cultivation. Requiring a mitigation measure for standards that are already required by regulation is inappropriate. Additionally, mitigation for noise is included as proposed mitigation measure BIO-4.

<u>Comment 2.</u> CDFW states that the botanical survey completed for the project is not floristic and does not follow the CDFW botanical survey protocol. CDFW also states that sensitive species such as Howell's Monita may be present in the non-road areas of the project, and that botanical surveys for Siskiyou checkerbloom were likely too late in the season for flowering and that they could therefore be impacted by the project.

County response. Page 3 of the botanical survey prepared by Kyle Wear states that the survey is "floristic in nature" and follows the methods outlined in the CDFW Protocols for botanical surveys. Staff reached out to CDFW staff to understand why they were suggesting Mr. Wear was misrepresenting his own report but had not received a sufficient response as of the date of this staff report. While CDFW staff did respond to say that it was not "floristic" because "floristic" surveys need to identify all botanical species found not just specific ones they were looking for. County staff responded to state that the report did in fact identify all species found on -site (Appendix C of the report). CDFW has not responded to requests for further clarification regarding these comments. It is staff's opinion that CDFW's comments on this issue are without merit (please see Attachment 3 of the staff report for email correspondence). Of note is that Kyle Wear has over 20 years experience performing floristic and botanical surveys in northern California and is well-versed in CDFW protocols.

Mr. Wear's botanical report states that the access roads were the likely only habitat for Howell's Monita, which is why a mitigation measure (MM-BIO-5) was included within the IS/MND. Regarding Siskiyou checkerbloom, the botanical survey completed by Kyle Wear did not identify any of this species on the project site and staff considers that Mr. Wear's experience makes him qualified to make this assessment. The reference in the CDFW comment letter to support the statement that the botanical surveys were likely too late in the season for Siskiyou checkerbloom is simply a link to the California Natural Diversity Database GIS. However, staff reviewed the California Native Plant Society website which states that the blooming period for Siskiyou checkerbloom is May through August. The botanical surveys were completed in July and August.

At the hearing of March 18, 2021 CDFW staff pulled this item from the consent agenda and stated that the botanical survey was inadequate because early season botanical surveys had not been completed. CDFW staff stated that meant the surveys were not floristic and that all plants may not have been able to be identified. While staff pointed out that the project botanist had stated that the survey was floristic and that they felt it was adequate for identifying all special status species that might occur on the site (with the exception of Howell's montia for which another survey was recommended and conditioned), CDFW staff stated that the project botanist had confirmed to them that they survey was in fact not floristic and therefore not adequate for the purposes of the review of this project. For this reason the project was continued, as the Commission was not able to feel comfortable making the findings for approval and adopting the CEQA document. Planning staff reached out to the project botanist to understand the source of confusion and found that this was simply an untrue characterization. Email correspondence between staff and the botanist is included to this staff report in Attachment 5.

Of further note is that the discussion at the hearing between CDFW staff and the Planning Commission centered around the idea that spring ephemeral plants may have not been able to be identified in July when the first survey was done. However, according to a nine-quad listing of all special status species that may occur in a nine-quad area, the only special status plant species that could potentially be considered a spring ephemeral is checkerbloom, which the project botanists is confident he could have identified in July.

<u>Comment 3.</u> Cumulative Impacts. CDFW states that cumulative impacts are not addressed because potential impacts to sensitive species could be cumulatively significant.

County response. The ISMND identifies that there will be no potentially significant impacts to sensitive communities from the proposed project. Accordingly, the project's contribution to cumulative impacts would be negligible and insignificant.

<u>Comment 4.</u> Invasive Species. CDFW expresses concern about the potential introduction of invasive species and requests an invasive species management plan.

County response. An invasive species plan has been submitted and compliance with this plan is a condition of approval.

<u>Comment 5.</u> Use of water wells. CDFW states that the location of the proposed second will should be disclosed and that they are concerned that the existing and proposed wells could be connected to surface water features, and that a mitigation measure should be added to require that a hydrogeologist conduct a study of the wells to determine connectivity.

County response. The location of the proposed second well is disclosed (IS/MND p.20). County staff has reviewed and analyzed the well log for the existing well. The existing well is screened (drawing water) only at 240 to 250 feet below the surface after a 188 foot deep clay layer which would presumably be acting as an aquitard to limit or prevent surface water from permeating below the surface. CDFW's comments regarding potential hydrological connection to surface water features is specious and includes no factual evidence to support the assertions that the wells may impact surface water or biological resources.

<u>Comment 6.</u> CDFW requests that the project be required to submit a post project remediation and restoration plan.

County response. This is a recommended condition of approval.

Comments were also submitted by the California Department of Food and Agriculture after the close of the circulation period. The comments can generally be summarized as requesting that all state cannabis regulations be included in the ISMND and a request for a more detailed description of proposed equipment and maintenance of equipment.

The comments submitted during the circulation period do not affect the conclusions of the document. 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 approving the Conditional Use Permit.

RECCOMENDATION: 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 Zoning Clearance Certificate.

ALTERNATIVES: The Planning Commission could elect not to approve the project, or to require the applicant to submit further evidence, or modify the project. 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 Division staff has stated that the required findings in support of the proposal have been made. Consequently, Planning staff does not recommend further consideration of either alternative.

Staff prepared a thorough environmental analysis which included the preparation of an IS/MND pursuant to the CEQA Statute (Public Resources Code 21000–21189) and Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387). The Commission could also decide the project may have environmental impacts that would require further environmental review pursuant to CEQA. Staff did not identify any potentially significant unmitigable impacts.

RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF HUMBOLDT

Resolution Number 21-

Record Number PLN-12154-CUP and PLN-2018-15197 Assessor's Parcel Number: 313-145-006

Resolution by the Planning Commission of the County of Humboldt certifying compliance with the California Environmental Quality Act and conditionally approves the Maple Creek Ranch Corp., Conditional Use Permit and Zoning Clearance Certificate.

WHEREAS, Maple Creek Ranch Corp., submitted an application and evidence in support of approving a Conditional Use Permit and Zoning Clearance Certificate for Record Numbers PLN-12154-CUP and PLN-2018-15197. Permit requested is a Conditional Use Permit for 4 acres of full sun outdoor commercial cannabis cultivation, a Zoning Clearance Certificate for 27,000 square feet of full sun outdoor cannabis cultivation, and ancillary nursery space, and appurtenant facilities to support the operation.

WHEREAS, a Mitigated Negative Declaration was prepared for the proposed Conditional Use Permit and circulated for public review pursuant to Section 15074 of the CEQA Guidelines; and

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

- 1. FINDING: Project Description: An application for a total of 4.6 acres of new, full sun outdoor commercial cannabis cultivation. This involves four Conditional Use Permits for new outdoor commercial cannabis cultivation under the CMMLUO, totaling 4acres (174,240 square feet) of cultivation on a 420-acre legal parcel in the Korbel area as well as a Zoning Clearance Certificate under the CCLUO for the relocation of 27,000 square feet of outdoor cannabis from APN 315-011-009. Water will be sourced from a groundwater well and from rainwater catchment. The total existing and proposed water storage capacity on the parcel will be 250,000 gallons. Water will be delivered to the cannabis plants using a pumpdriven drip irrigation system with adjustable emitters and in-line meters. The applicant's estimated annual water use is 800,000 gallons. The power sources for the project are a proposed solar system and 25 kw whisper watt diesel generators. The project includes a proposed ancillary nursery of 6,600 square feet and a proposed ancillary support facility of 4,800 square feet to be used for onsite drying and processing. Four full time and a maximum of 10 seasonal employees will work on the site.
 - **EVIDENCE:** a) Project File: PLN-12154 and PLN-15197
- 2. FINDING: CEQA. The requirements of the California Environmental Quality Act have been complied with. A Mitigated Negative Declaration (MND) was prepared for the project and circulated for public review. The conclusion of the MND is that there are not any potentially significant impacts that cannot be mitigated.
 - **EVIDENCE:** a) Environmental review for the proposed project included the preparation of an Initial Study/Mitigated Negative Declaration (IS/MND) pursuant to the California Environmental Quality Act (CEQA) Statute (Public Resources Code 21000–21189) and Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387).
 - b) The IS/MND was circulated from February 2, 2021 to March 3, 2021, at the State Clearinghouse (SCH #2021020037).
 - c) The Initial Study/Mitigated Negative Declaration included 8 mitigation measures

which have been incorporated into a Mitigation Monitoring and Reporting Plan which is being adopted as part of the project.

- 3. FINDING: ENVIRONMENTAL IMPACTS FOUND NOT TO BE SIGNIFICANT- NO MITIGATION REQUIRED. The following impacts have been found to be less than significant and mitigation is not required to reduce project related impacts: Aesthetics, Agriculture and Forest Resources, Air Quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, recreation. transportation and traffic, utilities, and wildfire
 - **EVIDENCE:** a) There is no evidence of an impact to any of the above reference potential impact areas based on the project as proposed at this proposed location.
 - b) Initial Study/Mitigated Negative Declaration dated February 2, 2021 and circulated for public review February 2, 2021 to March 3, 2021.
- 4. FINDING: ENVIRONMENTAL IMPACTS MITIGATED TO LESS THAN SIGNIFICANT The Initial Study identified potentially significant impacts to biological resources, cultural resources, and tribal cultural resources which could result from the project as originally submitted. Mitigation Measures have been required to ensure potential impacts are limited to a less than significant level.
 - **EVIDENCE** a) **Biological Resources**: Potentially significant impacts will be mitigated to a less that significant level with the implementation of the following mitigation measures for biological resources:

BIO-1: Preconstruction surveys for western pond turtle and special-status amphibian species shall be conducted throughout the proposed construction area and a 400-foot buffer around the proposed development area. Surveys shall consist of "walk and turn" surveys of areas beneath surface objects (e.g., rocks, leaf litter, moss mats, coarse woody debris) for newts and salamanders, and visual searches for frogs.

 If western pond turtle, red-bellied newt or southern torrent salamander or special status frogs are detected during the preconstruction survey, the proposed development shall not occur within 200 feet from the occurrence(s) measured as a horizontal line perpendicular to, and moving away from, the SMA until such time as surveys demonstrate that the species are not present.

BIO-2: No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting raptors that identifies that there are no active nests within 500 feet of the proposed development area.

BIO-3: No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting special status bird species that identifies that there are no active nests within 100 feet of the proposed development area.

BIO-4: The generator supplying power to the project shall be kept in an enclosed structure or otherwise muffled such that project-generated sound does not

exceed 50 decibels at 100 feet from the generator or at the edge of forest habitat, whichever is closer.

BIO-5: No additional road work or rocking of the access road shall occur until a seasonally appropriate (March to Mid-April) survey for Howell's montia is performed. If any Howell's montia would be affected by the road work the applicant shall relocate and restoration the impacted area at a 2:1 ratio on -site. Successful relocation and restoration shall include the following:

- A mitigation plan that includes the details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long- term protection, and management, monitoring and reporting requirements and success criteria.
- Success criteria for preserved and compensatory populations shall include:
 - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat.
 - Compensatory and preserved populations shall be selfproducing. Populations will be considered self- producing when:
 - Plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
 - Reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.

BIO-6: Rodenticides are prohibited from use associated with the project.

b) **Cultural Resources and Tribal Cultural Resources**: Potentially significant impacts will be mitigated to a less that significant level with the implementation of the following mitigation measures for cultural resources and for tribal cultural resources:

CUL-1: If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt County coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

CU-2: If cultural materials (chipped or ground stone, historic debris, building foundations, or bone) are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who

meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendations for further action.

- 5. FINDING: CEQA Public Comments: Comments were received from the California Department of Fish and Wildlife during the circulation period of the IS/MND. Comments were also received by the California Department of Food and Agriculture outside of the circulation period. These comments have been considered and none of these comments change the conclusions of the Mitigated Negative Declaration.
 - **EVIDENCE:** a) <u>Comment 1.</u> Northern Spotted Owl. CDFW states that a mitigation measure for noise and light to be attenuated should be included to ensure no impacts to Northern Spotted Owl and that this should include a requirement to comply with International Dark Sky Standards.

County Response: Humboldt County Code requires compliance with International Dark Sky standards for all artificial lighting associated with cannabis cultivation. Requiring a mitigation measure for standards that are already required by regulation is inappropriate. Additionally, mitigation for noise is included as proposed mitigation measure BIO-4.

b) Comment 2. CDFW states that the botanical survey completed for the project is not floristic and does not follow the CDFW botanical survey protocol. CDFW also states that sensitive species such as Howell's Monita may be present in the nonroad areas of the project, and that botanical surveys for Siskiyou checkerbloom were likely too late in the season for flowering and that they could therefore be impacted by the project.

County response. Page 3 of the botanical survey prepared by Kyle Wear states that the survey is "floristic in nature" and follows the methods outlined in the CDF Protocols for botanical surveys. Staff reached out to CDFW staff to understand why they were suggesting Mr. Wear was misrepresenting his own report but had not received a response as of the date of this staff report. Kyle Wear has over 20 years experience performing floristic and botanical surveys in northern California.

c) Comment 3. Cumulative Impacts. CDFW states that cumulative impacts are not addressed because potential impacts to sensitive species could be cumulatively significant.

County response. The ISMND identifies that there will be no potentially significant impacts to sensitive communities from the proposed project. Accordingly, the project's contribution to cumulative impacts would be negligible and insignificant.

d) Comment 4. Invasive Species. CDFW expresses concern about the potential introduction of invasive species and requests an invasive species management plan.

County response. An invasive species plan has been submitted and compliance with this plan is a condition of approval.

e) Comment 5. Use of water wells. CDFW states that the location of the proposed second will should be disclosed and that they are concerned that the existing and proposed wells could be connected to surface water features, and that a

mitigation measure should be added to require that a hydrogeologist conduct a study of the wells to determine connectivity.

County response. The location of the proposed second well is disclosed (IS/MND p.20). County staff has reviewed and analyzed the well log for the existing well. The existing well is screened (drawing water) only at 240 to 250 feet below the surface after a 188 foot deep clay layer which would presumably be acting as an aquitard to limit or prevent surface water from permeating below the surface. CDFW's comments regarding potential hydrological connection to surface water features is specious and includes no factual evidence to support the assertions that the wells may impact surface water or biological resources.

f) Comment 6. CDFW requests that the project be required to submit a post project remediation and restoration plan.

County response. This is a recommended condition of approval.

g) The California Department of Food and Agriculture (CDFA) submitted comments after the close of the circulation period. The comments can generally be summarized as requesting that all state cannabis regulations be included in the ISMND and a request for a more detailed description of proposed equipment and maintenance of equipment.

County response. These comments do not affect the conclusion of the IS/MND.

- 6. FINDING The proposed development is in conformance with the County General Plan, Open Space Plan, and the Open Space Action Program.
 - **EVIDENCE** a) The location of where the cannabis activities will take place are designated Timber in the Humboldt County General Plan. General and intensive agriculture are allowable use types for this designation. The project is, therefore, consistent with the T designation.
 - b) The General Plan Circulation Element requires Decisions to change or expand the land use of a particular area shall include an analysis of the impacts to existing and proposed transportation facilities and services so as to minimize or avoid significant operational, environmental, economic, and health-related consequences. This project does not change the land use or uses anticipated in the Timber Land Use Designation. The project is served by a County Maintained Road. There will not be a decrease in the level of service of any roadway as a result of this project.
 - c) The proposed project is consistent Conservation and Open Space Element Biological Resources as evidenced by compliance with the following polices and standards:
 - 1. <u>Streamside Management Areas (BR-P5, P6)</u>: There are several mapped Streamside Management Areas (SMAs) and wetland areas on the property. All development associated with the project is located outside of SMA and required setbacks.
 - 2. <u>Wetland Identification (BR-P7):</u> A wetland delineation has been prepared and the project is not proposed to impact any wetlands on the property. Portions of the existing access drive is located within the required setback from the intermittent wetlands however no expansion of this drive is proposed and maintenance of existing road and drives are allowed activities within the wetland buffers.

Biological Resource Maps (BRP11): Northern Spotted Owl have been observed

historically within one mile, with the closest NSO activity center being approximately 0.40 miles to the east across Maple creek Road from the project site. Northern Spotted Owl surveys were conducted by Blair Forestry Consultants for the Maple Creek Ranch NTMP, occurring between 2018 and 2020. There were no spotted owl detections for any of these years.

A nine-quad search was conducted for the IS/MND and found the potential for habitat for 31 species of wildlife. 28 of these species were found to have potential habitat on the subject parcels. Table 4 of the IS/MND lists the species with a possibility of occurring in and around the project area. Mapping has been used to identify the potential for sensitive species consistent with this policy.

- 3. <u>Agency Review (BR-P12)</u>: Consistent with this policy, the county has consulted with the California Department of Fish and Wildlife. The initial consultation was in July 2020 and no comments were received. CDFW was consulted in the preparation of the Initial Study/Mitigated Negative Declaration.
- d) The Goals and policies of the Conservation and Open Space Cultural Resources have been complied with based on the referral of the project to the Northwest Information Center (NWIC), the Bear River Band of Rohnerville Rancheria, the Blue Lake Rancheria, and the Wiyot Tribe. An archeological survey of the subject parcels. The report concludes that there are archeologically and historically significant resources on the property, but that they are outside of the proposed project area and would not be impacted by the proposed project. The Tribal Historic Preservation Officers (THPO's) have reviewed the reports and concurred with the findings and recommendations, which are included as mitigation measures in the IS/MND.
- e) The project is consistent with the Conservation and Open Space Scenic Resources policies as the only applicable policy is related to restricting light and glare. The project will comply with the CMMLUO and CCLUO which require all night lighting be completely shielded in compliance with International Dark Sky Standards.
- f) The project is consistent with the Water Resources Element through compliance with the following goals and policies:
 - Sustainable Management (WR-P1). Protection for Surface and Groundwater Uses (WR-P2). The project does not_utilize diversion from a surface water source, as water will come from wells that are not hydrologically connected to surface water and will use captured rainfall.
 - i. <u>Project Design (WR-P12.</u> The project will not detract from the function of rivers, streams, ponds, wetlands or their setback areas.
 - i. <u>Rain Catchment Systems (WR-P20)</u>. Rainwater catchment is a component of the project, providing approximately 200,000 gallons of the annual water use.
- g) The proposed cannabis cultivation, an agricultural product, is within land planned and zoned for agricultural purposes, consistent with the use of Open Space land for managed production of resources. The use of an agricultural 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.
- h) The project is in compliance with the Noise Element as there are no sensitive receptors which would be adversely affected by the project.
- i) The project complies with the Safety Element of the General Plan as follows:
 - I. <u>Geologic Safety</u>. The project site is not located in a mapped Alquist-Priolo fault zone. The site is located in an area designated as Moderate Slope

Instability (2) in the County's GIS mapping. Conditions of approval require the applicant to obtain grading permits from the Humboldt County Building Inspection Division for all grading required for the proposed project, which will require the grading plans to meet State and local regulations. As conditioned, the project is consistent with the geologic resource policies of the Safety Element.

- II. <u>Flooding</u>: The subject site is outside any mapped flood hazard areas. The project site is not within levee inundation area. The project is consistent with the flood policies of the General Plan.
- III. <u>Fire Hazard</u>. The subject property is located within an area with very high hazard severity. The parcel is located within the State Fire Responsibility Area where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. CAL FIRE was referred and stated that they had no comment on the proposed project. The Humboldt County Fire Safe Ordinance (Section 3111-1 et seq.) establishes development standards for minimizing wildfire danger in state responsibility designated areas. The project is consistent with the fire protection policies of the Safety Element.
- j) The project complies with the Community Infrastructure and Services Element, where standard 5 requires new industrial, commercial and residential development located outside of fire district boundaries to obtain written acknowledgment of available emergency response and fire suppression services from the local fire agency, including any recommended mitigation. For discretionary permits findings shall be made that no service is available, and the project shall be conditioned to record acknowledgment of no available emergency response area for the Kneeland Fire Protection District and it is assumed that no service would be available from the district, and that no acknowledgment would be received. For this reason, the project is conditioned that the applicant records an "ACKNOWLEDGMENT OF NO AVAILABLE EMERGENCY RESPONSE AND FIRE SUPPRESSION SERVICES" from the Garberville Fire Protection District.
- 7. FINDING The proposed development is consistent with the purposes of the Agriculture Exclusive (AE) zone in which the site is located.
 - **EVIDENCE** a) The open grassland and meadows on the subject property have been zoned AE.
 - b) The AE Zone is intended to be applied in fertile areas in which agriculture is and should be the desirable predominant use and in which the protection of this use from encroachment from incompatible uses is essential to the general welfare.
 - c) Section 55.4.8.2 of the Commercial Medical Marijuana Land Use Ordinance (and as modified to remove the limitation to medical cannabis) states that "Outdoor and Mixed-Light Commercial cultivation of cannabis for medical use shall be allowed in specifically enumerated zones in which general agriculture is a principally permitted use, or conditional use. Commercial cannabis cultivation is specifically allowed in the AE Zoning designation subject to approval of the appropriate permit as required by the CMMLUO.
- 8. FINDING The proposed 4.6 acres of cultivation and onsite propagation and drying is consistent with the requirements of the CCLUO and CMMLUO Provisions of the Zoning Ordinance.
 - **EVIDENCE** a) Section 55.4.3.1 of the Commercial Cannabis Land Use Ordinance states: "Applications for Commercial Cannabis Activity land use permits filed on or

before December 31, 2016 shall be governed by the regulations in effect at the time of their submittal..." The subject application was filed on December 21, 2016 and thus is subject to the provisions of the CMMLUO.

b) <u>Parcel Size and Cultivation Area (314-55.4.8.2.1.1 CMMLUO)</u>: On parcels 320 acres or larger in size, in the eligible zoning districts described in 55.4.8.2.1, one additional cultivation area permit of up to one acre each for each one hundred acre increment (e.g. 3 for a 320 acre parcel, 6 for a 600 acre parcel, etc.), up to a maximum of 12 permits, may be issued with a Use Permit. The proposed action is for 4 Conditional Use Permits for 4 acres of new full-sun outdoor cultivation on a 420 acre parcel. All proposed cultivation areas and associated development would be constructed on the AE-zone portions of the subject parcels.

<u>Relocation Sites (314-55.4.6.5.9 CCLUO):</u> Sites eligible for relocation of RRR sites shall be those meeting the eligibility criteria specified in Section 55.4.6.1 as well as the siting criteria specified in Section 55.4.6.4 through 55.4.6.8, as well as the performance standards of 55.4.12. The subject property meets the eligibility and siting criteria to receive the additional 27,000 sf of cultivation from APN 315-011-009 as it is zoned AE and over 5 acres in size, less than 15% slope, does not utilize diversionary water, utilizes a renewable energy source, meets the road performance standards and does not involve the conversion of timberland. The project is also conditioned to comply with all performance standards of the CCLUO for the 27,000 sf.

- C) Prime Agricultural Soils (55.4.8.2.1): The CMMLUO states that the cultivation area must be on prime agricultural soils with a slope of less than 15% and no more than 20% of the area of Prime Agricultural soils on the parcel may be utilized for commercial medical marijuana cultivation activities. A registered Civil Engineer for pacific Watershed Associates prepared an analysis of the ranch property, which consists of both the 420 acre parcel and the 450 acre parcel that is located directly south of the subject parcel, and found that there is approximately 25.66 acres of prime agricultural soils on the ranch. The applicant also hired Dirty Business Soil Consulting, LLC who prepared a prime soils assessment that concluded there was an additional 4 acres of previously unidentified prime soils on the property, bringing the total to 29.66 acres. This would allow up to 5.9 acres of cannabis cultivation. The 4 acre proposal complies with this requirement. While the additional 27,000 square feet is not required to be located on prime soils due to the requirements of the CCLUO, it will not result in more than 20% of the prime soils on the ranch property being occupied. A condition of approval requires the entire 870 acre ranch property to be held as one for the life of the project.
- d) Limitation on Number of Permits (314-55.4.8.10): No more than four commercial cannabis activity permits may be issued to a single person, as defined in the referenced section. According to records maintained by the Department, the applicant has not applied for any other cannabis activity permits and is entitled to four. Pursuant to CMMLUO Section 314-55.4.8.2.1.1, on parcels 320 acres or larger in size, in the eligible, one additional cultivation area permit of up to one acre each for each one hundred acre increment (e.g. 3 for a 320 acre parcel, 6 for a 600 acre parcel, etc.), up to a maximum of 12 permits, may be issued with a Use Permit. The subject parcel contains over 800 acres; therefore, the applicant is eligible for 8 acres of cultivation. This application is for 4 acres of cannabis cultivation. If approved, the applicant will hold 4 Conditional Use Permits pursuant to CMMLUO Section 314-55.4.8.2.1.1.
- e) <u>Accessory Processing (314-55.4.9.1)</u>: Processing onsite associated with a permit for cultivation is allowed as part of the approved permit. Processing is included within the project description and is allowed as part of the permit.
- f) <u>Performance Standards Water (314-55.4.11c, g, l, m</u>): Estimated annual water usage is 800,000 gallons of water for irrigation. This equates to approximately 4 gallons per sf. The applicant will utilize drip irrigation to conserve water and ensure

there is minimal to no run-off and the plants will be planted directly in the native soil. The proposed project includes rain catchment systems to capture up to 200,000 gallons of rainwater annually. The well completion logs indicate the well is drawing water at 240 feet below the surface, below over 170 feet of clay which would provide an aquitard layer from surface water. Therefore, the wells are hydrologically disconnected from surface water and do not require water rights for diversion and use from the State Water Resources Control Board. Conditions of approval require the applicant to meter water use to demonstrate that the well meets the water demand and provide evidence of metering at the time of annual inspection. Should the wells not provide sufficient water for the operation, the applicant is required to modify this permit and propose a different nondivisionary source of water, such as rain catchment and/or reduce the size of the cultivation area to be consistent with water availability. As conditioned, the project therefore conforms to the performance standards for water.

- g) Performance Standards-Setbacks 314-55.4.6.4.4 (CCLUO): The CCLUO contains the same and more restrictive setback requirements and so the CCLUO standards are referenced here for brevity. The area of cannabis cultivation and on-site processing is required to be setback at least 30 feet from any property line, 300 feet from any adjacent residence and 600 feet from any school, school bus stop, church or other place of religious worship, public park, 1,000 feet from any Tribal Ceremonial Sites. Based on a review of aerial imagery and referral agency comments, the cultivation area conforms to the 600-foot setback for schools, school bus stops, parks, or places of religious worship, 300 feet from adjacent residences and 30 feet from property lines. The cultural study prepared for the project indicated that there were not any nearby Tribal Ceremonial Sites.
- h) <u>Performance Standards-Generator Noise (314-55.4.11.0 CMMLUO)</u>: The noise produced by a generator used for cannabis cultivation shall not be audible by humans from neighboring residences. The combined decibel level for all noise sources, including generators, at the property line shall be no more than 60 decibels. Where applicable, sound levels must also show that they will not result in the harassment of Marbled Murrelet or Spotted Owl species, when generator use is to occur in the vicinity of potential habitat. Mitigation measures required for this project require the generator to be attenuated to not exceed 50 decibels at 100 feet or edge of any sensitive habitat.

<u>Performance Standards – for Energy Use (314-4.12.5 CCLUO)</u>: The 27,000 square feet to be relocated to the site falls under the CCLUO and is required to comply with the energy performance standards which require an on-site renewable energy system with no more than twenty percent net non-renewable energy use. The proposed 27,000 square feet is full sun outdoor and the portions of the project related to propagation and drying of this 27,000 square feet will be serves by the solar power system.

- **9. FINDING** The project as proposed complies with the requirements of the Streamside Management Ordinance requirements.
 - EVIDENCE a) Based on a review of the Humboldt County WebGIS and the site plans and biological analysis prepared by the applicant's consultants, there are several SMAs on the subject parcel.
 - b) With the exception of a portion of the existing access drive, the project developments are plotted outside of the buffered areas for watercourses as defined by the SMA ordinance and the State Cannabis Cultivation Policy. Maintenance of existing roadways are exempt from the SMAWO requirements.
- **10. FINDING** <u>Legal Lot Requirement (312-1.1.2)</u>: The Zoning Ordinance requires that Development permits be issued only for a lot that was created in compliance with all applicable state and local subdivision regulations. The lots in question were

legally created.

- **EVIDENCE** a) The subject property consists of four patent parcels.
- 11. FINDING The project as approved with mitigation measures and conditions of approval will not be operated or maintained in a manner that will be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the vicinity.
 - **EVIDENCE** a) The access for the project is located off Maple Creek Road, which is a publicly maintained road developed to the functional classification of a Road Category 4 standard. The Department of Public Works has reviewed the proposed project and found that the road is acceptable for the intended traffic.
- **12. 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 housing units. 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:

- Adopts the Mitigated Negative Declaration for the Maple Creek Ranch Corp. Conditional Use Permit and Zoning Clearance Certificate; and
- Adopt the findings set forth in this resolution; and
- Conditionally approves the Conditional Use Permit and Zoning Clearance Certificate for Maple Creek Ranch Corp. based upon the Findings and Evidence and subject to the conditions of approval attached hereto as Attachment 1 and incorporated herein by reference; and

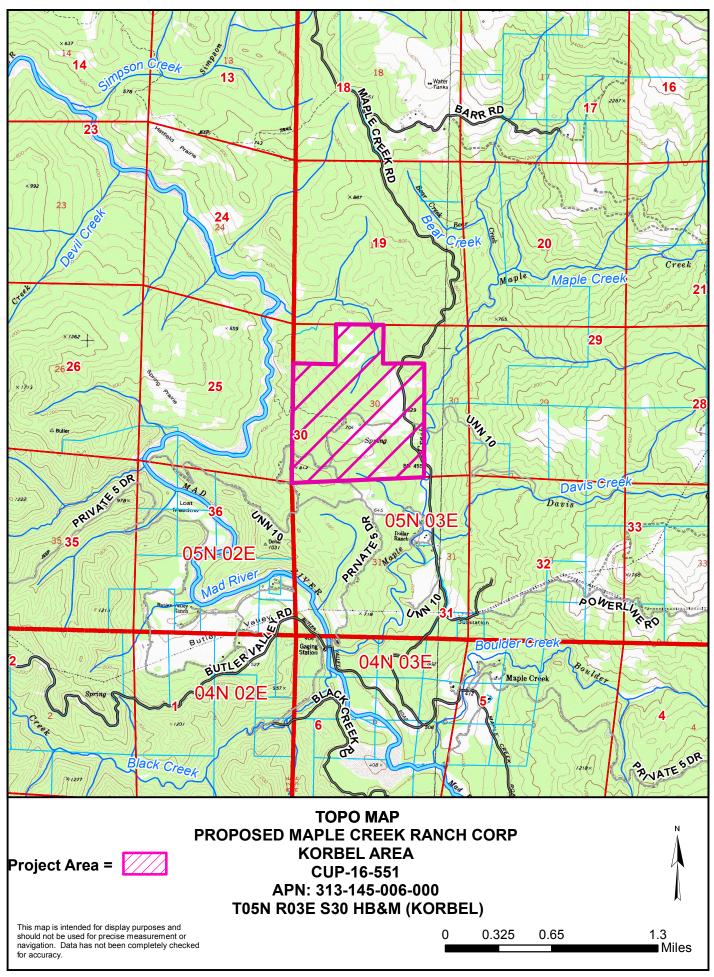
Adopted after review and consideration of all the evidence on March 18, 2021.

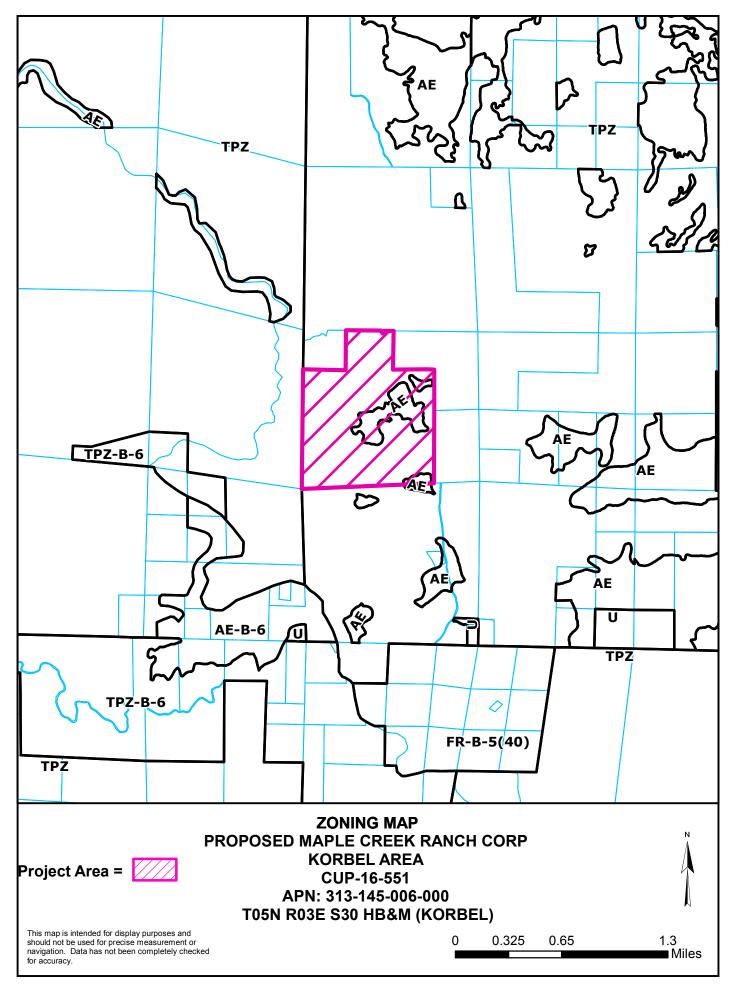
The motion was made by COMMISSIONER ______and second by COMMISSIONER ______and the following ROLL CALL vote:

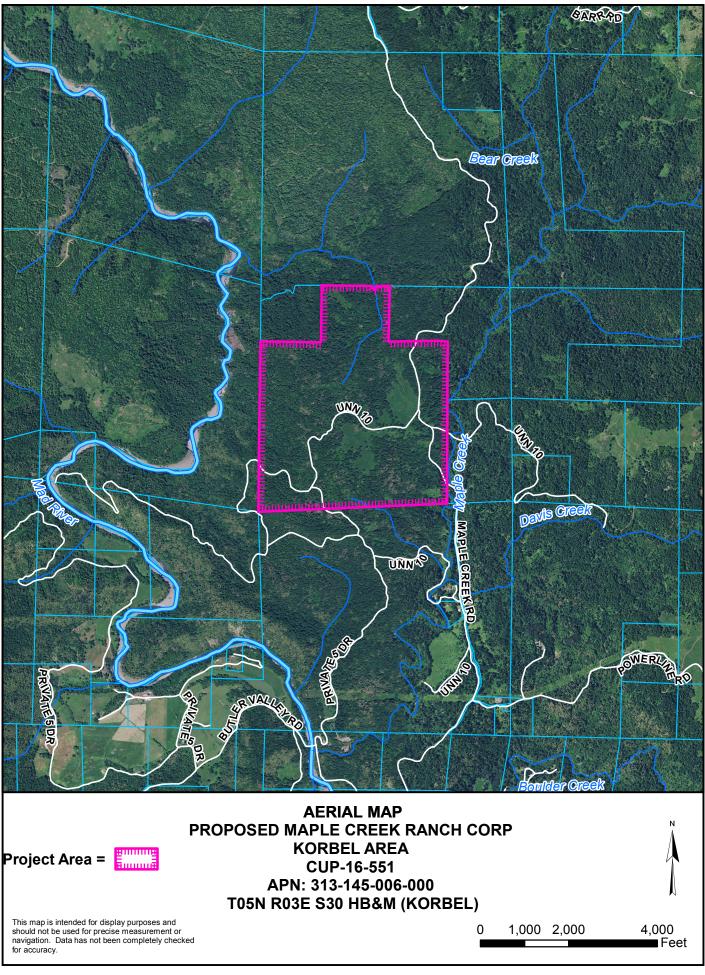
AYES: COMMISSIONERS: NOES: COMMISSIONERS: ABSENT: COMMISSIONERS: ABSTAIN: COMMISSIONERS: DECISION:

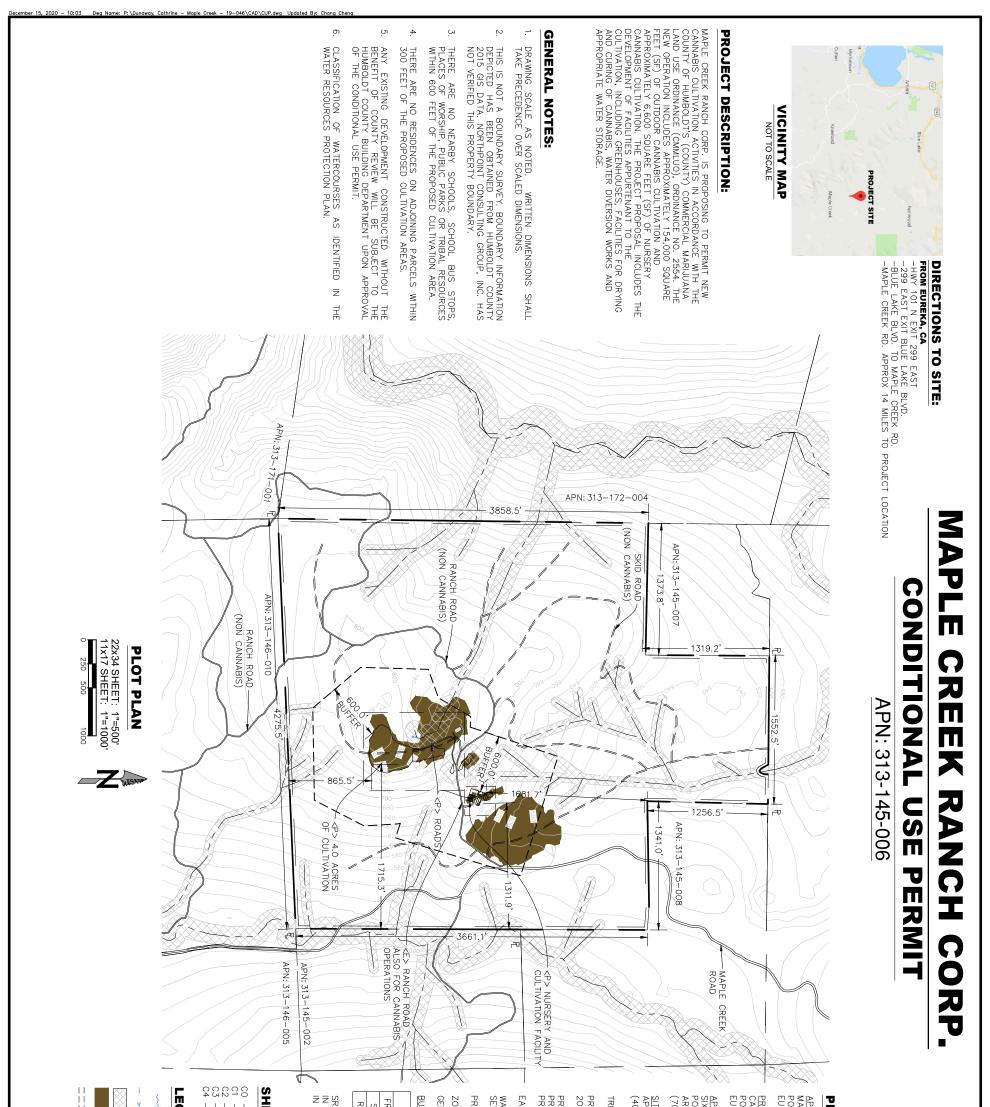
I, John Ford, Secretary to the Planning Commission of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above entitled matter by said Commission at a meeting held on the date noted above.

John Ford, Director Planning and Building Department

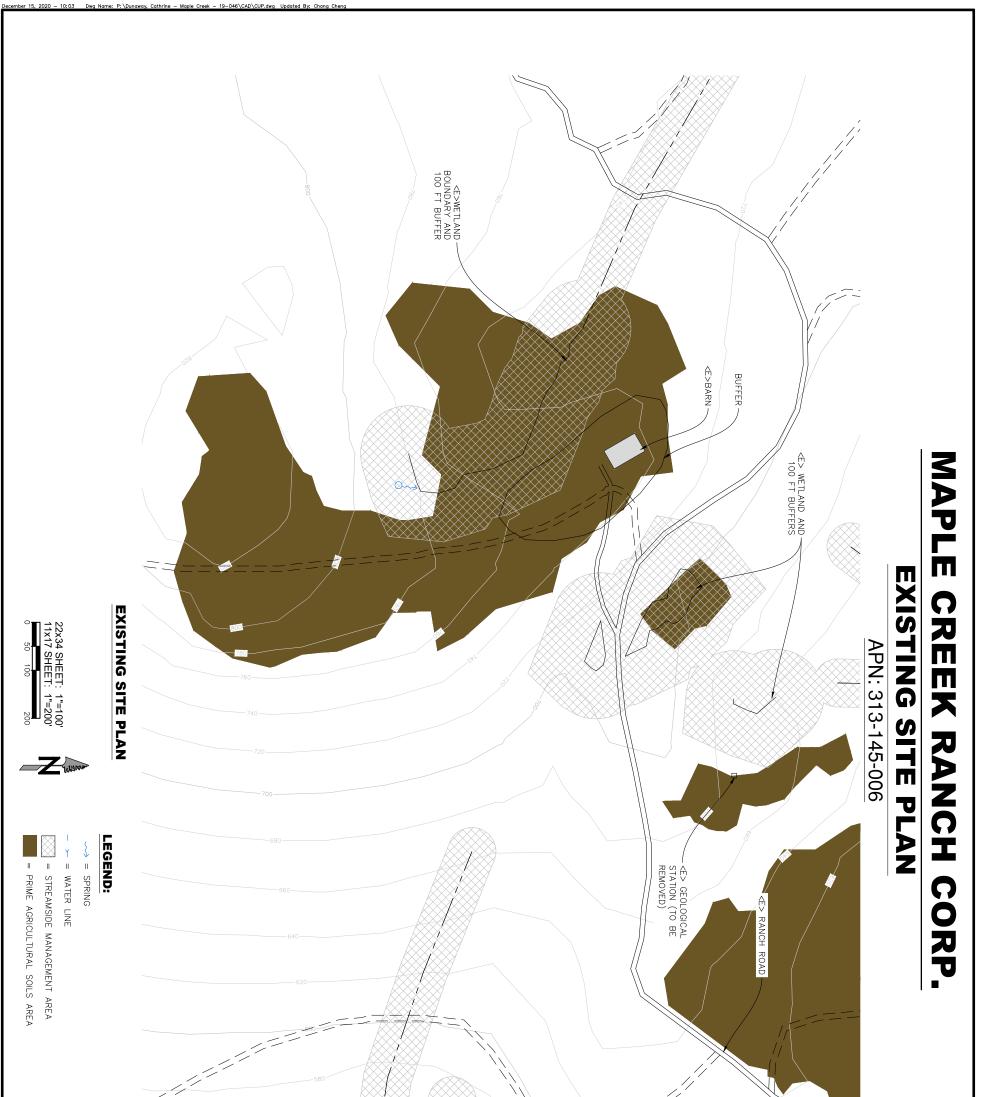




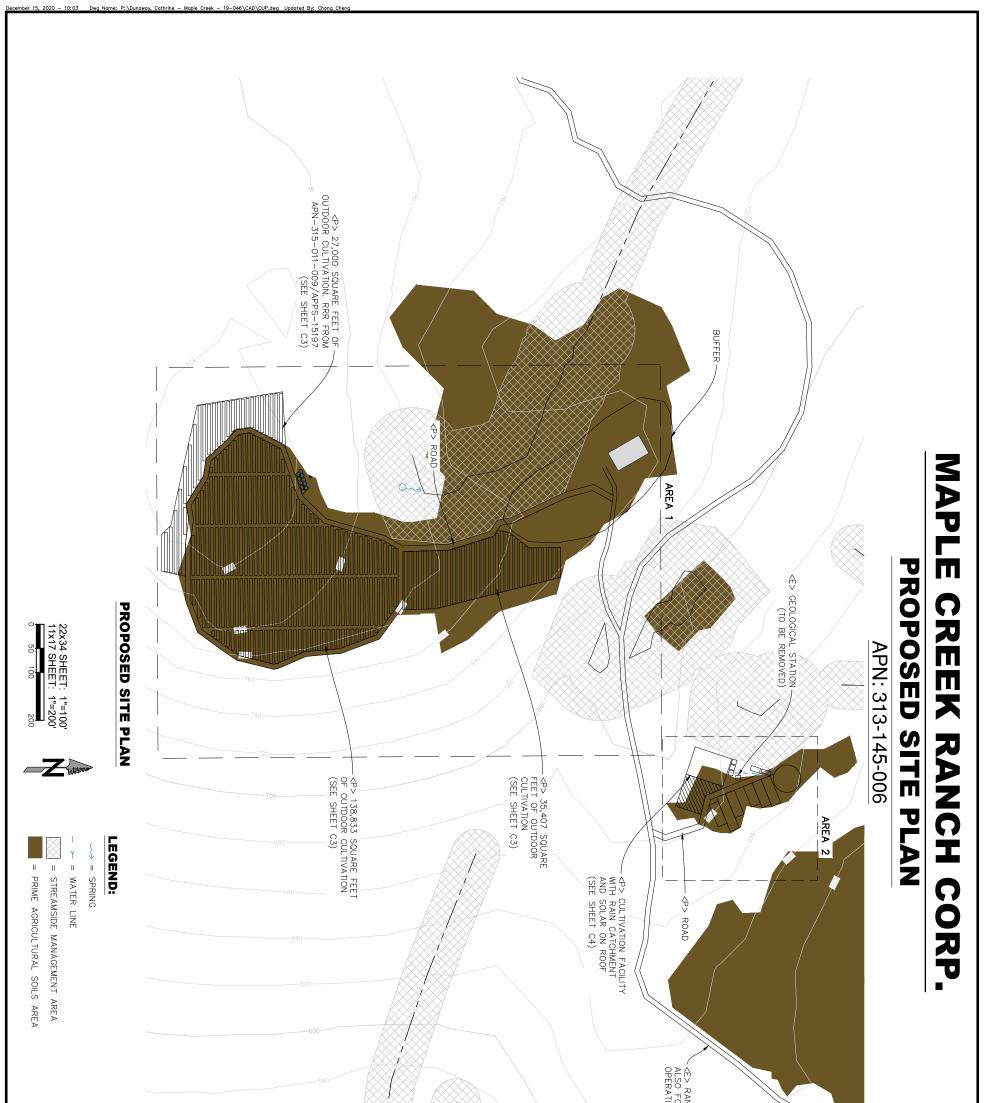




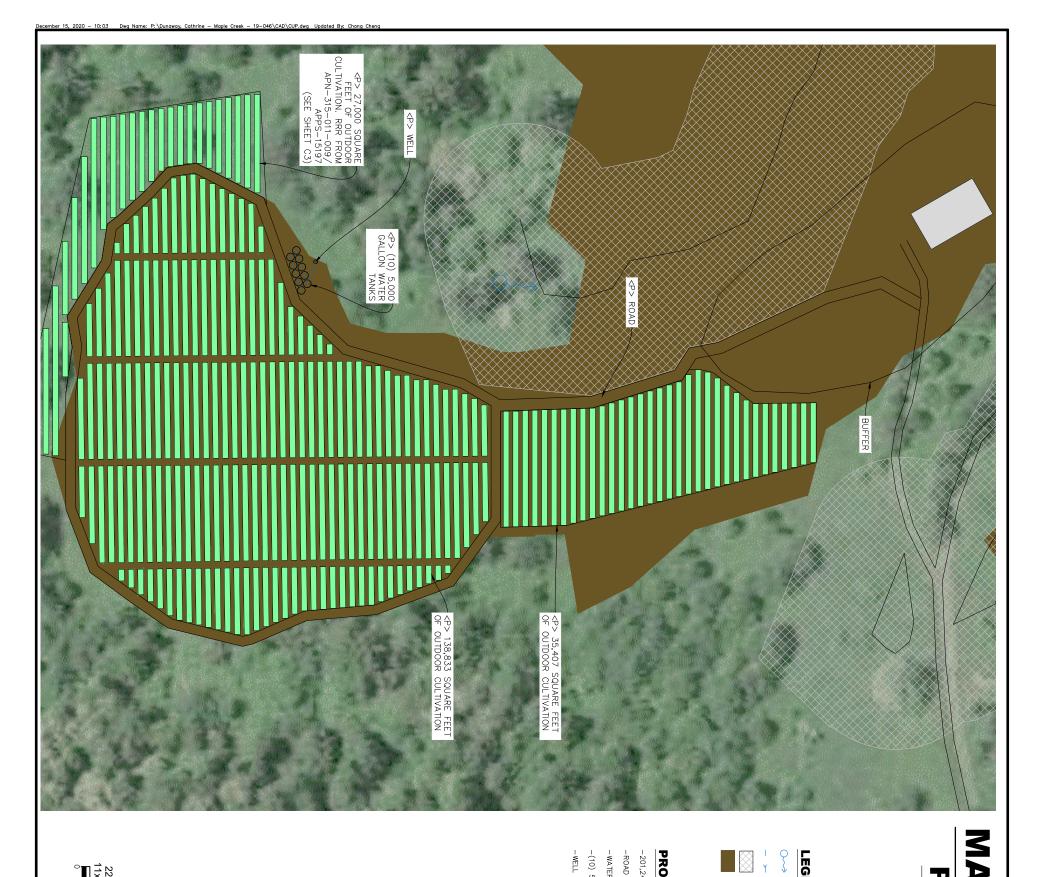
GEND: = SPRING = WATER LINE = STREAMSIDE MANAGEMENT AREA = PRIME AGRICULTURAL SOILS AREA = SKID ROAD	RONT 20' 30' SIDE 30' 20' 30' EAR 30' 10' 30' EER 30' 10' 30' COASTAL ZONE: = NO COASTAL ZONE: = NO 100 YR FLOOD ZONE: = YES	ROJECT INFORMATION: PPLCANT: PPLC CREEK RANCH CORP. DBOX 1212 REKA, CA 95502 DOPERTY OWNEE: INFERNE DUNAWAY DBOX 1212 REKA, CA 95502 SOPERTY REVERS AGENT. PPLCANTS AGENT. PPLCANTS AGENT. DEVELOPMENT, LLC DEVELOPMENT, LLC DBOX 4215 DEVELOPMENT, LLC DBOX 4215 DEVELOPMENT, LLC DEVELOPMENT, LLC DEVELOPMENT, LLC DEVELOPMENT, LLC DEVELOPMENT, LLC DEVELOPMENT, LLC DEVELOPMENT, LLC DEVELOPMENT, CA 95518 OT) 495-1791 CPPLCANTS AGENT. REKA, CA 95502 PPLCANTS AGENT. NIS3-145-006 0.7856, -123.8861) OT BE REMOVED = NONE EES TO BE REMOVED = NONE EES TO BE REMOVED = NONE EES TO BE REMOVED = NONE OF PRIME AGRICULTURAL AREA = 181,122 SO.FT. (20.79 ACRES) NIX OF PRIME AGRICULTURAL AREA = 181,122 SO.FT. (4.15) COPOSED OUTDOOR CULTIVATION AREA E 201,240 SO.FT. ROPOSED OUTDOOR CULTIVATION AREA E 201,240 SO.FT. COPOSED OUTDOOR CULTIVATION AREA E 201,240 SO.FT. CRTHWORK QUANTITIES = TBD CY FILL NERA ARTHWORK QUANTITIES = TBD CY FILL NERA ARTHWORK QUANTITIES = TBD CY FILL ABOO SQ.FT. NING = 420 ACRES NING = 1420 ACRES NING = 1420 ACRES NING = 1420 ACRES NING = 172, AE NING = 1420 ACRES NING = 1420 ACR	
PR0. WAR: <u>FOW</u> PR0. WAR: <u>FOW</u> PRH MAYE <u>12/15/20</u> PALE SHEET SHEET 19-046	MAPLE CREEK RANCH CORP. APN: 313-145-006 CONDITIONAL USE PEMIT-CUP	NORTHPOINT CONSULTING GROUP, INC. 1117 Samoa Blvd., Arcata, CA 95521	DRAWN BY



		MAPLE CREEK ROAD
Ministry POW miximum PRH miximum PRH miximum PRH miximum 12/15/20 source AS SHOWN SHEET SHEET 19-046 19-046	MAPLE CREEK RANCH CORP. APN: 313-145-006 EXISITNG SITE PLAN	A CONSULTING GROUP, INC. 1117 Samoa Blvd., Arcata, CA 95521



		ANCH ROAD OOR CANNABIS TIONS
mou wati. POW seawaw av. PRH seawaw in 12/15/200 seawaw AS SHOWN SHEET 19-046	MAPLE CREEK RANCH CORP. APN: 313-145-006 PROPOSED SITE PLAN	ATE EVENUS OF ATTENDED OF ATTE



MAPLE CREEK R/ PROPOSED SITE PL APN: 313-145-

LEGEND:

- $\bigcirc =$ SPRING
- >- = WATER LINE
- 💥 = STREAMSIDE MANAGEMENT AREA
- = PRIME AGRICULTURAL SOILS AREA

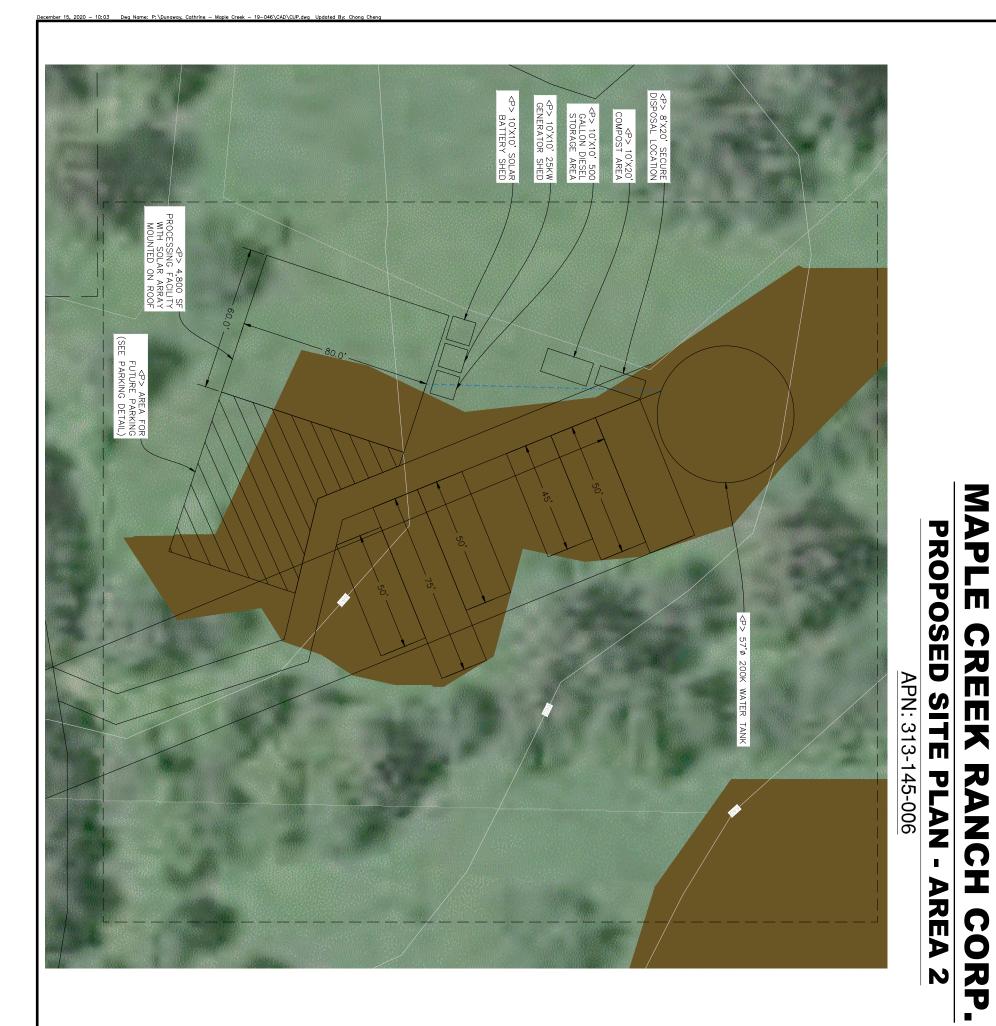
PROPOSED STRUCTURES AND USE

-(10) 5,000 GALLON WATER TANKS -WATER LINES -ROAD LEADING TO OUTDOOR CULTIVATION AREA -201,240 SQUARE FEET OF OUTDOOR CANNABIS CULTIVATION





			ANCH CORP.
мо. кол.: <u>РОМ</u> рамми вт.: <u>РАН</u> рамие <u>12./15/20</u> вали: <u>AS SHOWN</u> SHEET 13-046	MAPLE CREEK RANCH CORP. APN: 313-145-006 AREA 1	NORTHPOINT CONSULTING GROUP, INC. 1117 Samoa Blvd., Arcata, CA 95521	REVISIONS DRAWN B



LEGEND:

- → = WATER = STREA → = SPRIN(

= PRIME

EXISTING

-GEOLOGICAL STATI

-200,000 GALLON W -SECURE DISPOSAL PROPOSED -NURSERY GREENH -COMPOST AREA

-500 GALLON DIESEI -25KW GENERATOR -4,800 SQUARE FOC -AREA FOR FUTURE -SOLAR BATTERY S



PROL NAME: <u>POW</u> RANNA RY: <u>PRH</u> ROWE: <u>12/15/20</u> RANKET SHEET SHEET 19-046	
MAPLE CREEK RANCH CORP. APN: 313-145-006 AREA 2	
	u de la compañía de la
	SHED
N 111	SHED
	JEL SHED
R UL moa	WATER STORAGE TANK
T TIN BIV	- 6,600 :
H G (Ê
	INN (TO BE REMOVED)
DI UP , a, CA	AGRICULTURAL SOILS AREA
N IN 95	MENT A
T C .	R LINE
REVISIONS	
DRAWN BY	

ATTACHMENT 1A

RECOMMENDED CONDITIONS OF APPROVAL

Approval of the Conditional Use Permit and Zoning Clearance Certificate is conditioned on the following terms and requirements which must be satisfied before site development or initiation of operations.

Section 1: Development Restrictions

- 1. The applicant shall submit a check to the Planning Division payable to the Humboldt County Clerk/Recorder in the amount of \$2,530.25. Pursuant to Section 711.4 of the Fish and Game Code, the amount includes the CDFW fee plus the \$50 document handling fee to the Clerk. This fee is effective through December 31, 2021, at such time the fee will be adjusted pursuant to Section 713 of the Fish and Game Code. Alternatively, the applicant may contact CDFW by phone at (916) 651-0603 or through the CDFW website at www.wildlife.ca.gov for a determination stating the project will have no effect on fish and wildlife. If CDFW concurs, a form will be provided exempting the project from the \$2,530.25 fee payment requirement. In this instance, only a copy of the CDFW form and the \$50.00 handling fee is required.
- 2. APN's 313-145-006 and 313-146-010 shall be held together as a single unit of land for the life of this project.
- 3. A meter shall be installed on the existing well connection to keep track of all irrigation withdrawals. Records from the meter shall be maintained and made available to County staff upon request and/or at each annual inspection.
- 4. A meter shall be installed on the proposed well once it is completed to keep track of all irrigation withdrawals. Records from the meter shall be maintained and made available to County staff upon request and/or at each annual inspection.
- 5. The project shall meet all applicable fire codes, including fire suppression infrastructure requirements deemed necessary for the project. Sign off on the Occupancy Permit by the Building Division shall satisfy this requirement.
- 6. Where feasible, new utilities shall be underground or sited unobtrusively if above ground.
- 7. Prior to operation the applicant shall submit a post-project remediation and restoration plan to include how the site may be remediated once cultivation is no longer occurring.
- 8. The applicant shall comply with the Management and Mitigation Plan for Invasive plants prepared for the project, dated March 2020, for the life of the project. Compliance with this document will be reviewed annually during the annual site inspection.
- 9. The applicant shall obtain from the Building Inspection Division any Building or other required permits prior to commencing construction activities or the approved use (i.e. grading building plumbing electrical, mechanical, etc.).
- 10. Prior to initiating commercial cannabis cultivation or associated activities the applicant shall obtain a Business License from the Humboldt County Tax Collector.
- 11. Prior to initiating commercial cannabis cultivation or associated activities 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.

- 12. The applicant shall be compliant with the County of Humboldt's Certified Unified Program Agency (CUPA) requirements regarding any hazardous materials. A written verification of compliance shall be required before release of the Building Permit and initiation of operations. Ongoing proof of compliance with this condition shall be required at each annual inspection in order to keep the permit valid.
- 13. Prior to initiating operation, the applicant shall meet all of the requirements and obtain all necessary permits from the Division of Environmental Health. The applicant shall submit written verification from that agency verifying this requirement has been met.
- 14. The applicant shall pave the driveway apron for a minimum width of 18 feet and a length of 50 feet.

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 sixty (60) days of the effective date of the permit or upon filing of the Compliance Agreement (where applicable), whichever occurs first. Payment shall be made to the Humboldt County Planning Division, 3015 "H" Street, Eureka.
- 4. A Notice of Determination (NOD) will be prepared and filed with the County Clerk for this project in accordance with the State CEQA Guidelines. The Department will file the NOE and will charge this cost to the project.

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

- 1. All components of project shall be developed, operated, and maintained in conformance with the Project Description, the approved Site and Utility Plan, the Plan of Operations, and these conditions of approval. Changes shall require modification of this permit except where consistent with Humboldt County Code Section 312-11.1, Minor Deviations to Approved Plot Plan.
- 2. Cannabis cultivation and other commercial cannabis activity shall be conducted in compliance with all laws and regulations as set forth in the CMMLUO and MAUCRSA, as applicable to the permit type.
- 3. 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.
- 4. Confinement of the area of cannabis cultivation to the locations depicted on the approved site plan. The commercial cannabis activity shall be set back at least 30 feet (or setback for the underlying zone) from any property line, and 600 feet from any School, School Bus Stop, Church or

other Place of Religious Worship, or Tribal Cultural Resources, except where a reduction to this setback has been approved pursuant to County Code Section 55.4.11(d).

- 5. Maintain enrollment in Tier 1, 2 or 3, certification with the NCRWQCB Order WQ 2019-0001-DWQ, if applicable, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency.
- Consent to an annual on-site compliance inspection, with at least 24 hours prior notice, to be conducted by appropriate County officials during regular business hours (Monday – Friday, 9:00 am – 5:00 pm, excluding holidays).
- 7. Refrain from the improper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide.
- 8. Pay all applicable application, review for conformance with conditions and annual inspection fees.
- 9. The use of monofilament netting for all uses, including but not limited for erosion control, shall be prohibited. Geotextiles, fiber rolls, and other erosion control measure materials shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves to minimize the risk of ensnaring and strangling wildlife.
- 10. Leave wildlife unharmed. If any wildlife is encountered during the Authorized Activity, Permittee shall not disturb the wildlife and shall allow wildlife to leave the work site unharmed.
- 11. All refuse shall be contained in wildlife proof storage containers, at all times, and disposed of at an authorized waste management facility.
- 12. The burning of excess plant material associated with the cultivation and processing of commercial cannabis is prohibited.
- 13. Storage of Fuel Fuel shall be stored and handled in compliance with applicable state and local laws and regulations, including the County of Humboldt's CUPA program, and in such a way that no spillage occurs.
- 14. Any outdoor construction activity and use of heavy equipment outdoors shall take place between 7:00 a.m. and 6:00 p.m., Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturday and Sunday.
- 15. The Master Log-Books maintained by the applicant to track production and sales shall be maintained for inspection by the County.
- 16. Participate in and bear costs for permittee's participation in the State sanctioned tracking program (METRC).

Performance Standards for Cultivation and Processing Operations

- 17. 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."
- 18. Cultivators shall comply with all applicable federal, state, and local laws and regulations governing California Agricultural Employers, which may include: federal and state wage and hour laws,

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

- 19. Processing shall comply with the following Processing Practices:
 - I. Processing operations must be maintained in a clean and sanitary condition including all work surfaces and equipment.
 - II. Processing operations must implement protocols which prevent processing contamination and mold and mildew growth on cannabis.
 - III. Employees handling cannabis in processing operations must have access to facemasks and gloves in good operable condition as applicable to their job function.
 - IV. Employees must wash hands sufficiently when handling cannabis or use gloves.
- 20. All persons hiring employees to engage in commercial cannabis cultivation and processing shall comply with the following Employee Safety Practices:
 - I. Cultivation operations and processing operations must implement safety protocols and provide all employees with adequate safety training relevant to their specific job functions, which may include:
 - 1) Emergency action response planning as necessary;
 - 2) Employee accident reporting and investigation policies;
 - 3) Fire prevention;
 - 4) Hazard communication policies, including maintenance of material safety data sheets (MSDS);
 - 5) Materials handling policies;
 - 6) Job hazard analyses; and
 - 7) Personal protective equipment policies, including respiratory protection.
 - II. Cultivation operations and processing operations must visibly post and maintain an emergency contact list which includes at a minimum:
 - 8) Operation manager contacts;
 - 9) Emergency responder contacts;
 - 10) Poison control contacts.
 - III. At all times, employees shall have access to safe drinking water and toilets and handwashing facilities that comply with applicable federal, state, and local laws and regulations. Plumbing facilities and water source must be capable of handling increased usage without adverse consequences to neighboring properties or the environment.
- 21. All cultivators shall comply with the approved Processing Plan as to the following:
 - I. Processing Practices.
 - II. Location where processing will occur.
 - III. Number of employees, if any.
 - IV. Employee Safety Practices.
 - V. Toilet and handwashing facilities.
 - VI. Plumbing and/or septic system and whether or not the system is capable of handling increased usage.
 - VII. Drinking water for employees.
- 22. <u>Term of Commercial Cannabis Activity Permit.</u> Any Commercial Cannabis Permit issued pursuant to the CMMLUO shall expire after one (1) year after date of issuance, and on the anniversary date of such issuance each year thereafter, unless an annual compliance inspection has been conducted and the permittees and the permitted site have been found to comply with all conditions of approval.

If the inspector or other County official determines that the permittees or site do not comply with the conditions of approval, the inspector shall serve the permit holder with a written statement identifying the items not in compliance, and the action that the permit holder may take to cure the non-compliance, or file an appeal within ten (10) days of the date that the written statement is delivered to the permit holder. Personal delivery or mailing the written statement to the mailing address listed on the application by regular mail, plus three (3) days after date of mailing, shall constitute delivery. The permit holder may request a reinspection to determine whether or not the permit holder has cured all issues of non-compliance. Failure to request reinspection of any appeal period, or final determination of the appeal if an appeal has been timely filed pursuant to Section 55.4.12.3 of the CMMLUO.

- 23. <u>Permit Renewals to comply with Updated Laws and Regulations.</u> Permit renewal per Ongoing Condition of Approval #30, above, 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.
- 24. <u>Acknowledgements to Remain in Full Force and Effect.</u> Permittee acknowledges that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed in which the cultivation area is located will not support diversions for irrigation.

Permittee further acknowledges and declares that:

- (1) All commercial cannabis activity that I, my agents, or employees conduct pursuant to a permit from the County of Humboldt for commercial cultivation, processing, manufacturing, and distribution of cannabis for adult use or medicinal use within the inland area of the County of Humboldt, shall at all times be conducted consistent with the provisions of the approved County permit; and
- (2) All cannabis or cannabis products under my control, or the control of my agents or employees, and cultivated or manufactured pursuant to local Ordinance and the State of California Medicinal and Adult Use Cannabis Regulation and Safety Act ("MAUCRSA") (SB 94), will be distributed within the State of California; and
- (3) All commercial cannabis activity conducted by me, or my agents or employees pursuant to a permit from the County of Humboldt will be conducted in compliance with the State of California MAUCRSA.
- 25. <u>Transfers</u>. Transfer of any leases or permits approved by this project is subject to the review and approval of the Planning Director for conformance with CMMLUO eligibility requirements, and agreement to permit terms and acknowledgments. The fee for required permit transfer review shall accompany the request. The request shall include the following information:
 - (1) Identifying information for the new Owner(s) and management as required in an initial permit application;
 - (2) A written acknowledgment by the new Owner in accordance as required for the initial Permit application;
 - (3) The specific date on which the transfer is to occur; and
 - (4) Acknowledgement of full responsibility for complying with the existing permit; and
 - (5) Execution of an Affidavit of Non-diversion of Commercial Cannabis.
- 26. <u>Inspections.</u> 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. This permit approval shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date"), except where 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 Humboldt County Code.
- 2. If cultural resources are encountered during construction activities, the contractor on-site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist 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.

ATTACHMENT 1B

MITIGATION MONITORING REPORT

Maple Creek Ranch Conditional Use Permit and Zoning Clearance Certificate

Record Number: PLN-12154-CUP and PLN-2018-15197

Assessor Parcel Number: 313-145-006

Mitigation measures were incorporated into conditions of project approval for the above referenced project. The following is a list of these measures and a verification form that the conditions have been met. For conditions that require ongoing monitoring, attach the Monitoring Form for Continuing Requirements for subsequent verifications.

Mitigation Measures:

Biological Resources

BIO-1: Preconstruction surveys for western pond turtle and special-status amphibian species shall be conducted throughout the proposed construction area and a 400-foot buffer around the proposed developmentarea. Surveys shall consist of "walk and turn" surveys of areas beneath surface objects (e.g., rocks, leaf litter, moss mats, coarse woody debris) for newts and salamanders, and visual searches for frogs.

 If western pond turtle, red-bellied newt or southern torrent salamander or special status frogs are detected during the preconstruction survey, the proposed development shall not occur within 200 feet from the occurrence(s) measured as a horizontal line perpendicular to, and moving away from, the SMA until such time as surveys demonstrate that the species are not present.

Implementation	Monitoring	Date	To Be	Compliance	Comments /
Time Frame	Frequency	Verified	Verified By	Yes No	Action Taken
Prior to the start of construction	Once		HCP&BD*		

BIO-2: No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting raptors that identifies that there are no active nests within 500 feet of the proposed development area.

Implementation	Monitoring	Date	To Be	Compliance	Comments /
Time Frame	Frequency	Verified	Verified By	Yes No	Action Taken
Prior to the start of construction activities.	Once (prior to construction)		HCP&BD*		

BIO-3: No ground disturbing activities or vegetation removal shall occur between February 1 and August 31 unless a qualified biologist has conducted preconstruction surveys for nesting special status bird species that identifies that there are no active nests within 100 feet of the proposed development area.

Implementation	Monitoring	Date	To Be	Compliance	Comments /
Time Frame	Frequency	Verified	Verified By	Yes No	Action Taken
Prior to the start of construction activities.	Once (prior to construction)		HCP&BD*		

BIO-4: The generator supplying power to the project shall be kept in an enclosed structure or otherwise muffled such that project-generated sound does not exceed 50 decibels at 100 feet from the generator or at the edge of forest habitat, whichever is closer.

Implementation	Monitoring	Date	To Be	Compliance	Comments /
Time Frame	Frequency	Verified	Verified By	Yes No	Action Taken
Ongoing	Continuous and annually during County inspection		HCP&BD*		

- **BIO-5:** No additional road work or rocking of the access road shall occur until a seasonally appropriate (March to Mid-April) survey for Howell's montia is performed. If any Howell's montia would be affected by the road work the applicant shall relocate and restoration the impacted area at a 2:1 ratio on -site. Successful relocation and restoration shall include the following:
 - A mitigation plan that includes the details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long- term protection, and management, monitoring and reporting requirements and success criteria.
 - Success criteria for preserved and compensatory populations shall include:
 - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat.
 - Compensatory and preserved populations shall be self-producing. Populations will be considered self- producing when:
 - Plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
 - Reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.

Implementation	Monitoring	Date	To Be	Compliance	Comments /
Time Frame	Frequency	Verified	Verified By	Yes No	Action Taken
Prior to the start of construction or road maintenance	Once		HCP&BD*		

BIO-6: Rodenticides are prohibited from use associated with the project.

Implementation	Monitoring	Date	To Be	Compliance	Comments /
Time Frame	Frequency	Verified	Verified By	Yes No	Action Taken
Ongoing	Continuous and annually during county inspection		HCP&BD*		

Cultural Resources

CUL-1: If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt County coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

Implementation	Monitoring	Date	To Be	Compliance	Comments /
Time Frame	Frequency	Verified	Verified By	Yes No	Action Taken
During all initial ground disturbing activities	During initial ground disturbing activities		HCP&BD*		

CUL-2: If cultural materials (chipped or ground stone, historic debris, building foundations, or bone) are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendations for further action.

Implementation	Monitoring	Date	To Be	Compliance	Comments /
Time Frame	Frequency	Verified	Verified By	Yes No	Action Taken
During all initial ground disturbing activities	Continuous and annually during County inspection		HCP&BD*		

* HCP&BD = Humboldt County Planning and Building Department ** CDFW = California Department of Fish & Wildlife

ATTACHMENT 2

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Attached Separately

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. (Attached in Maps Section)
- 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. (Attached Separately)
- 5. Copy of the statement of water diversion, or other permit, license or registration filed with the State Water Resources Control Board, Division of Water Rights, if applicable. (Not applicable)
- 6. Description of water source, storage, irrigation plan, and projected water usage. (Included in Cultivation Operations Plan (item 4. above)
- 7. Copy of Notice of Intent 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 WQ 2019-0001-DWQ, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency. (Condition of approval)
- 8. If any on-site or off-site component of the cultivation facility, including access roads, water supply, grading or terracing, impacts the bed or bank of any stream or other watercourse, a copy of the Streambed Alteration Permit obtained from the California Department of Fish and Wildlife (Not applicable).
- If the source of water is a well, a copy of the County well permit, if available. (see Attachment 2 Appendix D)
- 10. If the parcel is zoned FR, U or TPZ, or involves the conversion of timberland as defined under Section 4526 of the Public Resources Code, a copy of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (Cal Fire). Alternately, for existing operations occupying sites created through prior

unauthorized conversion of timberland, evidence may be provided showing that the landowner has completed a civil or criminal process and/or entered into a negotiated settlement with Cal Fire. (Not applicable)

- 11. Consent for on-site inspection of the parcel by County officials at prearranged date and time in consultation with the applicant prior to issuance of any clearance or permit, and once annually thereafter. (On file)
- 12. For indoor cultivation facilities, identify the source of electrical power and how it will meet with the energy requirements in Section 55.4.12.5 (Not applicable)
- 13. Acknowledge that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed, will not support diversions for irrigation. (On file)
- 14. Acknowledge that the County reserves the right to engage with local tribes before consenting to the issuance of any clearance or permit, if cultivation operations occur within an Area of Traditional Tribal Cultural Affiliation, as defined herein. This process will follow current departmental referral protocol, including engagement with the tribe(s) through coordination with their Tribal Historic Preservation Officer (THPO) or other tribal representatives. This procedure shall be conducted similar to the protocols outlined under SB 18 (Burton) and AB 52 (Gatto), which describe "government to government" consultation, through tribal and local government officials and their designees. During this process, the tribe may request that operations associated with the THPO or their designee to the existing or proposed cultivation site, requiring that a professional cultural resources survey be performed, or requiring that a tribal cultural monitor be retained during project-related ground disturbance within areas of sensitivity or concern. The County shall request that a records search be performed through the California Historical Resources Information System (CHRIS). (On file)
- 15. Light Pollution Control Plan dated March 2020 (Attached Separately)
- 16. Maple Creek Ranch Cultivation and Operations Plan (Attached Separately)
- 17. Maple Creek Ranch Site plans (Attached)
- 18. Botanical and Aquatic Survey dated August 2019 (On file)
- 19. Botanical Assessment dated November 2019 (On file)
- 20. Archaeological Study dated November 2019 (On file)
- 21. Well Completion Report (Attached)

From:	kyle wear@suddenlink.net					
To:	Johnson, Cliff					
Subject:	RE: Maple Creek					
Date:	Thursday, March 18, 2021 11:58:45 PM					

I definitely did not admit the survey was not adequate. I told him I was willing to go do more surveys if that's what it took to move this forward just like I told you if they had a problem with the timing. Maybe I should not have said that, maybe he feels that means I feel it was not adequate, I just wanted to do whatever it took to move this forward, especially since we can start those survey right now, get it done and move forward. And I told him I understood his concern that there were not surveys in the middle part of the season. The survey I did was floristic, every plant was identified that was present to the taxonomic level necessary to determine if it was special status. The survey was over the entire project area in a type of habitat I am very familiar with. My understanding of the project timeline was that doing additional surveys in May or June 2020 would significantly delay the project and this project area was not identified to me until July 2019. Thus, I used my judgment to determine if there could be rare plants in the project area that could have been missed in July and if we could address potential impacts to sensitive botanical resources and meet the clients timeline. This is not that unusual. I concluded montia, which would not be identifiable in July could be on the access road, but I did not feel the grassland site was habitat for any other rare plants I would not have picked up in July. I think it is potential habitat for Siskiyou checkerbloom, but I would have recognized the plant at least to genus if it was no longer flowering and then would have recommend revisiting the plants the following year to make a positive ID. If there were streams or stream crossings that needed to be replaced that had rocky habitat for rare fawn lilies or other types of habitat, I would have recommended additional surveys. This judgment call based on habitat to try an accommodate the timeline is where his issue is I think. He feels it's not floristic because other plants could have been added to the plant list if I did additional surveys in May or June. This may be true, but not rare plants in my opinion, maybe some small annual grasses or other common annual plants that my have dried up by July. If I thought we would be here in March 2021, I would have done a more typical follow-up survey timing in 2020. When the video is uploaded I will listen to what he said exactly. But it seems the quickest path is just to do a couple more surveys soon? I don't think they want us to use our judgement anymore, just do three surveys over the growing season and not make any calls based on our professional judgment on the site to help move projects along or save clients money on surveys we don't feel are necessary. What exactly is continue project indefinitely? Greg's request as I read it was to go do more surveys and let them know if we found anything.

Kyle

From: Johnson, Cliff <CJohnson@co.humboldt.ca.us>
Sent: Thursday, March 18, 2021 6:52 PM
To: Kyle Wear <kyle_wear@suddenlink.net>
Subject: Maple Creek

Hi Kyle,

At the Planning Commission meeting tonight Greg specifically stated that you admitted to him that the botanical survey was inadequate and was not floristic. For this reason the Planning Commission

continued the project indefinitely. I know you and I talked about this and his disagreement, but I never understood that you were agreeing it was an inadequate survey for plant identification purposes. I actually understood the opposite, that you felt you would have been able to identify all plants but Howell's montia for which an additional survey was needed (and required). This is what I informed the commission of. Greg O'Connell then stated that you agreed with him it was an inadequate survey.

I hate to put you in the middle of this, but we need to understand whether you did confirm to Greg that the survey was not floristic and was therefore inadequate for plant id purposes of the site and project. If Greg misrepresented what you said we will need to inform them of this. If you agree with Greg that it is inadequate we will need to require additional surveys.

Cliff Johnson, Supervising Planner County of Humboldt Planning and Building Department 3015 H Street Eureka, CA 95501 (707) 268-3721

Management and Mitigation Plan for Invasive Plants

Maple Creek Ranch Corporation

APN:313-145-006, APPS#:12154

March 2020

Maple Creek Ranch Corporation is committed to controlling invasive plants from impacting the surrounding environment.

As per the Botanical and Aquatics Resources survey, *Ulex Europaeus L. (Gorse)* has been identified as being prevalent in the mapped areas throughout the proposed project location.

Gorse is classified as a noxious weed by the California Department of Food and Agriculture (CDFA).

Maple Creek Ranch Corporation plans to implement control measures outlined in the CDFA's control reference material, *Weed Control in Natural Areas in the Western United States*, a copy of the reference material is attached.

The control methods that will be used are a combination of the Mechanical and Chemical methods described in the reference material.

Ulex europaeus L.

Gorse

Family: Fabaceae

Range: Although gorse occurs along the Atlantic coast from Virginia to Massachusetts, it is most prevalent along the Pacific coast from California to British Columbia and is also found at high elevation on two Hawaiian Islands. Habitat: Grasslands, shrublands, forest margins, coastal habitats and disturbed sites such as roadsides, pasture lands, gravelly floodplains, burned areas, and cleared forests. Grows well on shady slopes with high soil moisture and good drainage. Frost-damaged plants can resprout from the crown. Does not survive severely cold winters or arid climates. It grows best on acidic soil and tolerates many soil types, including serpentine, but seldom grows in high calcium soils. Origin: Native to western Europe and introduced as an ornamental or hedge shrub. Impacts: Gorse often forms dense, impenetrable thickets that exclude desirable vegetation and increase fire risk. Mature plants contain about 2 to 4% flammable oils. Gorse can fix nitrogen, enabling the plant to colonize and dominate areas with poor soil. The plant also produces abundant leaf litter that can acidify the upper soil layers. Soil is often bare between individual plants, increasing erosion on steep slopes where gorse has replaced grasses or forbs. Plants are spiny and mostly unpalatable when mature, thus reducing pasture quality. Western states listed as Noxious Weed: California, Oregon, Washington California Invasive Plant Council (Cal-IPC) Inventory: High Invasiveness

Gorse is a dense, spiny, evergreen shrub to 5 ft tall, with yellow, pea-like flowers. The stems are highly branched, alternate and terminate with a green spine 1.5 to 2.5 inches long. Juvenile plants have soft, greygreen stems with trifoliate leaves. Mature shrubs appear leafless with simple leaves modified into stiff, curved, awl-like spines 0.25 to 1 inch long. Spines and leaves have a waxy coating and end in a sharp yellow point. Gorse has an extensive, lateral root system that contains nitrogen-fixing root nodules.

Plants begin flowering from 18 months to 3 years of age. Reproduction is by seed which are produced in small, hairy pods 0.5 to 0.75 inches long. Pods become black when mature, and upon drying, disperse seeds by ejecting them several feet from the plant. Seeds can remain viable in the soil for up to 30 years. Large soil seedbanks often accumulate, making long term control difficult. Shrubs may live for up to 30 years.

NON-CHEMICAL CONTROL

Mechanical (pulling, cutting, disking)	 Hand pulling can remove seedlings and small shrubs, but once established this technique is generally not effective. Cutting gorse off before it flowers will reduce seed production and deplete the plant's energy reserves. Resprouts are common after treatment. Cutting should be combined with an herbicide treatment or with multiple cuttings over a period of years. Cut shrubs at ground level with power or manual saws. Heavy equipment can be effectively used to control gorse in areas where soil disturbance and nonselective species removal are not important considerations. Stumps that remain following such
Cultural	treatment will require herbicide application to prevent regrowth. Repeated grazing by goats and/or sheep can greatly reduce seedling establishment and crown regrowth. In a long-term study, the best control of gorse was achieved by first burning gorse stands, followed by grazing goats or a 2:1 mix of goats and sheep at 10 or more animals/acre. On areas of unburned gorse, sustained goat stocking for 4 to 5 years provided good control in some situations. Once animals are removed, new seedlings must be controlled.

	Burning alone does not kill the root system and resprouts are common after treatment. Burning often stimulates a flush of seedling germination after the first rains. Following a burn with herbicide application provides good control.
Biological	The gorse seed weevil (<i>Exapion ulicis</i>) and spider mite (<i>Tetranychus lintearius</i>) are biocontrol agents that have become established in California. The seed weevil reduces seed production but cannot kill established stands. The seed weevil was first introduced to New Zealand in 1931, and was widely established by 1935. It has destroyed approximately 35% of the seed crop annually since then. Heavy mite (<i>Tetranychus lintearius</i>) infestations can kill branches and reduce overall plant vigor and are apparent by the dense webbing that covers the foliage.

CHEMICAL CONTROL

The following specific use information is based on published papers and reports by researchers and land managers. Other trade names may be available, and other compounds also are labeled for this weed. Directions for use may vary between brands; see label before use. Herbicides are listed by mode of action and then alphabetically. The order of herbicide listing is not reflective of the order of efficacy or preference.

GROWTH REGULAT	ORS
Picloram Tordon 22K	Rate: Broadcast treatment: 1 to 2 qt product/acre (0.5 to 1 lb a.e./acre). Spot treatment: 0.5% v/v solution and water plus 0.25 to 0.5% v/v surfactant to thoroughly wet all leaves.
	Timing: Postemergence foliar treatments are best when plants are growing rapidly at or beyond early to full bloom stage.
	Remarks: High levels of picloram can give long-term soil activity for broadleaves. Picloram is a restricted use herbicide. It is not registered for use in California.
Triclopyr Garlon 3A, Garlon 4 Ultra, Pathfinder II	Rate: Low volume spot treatment: 0.5 to 2% v/v solution of <i>Garlon 4 Ultra</i> , or 0.5 to 2% <i>Garlon 3A</i> and water plus 0.25 to 0.5% v/v surfactant to thoroughly wet all leaves. Cut stump treatment: 25% <i>Garlon 4 Ultra</i> in 75% oil carrier, or undiluted <i>Garlon 3A</i> or 50% <i>Garlon 3A</i> in water. Basal bark treatment: 20% <i>Garlon 4 Ultra</i> in 80% oil carrier, or undiluted <i>Pathfinder II</i> as a ready-to-use formulation. Basal cut stump treatment: 25% <i>Garlon 4 Ultra</i> in 75% oil carrier.
	Timing: Postemergence when plants are growing rapidly. Cut stump, basal cut stump, and basal bark treatments can be applied anytime as long as the ground is not frozen, but are best used in late summer or early fall.
	Remarks: Triclopyr is a selective herbicide for broadleaf species and will not damage desirable grasses growing nearby. For cut stump treatments, cut stems horizontally at or near ground level, and immediately apply herbicide solution. Suckering from the roots typically occurs after cutting, but the treatment should control most resprouts. Basal bark treatment: spray the lower trunk, including the root collar, to a height of 12 to 15 inches from the ground; the spray should thoroughly wet the lower stem but not to the point of runoff. Plants should not be cut for at least 1 month following basal bark treatment.
Triclopyr + 2,4-D	Rate: Spot treatment: 1 to 1.5% v/v solution of Crossbow and water to thoroughly wet all leaves.
Crossbow	Timing: Postemergence when plants are growing rapidly.
	Remarks: <i>Crossbow</i> in water forms an emulsion (not a solution), and separation may occur unless the spray mixture is agitated continuously.
AROMATIC AMINO	ACID INHIBITORS
Glyphosate Roundup, Accord XRT II, and others	Rate: Spray-to-wet spot treatment: 1.5 to 2% v/v solution of <i>Roundup ProMax</i> (or other trade name with similar concentration of glyphosate) in water to thoroughly wet all leaves. Low volume spot treatment: 5 to 10% v/v solution of <i>Roundup</i> (or other trade name) in water. Spray coverage should be uniform with at least 50% of the foliage contacted. Cut stump treatment: undiluted product or 50% v/v in water.
	Timing: Postemergence when plants are growing rapidly. Foliar treatments should be made in late summer or early fall. For cut stump treatment, application in late summer, early fall or dormant season provides best control. Treatment should occur immediately after cutting.
	Remarks: Nonselective systemic herbicide; gives good control with some resprouts. Plants should not be cut for at least 4 months after foliar treatments. Cut stump applications are as described for triclopyr.

BRANCHED-CHAIN	BRANCHED-CHAIN AMINO ACID INHIBITORS					
Metsulfuron	Rate: Broadcast foliar treatment: 1 oz product/acre (0.6 oz a.i./acre) plus 0.25% v/v surfactant.					
Escort	Timing: Postemergence foliar treatments are best when plants are growing rapidly at or beyond early to full bloom stage.					
	Remarks: Although metsulfuron has some preemergent activity, best results are generally obtained when applied to the foliage during active growth. Metsulfuron is not registered for use in California.					

RECOMMENDED CITATION: DiTomaso, J.M., G.B. Kyser et al. 2013. *Weed Control in Natural Areas in the Western United States*. Weed Research and Information Center, University of California. 544 pp.

			-,											
File Orig	inal with	OWR			141		tate of Cali				DV	VR Use Or	nly - Do	Not Fill In
Page 1		of	1		AAG	ell Co	r to Instruction	on Repo	ort					ite Number
Owner's	Well Nur	nber 1			No. XXXXXXX Work Ended 2/22/1999						Sta		mber/S	
Date Wo	rk Began	02/1	5/1999	Date V	Vork End	ed 2/22	2/1999				Latitude			Longitude
Local Pe	ocal Permit Agency Humboldt County										111		TRS/Of	her
Permit N	umber				e	_	-				187-11	0		
		<u> </u>		gic Log	O Anala	Creat			1	- I Dee	and the second se	Owner	-	
	entation		ertical O Ho		OAngle		tonite mud		Maple Cre					
	Method F	The second second second		Desci			torinte rinata		Address F				0.	EK 05500
	to F	et	Des	cribe material, g	rain size,	color, etc		City EL	ireka,					lif_zip_95502
0	7		Brown Sandy									ocatio	0	
7	9		Brown Sandy		avel (We	et)			14352					
9	145		Grey Silty Cla						orbel					
145	149		Grey Silty Cla	iy And Grave	el and S	ea She	lls	Latitude	Deg.		Per	N Longite	ude	Deg. Min. Sec.
			3-4GPMs					Datum	Ded.	Min. Dec La	300.		Dec	Long
149	188		Grey Silty Cla											el 004
188	228		Grey Gravel A						ip	-				
228	240		Blue and Grey					TOWNSI		tion Ske			. Occa	Activity
240	250		Blue Sand, Cl		_		Shells	(Sketch	must be draw			aninted.)	(O) N	lew Well
250	260		Green Clay S	ilty With son	pee Gr	avel				North	_		ŌΜ	odification/Repair
							and the local data	-11						Deepen
L					-			41		5	3			O Other
					Mer and a second	-		-11					Du	Describe procedures and materials under "GEOLOGIC LOG"
				R	ECEN	In	-	-11						Planned Uses
					LUEP	VED		-11				1	OV	Vater Supply
L					6-0	2019	1	41						Domestic Public
L					-			Mest				East		Irrigation Industrial
	_				nboldt Cr nnabis S	unly /	1	- >						athodic Protection
				100	mauls S	VCS.		O Dewatering						A TAA A DI TATATATATATA
	_				A STREET			41						leat Exchange
	_						_	-11						njection
								-11						Ionitoring cemediation
								41						parging
						2		11						est Well
										South		-		apor Extraction
								rivers, etc. at	escribe distance id attach a map.	Use additiona	oads, building al paper if nec	essary.)ther
									cursts and con		of Com	alatad W	Mall	
								0	o first wate			Meteu v		et below surface)
								Depth to	Static					
									evel 14			t) Date		
Total D	epth of B	oring	260			_ Feet			ed Yield *					Air Lift
Total C	enth of C	omple	ted Well 257			Feet			ngth			irs) Tota		
Total o								-May no	t be repre	sentative	of a wei	the state of the local division of the	-	
				Casin	igs	Wall	Outside	Screen	Slot Size	H Dont	h from	Annul	lar Ma	terial
	h from face	Boreh		Materia	н т	hickness	Diameter	Туре	if Any	Su	rface	Fi	8	Description
	to Feet	(Inche		· · · ·	T	(Inches)	(inches)		(Inches)		to Feet	Cement	-	[Chum/
0	240	12	Blank	PVC Sch. 40	and the second se	1/4 1/4	6.5 6.5	Milled Slots	0.032	0 20	257	Filter Pa		Slurry 3/8 Pee Gravel
240	250	12 12	Screen Blank	PVC Sch. 40 PVC Sch. 40		1/4	6.5	Willey Sides	0.032	20	201	T HIGHT &		U/O T CE OTAVET
250	257	12	Diatrik	FVC Gui. 40		1/4	0.0				-			
									-	1	0	-		
				1						H	1			
		Attan	hments						Certificat	ion Sta	tement		1	
	Geologic		milente		, the und	lersiane	d, certify th					o the bes	t of my	knowledge and belief
			n Diagram	l i	Name R	lich We	Il Drilling							
Well Construction Diagram Geophysical Log(s) Ware <u>Name Network</u> Firm or Corporation 1251 Rail Road Dr.				auon	Mck	inleyville	e			95519				
	Soil/Wate		nical Analyses				Address	City State Zip 721799						
	Other		1	 `	Signed -	C-57 Lie	ensed Water V	Vell Contractor			Date Si		-5714	cense Number
	itional infom REV. 1/2000							USE NEXT CO	NSECUTIVE	LY NUMBER				and the second

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		
Building Inspection Division	✓	Approval			
Division Environmental Health	√	Conditional Approval	Conditions to apply if manufacturing or year round activities were proposed		
Public Works, Land Use Division	\checkmark	Conditional Approval	Attached		
California Department of Fish & Wildlife					
Regional Water Quality Control Board					
Wiyot Tribe					
Ag Commission	✓	Approval			
NWIC	✓	Further study	On file		
Bear River Band	~	Archaeological Survey	On file		
Wiyot Tribe					
Blue Lake Rancheria	✓	Follow Archaeological Report Recommendations	On file		
North Coast Air Quality Management District					
Maple Creek School					



COUNTY OF HUBLIC WORKS

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

		CLARK COMPLEX HARRIS & H ST., EUREKA				
ON-LINE		F	AX 445-7409		FAX 445-7	388
WEB: CO.HUMBOLDT.CA.US	ADMINISTRATION	445-7491	NATURAL RESOURCES	445-7741	LAND USE	445-7205
	BUSINESS	445-7652	NATURAL RESOURCES PLANNING	267-		
				9540		
	ENGINEERING	445-7377	PARKS	445-		
				7651		
	FACILITY MANAGEMENT	445-7493	ROADS	445-		
				7421		

LAND USE DIVISION INTEROFFICE MEMORANDUM

TO: Liza Welsh, Planner, Planning & Building Department

FROM: Kenneth M. Freed, Assistant Engineer

DATE: 06/17/2020

Applicant Name	MAPLE CREEK RANCH CORP
APN	313-145-006
APPS#	PLN-12154 CUP

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

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

Road Evaluation Reports(s) are required; See **Exhibit "D"**

Note: Prior to requesting an applicant to submit a road evaluation report, verify if the project is exempt from meeting road system performance standards under CCLUO v2.0 sections 313-55.4.6.5.1 and 314-55.4.6.5.1, even if this box is checked.

No re-refer is required.

*Note: Exhibits are attached as necessary.

Additional comments/notes:

// END //

Public Works Recommended Conditions of Approval

(All checked boxes apply)

APPS # 12154

COUNTY ROADS- PROXIMITY OF FARMS:

Applicant is advised that County maintained roads may generate dust and other impacts to farm(s). Applicant shall locate their farm(s) in areas not subject to these impacts. Applicant shall be responsible for protecting their farm(s) against these impacts. Applicant shall hold the County harmless from these impacts. Applicant is advised that a paved road may not always remain paved and Applicant shall locate their farms appropriately. Applicant is advised that the amount of traffic on a road will vary over time which may increase or decrease the impacts.

COUNTY ROADS- FENCES & ENCROACHMENTS:

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

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

COUNTY ROADS- DRIVEWAY (PART 1):

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

COUNTY ROADS- DRIVEWAY (PART 2):

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

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

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

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

COUNTY ROADS- DRIVEWAY (PART 3):

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

COUNTY ROADS-PARKING LOT- STORM WATER RUNOFF:

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

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

COUNTY ROADS- DRIVEWAY & PRIVATE ROAD INTERSECTION VISIBILITY: All driveways and private road intersections onto the County Road shall be maintained in accordance with County Code Section 341-1 (Sight Visibility Ordinance).

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

COUNTY ROADS- PRIVATE ROAD INTERSECTION: (AT COUNTY MAINTAINED RD)

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

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

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

COUNTY ROADS- ROAD EVALUATION REPORT(S):

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

ATTACHMENT 5

CEQA COMMENTS

March 3, 2021

Cliff Johnson Humboldt County Planning and Building 3015 H Street Eureka, CA 95501

Subject: Initial Study/Mitigated Negative Declaration (SCH#2021020037) – Maple Creek Ranch Commercial Cannabis Cultivation Use Permit and Zoning Clearance

Dear Mr. Johnson:

Thank you for providing the California Department of Food and Agriculture (CDFA) CalCannabis Cultivation Licensing Division (CalCannabis) the opportunity to comment on the Initial Study/Mitigation Negative Declaration (IS/MND) (SCH#2021020037) prepared by the County of Humboldt for Maple Creek Ranch Commercial Cannabis Cultivation Use Permit and Zoning Clearance (Proposed Project).

CDFA has jurisdiction over the issuance of licenses to cultivate, propagate and process commercial cannabis in California. CDFA issues licenses to outdoor, indoor, and mixed-light cannabis cultivators, cannabis nurseries and cannabis processor facilities, where the local jurisdiction authorizes these activities. (Bus. & Prof. Code, § 26012, subd. (a)(2).) All commercial cannabis cultivation within California requires a cultivation license from CDFA. For a complete list of all license requirements contained in the CalCannabis Licensing Program regulations, please visit: https://static.cdfa.ca.gov/MCCP/document/CDFA%20Final%20Regulation%20Text 0 1162019 Clean.pdf.

CDFA expects to be a Responsible Agency for this project because the project will need to obtain an annual cultivation license from CDFA. In order to ensure that the IS/MND is sufficient for CDFA's needs at that time, CDFA requests that a copy of the IS/MND, revised to respond to the comments provided in this letter, and a signed Notice of Determination be provided to the applicant, so the applicant can include them with the application package it submits to CDFA. This should apply not only to this Proposed Project, but to all future California Environmental Quality Act (CEQA) documents related to cannabis cultivation applications in Humboldt County. CDFA offers the following comments concerning the IS/MND.

General Comments (GCs)

GC 1: Acknowledgement of CDFA Regulations

The IS/MND acknowledges that CDFA is an agency whose approval may be required for the Proposed Project. CDFA is responsible for the licensing of cannabis cultivation and is responsible for the regulation of cannabis cultivation and enforcement, as defined in the Medicinal and Adult Use Cannabis Regulation and Safety Act (MAUCRSA) and CDFA regulations related to cannabis cultivation (Bus. & Prof. Code, § 26103(a)). The IS/MND's analysis would benefit from discussion of the protections for environmental resources provided by CDFA's regulations (Cal. Code Regs. tit.3, § 8000 et seq.). In particular, the impact analysis would be further supported by a discussion of the effects of state regulations on reducing the severity of impacts on the following resource topics:

- Aesthetics (See 3 California Code of Regulations § 8304(c); § 8304(g).)
- Air Quality and Greenhouse Gas Emissions (See § 8102(s); § 8304(e); § 8305; § 8306.)
- Biological Resources (See § 8102(w); § 8102(dd); § 8216; § 8304(a-c); § 8304(g).)
- Cultural Resources (See § 8304(d).)
- Hazards and Hazardous Materials (See § 8102(q); § 8106(a)(3); § 8304(f); § 8307.)
- Hydrology and Water Quality (See § 8102(p); § 8102(v); § 8102(w); § 8102(dd); § 8107(b); § 8216; § 8304(a and b); § 8307.)
- Noise (*See* § 8304(e); § 8306.)
- Utilities and Service Systems (*See* § 8102(s); § 8108; § 8308.)
- Energy (*See* § 8102(s); § 8305; § 8306.)
- Cumulative Impacts (related to the above topics).

GC 2: Proposed Project Description

In general, more detailed information related to Proposed Project operations and routine maintenance would be helpful to CDFA. This includes:

- the types of equipment and projected duration of use anticipated for operations and maintenance activities; and
- the source (equipment) and amounts of energy expected to be used in operating the cultivation facility, including any energy management and efficiency features incorporated into the Proposed Project.

Specific Comments and Recommendations

In addition to the general comments provided above, CDFA provides the following specific comments regarding the analysis in the IS/MND.

Comment No.	Section Nos.	Page No(s).	Resource Topic(s)	CDFA Comments and Recommendations
1	3.1.1	34-35	Aesthetics	The IS/MND would be improved if it referenced CDFA's requirements that all outdoor lighting for security purposes must be shielded and downward facing, (Cal. Code Regs., tit. 3 §§ 8304(c)).
2	3.1.10	90	Hydrology and Water Quality	The checklist on page 87 indicates that e-f would have Less Than Significant Impact. However, the discussion for this section is missing the impact determination. The IS/MND would be improved if the checklist conclusions and impact conclusions were consistent throughout the document.
3	3.1.10	89	Hydrology and Water Quality	The document would be improved if it described any applicable water quality control plans and sustainable groundwater management plans, then provided an analysis of whether the Proposed Project would conflict with such plans.
4	3.1.10	89	Hydrology and Water Quality	The IS/MND would be improved if it provided an analysis of whether there are sufficient groundwater supplies to serve the Proposed Project and reasonably foreseeable future development during normal, dry and multiple dry years.

Comment No.	Section Nos.	Page No(s).	Resource Topic(s)	CDFA Comments and Recommendations
				In addition, the document would be improved if it referenced the state's requirements regarding proposed water sources and groundwater use (Cal. Code Regs., tit. 3 §§ 8102(v), 8107(b)).
5	3.1.21	113	Mandatory Findings of Significance	The IS/MND could be more informative if it identified whether any other cannabis growing operations exist or have been proposed in the vicinity of the Proposed Project, and whether the Proposed Project could make a considerable contribution to any cumulative impacts from these other projects.

Conclusion

CDFA appreciates the opportunity to provide comments on the IS/MND for the Proposed Project. If you have any questions about our comments or wish to discuss them, please contact Kevin Ponce, Senior Environmental Scientist Supervisor, at (916)247-1659 or via e-mail at kevin.ponce@cdfa.ca.gov.

Sincerely,

Lindsay Rains Licensing Program Manager March 3, 2021

Cliff Johnson Humboldt County Planning and Building Department 3015 H Street Eureka, CA. 95501 cjohnson@co.humboldt.ca.us 707-445-7541

Subject: Maple Creek Ranch Conditional Use Permits and Zoning Clearance Certificate (SCH# <u>2021020037</u>)

Dear Cliff Johnson:

The California Department of Fish and Wildlife (CDFW) received from the County of Humboldt (Lead Agency) an Initial Study and Draft Mitigated Negative Declaration (IS/MND), dated February 2, 2021, for the Maple Creek Ranch Conditional Use Permits and Zoning Clearance Certificate (Project), in Maple Creek, Humboldt County, California. CDFW understands the Lead Agency will accept comments on the Project through March 3, 2021.

As the Trustee for the State's fish and wildlife resources, CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants and the habitat necessary to sustain their populations. As a Responsible Agency, CDFW administers the California Endangered Species Act and other provisions of the Fish and Game Code (FGC) that conserve the State's fish and wildlife public trust resources. CDFW offers the following comments and recommendations in our role as Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code §21000 *et seq.*). CDFW participates in the regulatory process in its roles as Trustee and Responsible Agency to minimize Project impacts and avoid potential significant environmental impacts by recommending avoidance and minimization measures. These comments are intended to reduce the Projects impacts on public trust resources.

Project Description

The Project is located on Humboldt County Assessor's Parcel Number (APN) 313-145-006. The Project proposes 4.6 acres of new outdoor cannabis cultivation on the parcel and an additional 4,800-square feet of ancillary support facility as well as 6,600-square feet of nursery facilities for propagation of immature plants. The Project proposes use of one existing and one new water well for irrigation in addition to a 200,000-gallon rainwater catchment storage tank. An additional four 50,000 gallon hard-sided tanks are proposed for water storage. The IS/MND states projected annual water usage for the Project is approximately 800,000 gallons. The Project will be powered by combination of a 25-kilowatt diesel generator and a solar power system installed on the roof of the proposed drying/processing facility.

CDFW Consultation History

On February 11, 2021, CDFW received a Lake or Streambed Alteration (LSA) Notification (EPIMS-HUM-16565-R1) for the Project. However, the LSA Notification states there are no Project element subject to the FGC 1602 Notification requirement. This Notification is currently in review with CDFW.

CDFW Comments on the IS/MND:

Northern Spotted Owl

The Project occurs approximately 0.5 miles from the closest documented northern spotted owl (*Strix occidentalis caurina*, a State and Federally Threatened species [NSO]) activity center and as close as 300 feet to previous NSO pair detections (Keiser 2021). CDFW appreciates IS/MND mitigation measure BIO-6 (rodenticides prohibited from use associated with the Project) and the Project being limited to an outdoor cannabis cultivation style that will not use artificial light or generators for flower production areas. However, the Project proposes ancillary use of lights and generators for nursery and processing areas.

A mitigation measure for a Project-specific noise and light attenuation plan with monitoring requirements should be included in the Project's IS/MND or as a County condition of approval **(Recommendation 1)**. The plan should specify security and other outdoor lighting be motion activated and comply with the International Dark-Sky Association standards and Fixture Seal of Approval Program (https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/). Standards include but are not limited to the following: 1) light will be shielded and downward facing, 2) will consist of low-pressure sodium light or low spectrum light emitting diodes with a color temperature of 3000 kelvins or less and 3) only placed where needed. The IS/MND mitigation measure BIO-4 (Project-generated sound does not exceed 50 decibels at 100 feet from the generator [or other noise sources] or at the edge of forest habitat, whichever is closer) should also be periodically monitored for compliance.

Botanical Surveys and Impact Analysis

The Project botanical survey is not complete and does not follow CDFW's botanical survey protocol (CDFW 2018a). The botanical report only includes late-season survey dates (July 19 and August 18, 2019) and appears to utilize a "focused" survey method rather than a "floristic" survey. CDFW appreciates mitigation measure BIO-5 (pre-road work survey for Howell's Montia (*Montia howellii*; California Rare Plant Rank [CRPR] 2B.2), but this species may also be present and impacted in non-road areas of the Project. Additionally, suitable habitat for Siskiyou checkerbloom (*Sidalcea malviflora* ssp. *patula*, CRPR 1B.2) is present within the Project area and could be impacted but Project botanical surveys were likely too late in the season for flowering at this location (Nelson 2021).

To adequately address CEQA §15125(c), §15380, Guidelines Checklist IV, and avoid deferred analysis and potential deferred mitigation, the IS/MND should include the results of floristic botanical surveys including the presence of special status plants and a characterization of natural communities sufficient to determine the presence of any Sensitive Natural Communities. Surveys and reporting should be in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* and propose avoidance/mitigation where appropriate (**Recommendation 2**).

Cumulative Impacts

The Lead Agency's Commercial Medical Marijuana Land Use Ordinance states no more than 20 percent of the area of prime agricultural soils on a parcel may be permitted for commercial cannabis cultivation. It is unclear if the ordinance and its supporting CEQA analysis intended new cultivation sites to be located within remote, undeveloped, hillside grassland prairies (where sensitive species may occur) as opposed to traditional agricultural lands already associated with crop production. An unintended consequence of requiring new cultivation on prime agricultural soils (and allowing new areas to be classified as such with no minimum size) is the targeting of small, isolated, flat grasslands within larger prairie complexes on steeper slopes. These habitats are vital elements of biodiversity and provide important habitat for wildlife (Stromberg et al. 2007, CNPS 2011, CDFW 2014, CDFW 2018b, CDFW 2020a). The IS/MND does not adequately disclose or address potential cumulative impacts from the proposed Project's development of 4.6 acres of grassland, in addition to other existing or proposed cannabis projects in grasslands. Additionally, the IS/MND does not adequately disclose or address potential cumulative impacts from upcoming timber harvest activity immediately adjacent to the Project and on the same parcel (CalFire 1-01NTMP-011). These associated activities could have a cumulative effect on grasslands and grassland-dependent wildlife species.

Cumulative impacts could occur to grassland-dependent special status species such as northern red-legged frog (*Rana aurora*), grasshopper sparrow (*Ammodramus savannarum*), golden eagle (*Aquila chrysaetos*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), Pacific gilia (*Gilia capitata* ssp. *pacifica*), shortleaved evax (*Hesperevax sparsiflora* var. *brevifolia*), Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*), Kneeland prairie pennycress (*Noccaea fendleri* ssp. *californica*), maple-leaved checkerbloom (*Sidalcea malachroides*), Siskiyou checkerbloom (*Sidalcea malviflora* ssp. *patula*), beaked tracyina (*Tracyina rostrata*), leafy reed grass (*Calamagrostis foliosa*), Hitchcock's blue-eyed grass (*Sisyrinchium hitchcockii*), and other special status species (CDFW 2020b).

Cumulative impacts could also occur to rare vegetation types known as Sensitive Natural Communities. Using the best available data on the abundance, distribution, and threat, CDFW assigns natural communities rarity ranks and/or a designation as "Sensitive" (*). Rarity ranks range from 1 (very rare and threatened) to 5 (demonstrably secure). Sensitive Natural Communities (State rank of S1 through S3) should be addressed in the environmental review processes of CEQA and its equivalents (CDFW

2020c). Cumulative impacts could occur to grassland-associated Sensitive Natural Communities in Humboldt County including California brome – blue wildrye prairie (*Bromus carinatus* – *Elymus glaucus*; S3), Oatgrass - Tufted Hairgrass - Camas wet meadow (*Danthonia californica* – *Deschampsia cespitosa* – *Camassia quamash*; S4*), Idaho fescue - California oatgrass grassland (*Festuca idahoensis* – *Danthonia californica*; S3), California goldfields – dwarf plantain – small fescue flower fields (*Lasthenia californica* – *Plantago erecta* – *Vulpia microstachys*; S4*), and other Sensitive Natural Communities.

The IS/MND should evaluate cumulative impacts to grassland prairies, particularly special status species and Sensitive Natural Communities **(Recommendation 3)**.

Invasive Species

The IS/MND does not address potential significant impacts from introduction or spread of invasive plant and animal species. Invasive species are known to result in habitat loss and other impacts to native species and may result in an overall loss of biodiversity, particularly special status species (Duenas et al. 2018). Invasive plant species may enter or spread through the Project area from imported soil, attachment to vehicles, and other means of accidental introduction. Additionally, the Project botanical report discloses the occurrence of gorse (*Ulex europaeus*), a highly invasive plant species.

A mitigation measure to require an invasive species management plan to manage existing invasive species and prohibit planting, seeding or otherwise introducing terrestrial or aquatic invasive species on Project parcels, including all access roads should be included in the Project's IS/MND or as a County condition of approval **(Recommendation 4)**.

Use of Water Wells

The scientific and engineering community accepts the connectivity of surface water and groundwater systems and that groundwater discharge to streams constitutes a sizeable and important fraction of streamflow (Fetter 1988, Winter et al. 1998, Department of Water Resources 2003, Barlow and Leake 2012, Province of British Columbia 2016). The existing well is stated to be 260-feet deep and located approximately the same horizontal distance from Maple Creek, a perennial stream that contains coho salmon (*Oncorhynchus kisutch*, a state and federally threatened species). The grasslands of this parcel are surrounded by at least eight springs mapped in CalFire's hydrography dataset, some as close as 100-feet from the Project, however the location of the proposed second well was not disclosed in the IS/MND. The IS/MND should disclose the proposed location of the second well **(Recommendation 5)**.

A mitigation measure that the applicant retains a qualified professional (e.g., geologist or engineer with hydrogeology background) licensed to practice in California to conduct a preliminary evaluation of the Project's potential impacts to local surface water flows, and to provide recommendations that ensure Project activities will not substantially affect aquatic resources should be included in the Project's IS/MND or as a County condition of approval **(Recommendation 6)**. The preliminary evaluation should also include a discussion on potentially significant cumulative effects of well-related impacts to local surface water flows

Post-Project Reclamation and Restoration

As described in the IS/MND, the Project will occur in a remote area of the County that supports numerous special status species and habitats. The Project's 4.9 acres of new cannabis facility development and infrastructure may have lasting effects on the landscape if the Project permanently ceases operations at some point in the future. Similar to other industries with this spatial magnitude of ground disturbance, it is appropriate to decommission facilities and restore the area at the end of a Project's life.

A mitigation measure to require a Post-Project Reclamation and Restoration Plan should be included in the Project's IS/MND or as a County condition of approval **(Recommendation 7)**. That plan should be implemented if Project activities cease for five years.

We appreciate the opportunity to comment on this IS/MND. If you have any questions please contact Environmental Scientist Greg O'Connell by email at <u>Gregory.OConnell@Wildlife.ca.gov</u>.

Sincerely,

DocuSigned by: (heri Sanville - 19DB3234CB3B411...

Curt Babcock Northern Region Habitat Conservation Program Manager California Department of Fish and Wildlife

ec:

State Clearinghouse, Office of Planning and Research state.clearinghouse@opr.ca.gov

Humboldt County Planning Commission Clerk planningclerk@co.humboldt.ca.us

Curt Babcock, Jennifer Garrison, Scott Bauer, Laurie Harnsberger, Greg O'Connell, Cheri Sanville California Department of Fish and Wildlife <u>Curt.Babcock@wildlife.ca.gov; Jennifer.Garrison@wildlife.ca.gov;</u> Scott.Bauer@wildlife.ca.gov; Laurie.Harnsberger@wildlife.ca.gov; <u>Gregory.OConnell@Wildlife.ca.gov; Cheri.Sanville@wildlife.ca.gov;</u> <u>CEQACommentLetters@wildlife.ca.gov</u>

Citations

- Barlow, P.M., and Leake, S.A. (2012). Streamflow depletion by wells—Understanding and managing the effects of groundwater pumping on streamflow: U.S. Geological Survey Circular 1376, 84 p. (Also available at <u>https://pubs.usgs.gov/circ/1376/</u>.)
- CDFW. (2014). California Wildlife Habitat Relationships. Sacramento, CA. Accessed at <u>https://wildlife.ca.gov/data/cwhr</u>
- CDFW. (2018a). Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. California Department of Fish and Wildlife, Habitat Conservation Branch. Sacramento, CA. <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959</u>
- CDFW. (2018b). A Review of the Potential Impacts of Cannabis Cultivation on Fish and Wildlife Resources. California Department of Fish and Wildlife, Habitat Conservation Planning Branch. Sacramento, CA.
- CDFW. (2020a). Impacts of Cannabis Cultivation on Fish and Wildlife Resources. California Fish and Wildlife Journal. Sacramento, CA.
- CDFW. (2020b). California Natural Diversity Database Quick View Tool. Biogeographic Data Branch, California Department of Fish and Wildlife. Retrieved December 14, 2020 from <u>https://wildlife.ca.gov/Data/CNDDB</u>.
- CDFW. (2020c). Vegetation Classification and Mapping Program. Biogeographic Data Branch, California Department of Fish and Wildlife. Retrieved December 14, 2020 from https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities.
- CDFW. (2021). California Natural Diversity Database Quick View Tool. Biogeographic Data Branch, California Department of Fish and Wildlife. <u>https://wildlife.ca.gov/Data/CNDDB</u>
- [CNPS] California Native Plant Society. (2011). California's Prairies and Grasslands. Fremontia. Vol. 39, No. 2 and 3.
- Department of Water Resources. (2003). California's Groundwater: State of California, The Resources Agency, Department of Water Resources Bulletin 118, 2003 Update, 246 p.

Duenas, M. A., Ruffhead, H. J., Wakefield, N. H., Roberts, P. D., Hemming, D. J., & Diaz-Soltero, H. (2018). The role played by invasive species in interactions with endangered and threatened species in the United States: a systematic review. Biodiversity and Conservation, 27(12), 3171-3183.

Fetter Jr., C.W. (1988). Applied Hydrogeology: Charles E. Merrill Publishing Company.

- Keiser, K. (2021). Spotted Owl Observations [ds704]. California Department of Fish and Wildlife. Biogeographic Information and Observation System (BIOS). Retrieved February 23, 2021 from <u>http://bios.dfg.ca.gov</u>
- Nelson, M. (2021). California Natural Diversity Database (CNDDB) Government [ds45]. California Department of Fish and Wildlife. Biogeographic Information and Observation System (BIOS). Retrieved February 23, 2021 from http://bios.dfg.ca.gov
- Province of British Columbia. (2016). Determining the likelihood of hydraulic connection – Guidance for the purpose of apportioning demand from diversion of groundwater on streams: Version 1.0, Water Science Series, WSS2016-01, Province of British Columbia, Victoria, British Columbia, <u>http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/waterscience-data/water-science-series</u>.
- Stromberg, M. R., Corbin, J. D., and Antonio, C. M. (2007). California grasslands: ecology and management. Univ of California Press.
- U.S. Fish and Wildlife Service. (2019). Northern Spotted Owl Take Avoidance Analysis and Guidance for Private lands in California. Accessed at: <u>https://www.fws.gov/yreka/NSO-TakeAvoidanceAnalysis_Att_A-B_2019-1101.pdf</u>
- Winter, T.C., J.W. Harvey, O.L. Franke, and W.M. Alley. (1998). Ground Water and Surface Water A Single Resource: U.S. Geological Survey Circular 1139, Denver, Colorado, 79 p.

McClenagan, Laura

From:	Johnson, Cliff
Sent:	Thursday, March 04, 2021 4:04 PM
То:	O'connell, Gregory@Wildlife
Cc:	Ford, John; Sanville, Cheri@Wildlife; Bauer, Scott@Wildlife; Babcock, Curt@Wildlife; Olson, Jennifer@Wildlife
Subject:	RE: CEQA-2021-0027_MapleCreekRanchCannabis_ISMND_LTR_20210228_FINAL.pdf

Thanks Greg but this does not answer my question.

Mr. Wear's report specifically states that it is floristic in nature and follows the protocol, and it includes a survey route map and every single plant that was encountered along the route (Appendix C). Your comment indicates these statements in the report are false, which as I stated has me extremely concerned that Mr. Wear may be misrepresenting the report. However, given that the entirety of the plant species encountered along the survey route are identified in Appendix C, I do not understand how this is not floristic as you describe in this email.

Cliff

From: O'connell, Gregory@Wildlife <Gregory.OConnell@Wildlife.ca.gov>
Sent: Thursday, March 4, 2021 3:54 PM
To: Johnson, Cliff <CJohnson@co.humboldt.ca.us>
Cc: Ford, John <JFord@co.humboldt.ca.us>; Sanville, Cheri@Wildlife <Cheri.Sanville@wildlife.ca.gov>; Bauer,
Scott@Wildlife <Scott.Bauer@wildlife.ca.gov>; Babcock, Curt@Wildlife <Curt.Babcock@wildlife.ca.gov>; Olson,
Jennifer@Wildlife <Jennifer.Olson@wildlife.ca.gov>
Subject: RE: CEQA-2021-0027 MapleCreekRanchCannabis ISMND LTR 20210228 FINAL.pdf

Hi Cliff. Thanks for the question about CDFW's <u>Protocols for Surveying and Evaluating Impacts to Special Status Native</u> <u>Plant Populations and Sensitive Natural Communities</u>. This is an important topic and I'm glad for the opportunity to provide clarification.

The project's botanical report only includes late-season survey dates (July 19 and August 18, 2019) and appears to utilize a "focused" survey method rather than a "floristic" survey approach. To follow CDFW's protocol, botanical field surveys should be floristic in nature, meaning every plant taxon occurring in the project area is identified to the taxonomic level necessary to determine rarity and listing status. Focused surveys are limited in seasonality, limited to habitats known to support special status plants, or are restricted to lists of likely potential special status plants. Focused surveys are not considered floristic in nature and are not adequate to identify all plants in a project area to the level necessary to determine if they are special status plants. Although scoping lists of species known to occur in a local area (e.g., nine quad search of the California Natural Diversity Database [CNDDB]) are useful, they should be used with caution with the understanding that special status plants and Sensitive Natural Communities in a project area may not be limited to those on scoping list which are solely based on previous positive detections. I have some good examples I can share with you if we get a chance to discuss this further.

Botanical field surveys and subsequent reporting should be comprehensive and floristic in nature and not restricted to one season or focused only on a scoping list. Botanical field survey visits should be spaced throughout the growing season to accurately determine what plants and natural communities exist in the project area throughout the growing season. This usually involves multiple visits to the project area (e.g. in early, mid, and late-season) to capture the floristic diversity at a level necessary to determine if special status plants are present.

I'm happy to discuss this further anytime. Also, in previous conversation with Director Ford I offered to give County staff a brief presentation on some of the things CDFW staff look for while reviewing referrals. Let's get something scheduled if you'd like.

Thanks, again,

Greg O'Connell Environmental Scientist Coastal Conservation Planning California Department of Fish and Wildlife 619 Second Street Eureka, CA 95501 Gregory.OConnell@Wildlife.ca.gov

From: Johnson, Cliff <<u>Clohnson@co.humboldt.ca.us</u>>
Sent: Thursday, March 4, 2021 10:50 AM
To: O'connell, Gregory@Wildlife <<u>Gregory.OConnell@Wildlife.ca.gov</u>>; Sanville, Cheri@Wildlife
<<u>Cheri.Sanville@wildlife.ca.gov</u>>; Bauer, Scott@Wildlife <<u>Scott.Bauer@wildlife.ca.gov</u>>; Babcock, Curt@Wildlife
<<u>Curt.Babcock@wildlife.ca.gov</u>>; Bauer, Scott@Wildlife <<u>Scott.Bauer@wildlife.ca.gov</u>>; Babcock, Curt@Wildlife
<<u>Curt.Babcock@wildlife.ca.gov</u>>; Bauer, Scott@Wildlife
<<u>Scott.Bauer@wildlife.ca.gov</u>>; Babcock, Curt@Wildlife
<<u>Scott.Bauer@wildlife.ca.gov</u>>; Babcock, Curt@Wildlife
<<u>Subject:</u> RE: CEQA-2021-0027 MapleCreekRanchCannabis ISMND LTR 20210228 FINAL.pdf

Warning: This email originated from outside of CDFW and should be treated with extra caution.

Hello Greg,

Thanks for your comments on the ISMND for this project. I would like a bit of clarification on your comment regarding the botanical surveys and impact analysis. You state that the project botanical survey is not floristic and does not follow CDFW's botanical survey protocol (2018). The Botanical Survey itself, prepared by Kyle Wear, specifically states that it is floristic and followed the methods outlined in the 2018 CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (p.3), which is the document referenced on CDFW's website for protocol for botanical surveys. It appears to me that you are suggesting that Mr. Wear is misrepresenting his botanical survey and this has me very concerned. Could you please provide some more context to this comment?

Cliff Johnson, Supervising Planner County of Humboldt Planning and Building Department 3015 H Street Eureka, CA 95501 (707) 268-3721

From: Smith, Diane@Wildlife <<u>Diane.Smith@wildlife.ca.gov</u>>
Sent: Wednesday, March 3, 2021 11:02 AM
To: Johnson, Cliff <<u>CJohnson@co.humboldt.ca.us</u>>
Cc: <u>state.clearinghouse@opr.ca.gov</u>; Planning Clerk <<u>planningclerk@co.humboldt.ca.us</u>>; Babcock, Curt@Wildlife

<<u>Curt.Babcock@wildlife.ca.gov</u>>; Garrison, Jennifer@Wildlife <<u>jennifer.Garrison@wildlife.ca.gov</u>>; Bauer, Scott@Wildlife <<u>Scott.Bauer@wildlife.ca.gov</u>>; Harnsberger, Laurie@Wildlife <<u>Laurie.Harnsberger@wildlife.ca.gov</u>>; O'connell, Gregory@Wildlife <<u>Gregory.OConnell@Wildlife.ca.gov</u>>; Sanville, Cheri@Wildlife <<u>Cheri.Sanville@wildlife.ca.gov</u>>; Wildlife CEQA Comment Letters <<u>CEQACommentLetters@wildlife.ca.gov</u>> Subject: CEQA-2021-0027_MapleCreekRanchCannabis_ISMND_LTR_20210228_FINAL.pdf

Hello:

Please see the attached document. A copy of this document will be mailed to the addressee via USPS today, and all ecs have been completed electronically.

Regards, -Diane

Diane Smith Administrative Officer I California Department of Fish and Wildlife Region 1 - Northern <u>diane.smith@wildlife.ca.gov</u> Cell: (530) 945-0755 Ph: (530) 225-2851 Fx: (530) 225-2055

Every Californian should conserve water. Find out how at:

http://saveourwater.com/

ATTACHMENT 6

ADDITIONAL PUBLIC COMMENT

Hello Robert and Dunaways,

We just read a notice from Planning about the current application.

It looks like it is on the Fahler (sp?) property, which seems like a good location.

Preferring to communicate with you directly from the beginning, we have a question about water. Our understanding was that this site would be using collected rain and water pumped from the creek/river as allowed. That there would be no well water involved. That no longer seems the case. As previously stated, we are forever concerned about water. No surprise. Our primary interest is to protect the resources we have, not only for ourselves but the whole area, now and for the future.

We're sure you know that wells do not tap into individual pockets of water. So much of the underground sources are connected, and drawing from one well affects the water source of many others. The negative effects of over pumping are cumulative and lasting. When you over pump an aquifer the result can be land subsidence, the settling of ground. More than 80 percent of the subsidence in the United States is related to the withdrawal of ground water. When land subsides, it is compacting. Once those spaces disappear, the aquifer's ability to store water is reduced forever. A long rainy season or good snow melt is not going to recreate voids that have closed.

It is not just a here and now question. There are so many examples of overdrawing ground water around the world. Saudi Arabia has depleted their ground water. Oasises from Biblical times have dried up and are not recovering. You are probably aware; the Saudis have bought up huge amounts of farm land in our country, mostly Arizona and California, and are now draining the rural water resources there.

https://www.vox.com/2015/9/14/9323379/saudi-arabia-squandered-its-groundwater-and-agriculture-collapsed Saudi Arabia squandered its groundwater; agriculture collapsed. California, take note.

https://www.azcentral.com/story/opinion/op-ed/ej-montini/2019/12/16/why-arizona-water-drained-saudi-arabian-

farmers/2659993001/ Why are Saudi Arabian cows still eating Arizona's water?

Over pumping groundwater in California has been a problem for decades. <u>https://revealnews.org/article/9-sobering-facts-about-californias-groundwater-problem/</u> Southern Humboldt is already having repercussions from the drawing down of ground water because of the high well water use by growers.

<u>The Groundwater Act</u> was passed intending to support local management and use of groundwater in a manner that can be maintained without causing undesirable results. Undesirable results include:

1. Lowering of groundwater levels and depletion of supply;

- 2. Reduction of groundwater storage;
- 3. Seawater intrusion;
- 4. Degraded water quality;
- 5. Land subsidence; and
- 6. Depletions of interconnected surface waters with adverse impacts on beneficial uses of the surface water.

At the moment California is focusing on control of surface water, but we think the ground water issue will rise steadily and it is only a matter of time before wells will not be allowed for growers, whether they got permission previously or not. It therefore would be good to start growing without depending on well water. It would make sense to put in ponds or more water storage containers for catchment, and we hope you do that. You might think that as one little grower, you can't have that big of an effect. That is not true.

We do support your desire to grow, but are not supportive of any plan, anywhere, that involves aquifer well water use. Help us understand your goals regarding water. We would prefer to communicate with you directly vs. getting involved in future group discussions, trusting all interested parties will be informed by you as you see fit.

Safe journey, Tony and Carlene

From:	<u>Carlene Cogliati</u>
To:	Johnson, Cliff
Cc:	Antonio
Subject:	Dunaway project & water concerns
Date:	Friday, March 12, 2021 11:10:28 AM
Attachments:	Dunaway letter.doc

Hello Cliff,

We are sending you a copy of the letter we sent to Dunaways. We hope you check out the links in it, as well as the letter.

There are some additional things we would like to say about the water issue and the protection of groundwater. Above ground water sources are carefully monitored. The below surface water is so very much harder to monitor – therefore should be even more protected.

We understand the laws about water usage for cannabis includes the use of well water – IF – the well is non-diversionary, unaffected by surface water. In reality such wells do not exist. We know firsthand that our well, although deep, is affected by rainfall. It is in the same aquifer as Dunaways'.

https://www.watereducation.org/general-information/surface-water-vs-groundwater "Groundwater is the part of precipitation that seeps down through the soil until it reaches rock material that is saturated with water."

https://www.sciencedirect.com/topics/earth-and-planetary-sciences/groundwater-surface-water-interaction "The hydrologic science dealing with groundwater-surface water interaction is quite well developed, as is evident from the 1980 publication of UNESCO that dealt with the subject (Wright, 1980)."

https://www.usgs.gov/mission-areas/water-resources/science/groundwatersurface-water-interaction?qtscience_center_objects=0#qt-science_center_objects

"The complex interaction of water above ground and below ground is a key element of the hydrologic cycle."

https://www.americangeosciences.org/critical-issues/faq/how-do-groundwater-and-surface-water-interact

"Streams interact with groundwater in three basic ways: streams gain water from inflow of groundwater through the streambed, streams lose water by outflow through the streambed, or they do both depending upon the location along the stream. It is the groundwater contribution that keeps streams flowing between precipitation events or after snowmelt."

In addition to the links in the Dunaway letter, the impacts of California's groundwater pumping are well-known: the dropping water levels, dried-up wells and slowly sinking farmland. Some areas in central California have sunk about 30 feet, and are predicted to sink another 30'. The pumping of groundwater has also led to the progressive salinization of groundwater in many parts of the world, particularly in coastal aquifers, which we are, (even the central valley has wells contaminated by sea water.) The impact of groundwater decline on wetland and dryland ecosystems is also well studied, understood and documented.

https://www.sciencemag.org/news/2020/04/droughts-exposed-california-s-thirst-groundwater-now-state-hopes-refill-its-aquifers

"Groundwater science is taking on a new urgency as California and other regions around the world face

growing threats from drought—and are increasingly drilling wells to make up for missing rain and snow.

Globally, aquifers are "highly stressed" in 17 countries that hold one-quarter of the

world's population,

according to the World Resources Institute. Water and food supplies for billions of people are under threat. . . .

Rates of groundwater extraction are unsustainable, says Jay Famiglietti, a hydrologist at the University of

Saskatchewan. During wet years, enough <u>water from rain and gushing streams sinks</u> into the ground to at least

partially refill aquifers, he says, but levels can fall even lower during the next drought. "It's like a tennis ball

bouncing down the stairs, it's just going in one direction," Famiglietti says." ...

"Scientists use a banking analogy to explain groundwater's role: Surface water from rain and melted snowpack

should be the state's checking account, and groundwater its savings, used only when absolutely necessary."...

"And it has devastating environmental impacts. Because groundwater feeds rivers, depleted aquifers then

decimate aquatic ecosystems and habitat for endangered species." ...

"Depleted aquifers also allow salt water to creep inland, rendering high value cropland — such as the Salinas

Valley near Monterey — useless. And winds whipping across dried landscapes fill the sky with toxic dust."...

https://www.usgs.gov/special-topic/water-science-school/science/land-subsidence?qt-science_center_objects=0#qtscience_center_objects "Excessive pumping of such aquifer systems has resulted in permanent subsidence and related ground failures. In some systems, when large amounts of water are pumped, the subsoil compacts, thus reducing in size and number the open pore spaces in the soil the previously held water. This can result in a <u>permanent reduction in the total storage</u> <u>capacity of the aquifer system</u>."

A very important thing we repeat from the Dunaway letter, and add to, is information on the 2014 **Groundwater Act.**

<u>The Groundwater Act</u> was passed intending to support local management and use of groundwater in a manner that can be maintained without causing undesirable results. Undesirable results include:

1. Lowering of groundwater levels and depletion of supply;

- 2. Reduction of groundwater storage;
- 3. Seawater intrusion;
- 4. Degraded water quality;
- 5. Land subsidence; and
- 6. Depletions of interconnected surface waters with adverse impacts on beneficial uses of the surface water.

* <u>https://ca.water.usgs.gov/sustainable-groundwater-management/</u>

We're sure you know, Humboldt is required by this legislation to develop a GSA for southern Humboldt, which must develop and implement Groundwater Sustainability Plans (GSPs) with the option of doing the same for the rest of the county; acting *before* it becomes critical in all of the area.

This legislation was intended, not only to help areas already damaged from overdrawing wells, but to give options to protect water *before* the loss occurs. But legislation is only as good as the follow-through and enforcement. Let Humboldt *lead* the way, instead of waiting to follow others' actions. Protect our most critical resource *now* please. A good place to start is with cannabis grow plans that are still in process. Rather than allowing wells, (which are *not* non-diversionary) it would be good to have growers spend their resources on ponds and

storage tanks. That water is much easier to monitor.

Most Sincerely, Tony & Carlene Cogliati

ATTACHMENT 7

SUPPLEMENTAL INFORMATION #1

For Planning Commission Agenda of: <u>March 18, 2021</u>

[X]Consent Agenda Item[]Continued Hearing Item

No. E-8

- [] Public Hearing Item
- [] Department Report
- [] Old Business

Re: Maple Creek Ranch Corp Conditional Use Permit and Zoning Clearance Certificate

Record Number: PLN-12154 and 15197 Assessor Parcel Number: 313-145-006 Maple Creek Road, Korbel, CA

Attached for the Planning Commission's record and review is an additional email received from Greg O'Connell, California Department of Fish and Wildlife. This email continues the conversation that staff and CDFW were engaged in regarding CDFW's CEQA comments and the assertion that the botanical study was inadequate. The CEQA comments and email correspondence is found in Attachment 5 of the staff report.

In addition to this email is a web page from the California Native Plant Society regarding Siskiyou checkerbloom, which CDFW states would not be likely to be blooming in July when the first botanical survey was conducted. Please note that the CNPS states that the blooming period is from May to August. Staff has also attached the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations referenced in CDFW's CEQA comments.

Staff does not suggest any changes or amendments to the proposed mitigation measure as requested by CDFW in the email. The botanist that has actually been on-site and conducted the survey is of the opinion that any Siskiyou checkerbloom and any other species of concern would have been identifiable during the July survey, with the exception of Howell's montia for which a further study has been recommended as a mitigation measure. Therefore, staff does not believe the additional mitigation language proposed by CDFW is necessary. Further, the measure as suggested by CDFW staff could be construed as deferred mitigation.

While not particularly relevant to the Planning Commission's determination of whether the botanical survey is adequate for the purposes of CEQA, the Planning Commission should understand that Planning staff reached out to CDFW through the agency referral process in June of 2020 and received no response or request for additional survey information.

From:	O"connell, Gregory@Wildlife
То:	Johnson, Cliff
Cc:	Ford, John; Sanville, Cheri@Wildlife; Bauer, Scott@Wildlife; Babcock, Curt@Wildlife; Olson, Jennifer@Wildlife; Kyle Wear
Subject:	RE: CEQA-2021-0027_MapleCreekRanchCannabis_ISMND_LTR_20210228_FINAL.pdf
Date:	Monday, March 15, 2021 10:27:20 AM
Attachments:	CEOA-2021-0027 MapleCreekRanchCannabis ISMND LTR 20210228 FINAL.pdf

Hi Cliff,

I see the <u>Maple Creek Ranch cannabis project</u> is on the Planning Commission <u>agenda</u> this Thursday. I got a chance to speak with Kyle Wear (added to email as cc) about his botanical survey report for the this project. It appears there was a misunderstanding with his interpretation of <u>CDFW's botanical</u> <u>survey protocol</u>. Although he did attempt to identify all plant species encountered during his July and August 2019 site visits, the timing of these visits is not adequate to document floristic diversity throughout the growing season. Kyle and I have spoken about this previously and he has made changes to is procedure since.

For the reasons described in CDFW's botanical survey protocol, CDFW's Project comment letter (attached), and further explained in my March 4 email further below, floristic surveys are needed to determine presence of special status plant species and sensitive natural communities. I would much rather see complete biological surveys and impact analyses prior to completion of CEQA, but at a minimum it's appropriate to expand Mitigation Measure BIO-5 to include early and mid-season surveys of the project area and consult with CDFW if special status plants or sensitive natural communities may be impacted.

I understand the Planning Commission is sensitive to receiving new information close to the hearing date. Although this is not new information, my suggested modification of BIO-5 differs from what is currently in the County staff report. We could schedule a call to discuss this prior to the Planning Commission hearing, and/or I could attend the hearing to explain my recommendations. Please let me know if you have a preference.

Lastly, I recognize the County's tremendously workload and need to bring projects to decision as soon as possible. I'm open to additional follow-up discussions on how the County and CDFW can communicate effectively and accomplish shared goals, particularly for projects with site-specific CEQA documents.

Thanks,

Greg O'Connell Environmental Scientist Coastal Conservation Planning California Department of Fish and Wildlife 619 Second Street Eureka, CA 95501 Gregory.OConnell@Wildlife.ca.gov

lome About t	he Inventory CNPS	Home Join CNPS			Simple Search	Advanced Searc	
_		base used to provide on. <u>View updates and</u>					
1					Export to Excel		
Sidalcea malvifloi	ra ssp. patula				Biology 🗊		
Common Name:	Siskiyou checkerbloom			1 6 2 ·	Lifeform: perennia	al rhizomatous	
Family:	Malvaceae				Blooming Period: (/	Apr)Mav-Aug	
Synonyms:				100	Habitat: often roa		
Element Code:	PDMAL110F9				Coastal bluff s	Coastal bluff scrub	
Full Name:	<i>Sidalcea malvifl</i> Hitchc.	ora (DC.) A. Gray ssp. <i>pa</i>	ula C.L.	E AN	Coastal prairie North Coast co		
				2005 Dean Wm. Taylor			

Rarity Status 🗊		Occurrence Data California Natura	
California Rare Plant Rank: 1B.2 Rare or endangered in California and elsewhere	Total # of K		
.2: Fairly endangered in California	Element Oc	currence	
Federal Listing Status: Not Listed		A B 10 20	
State Listing Status: Not Listed	Population Status: Historic Recen		
<u>State Rank:</u> S2 S2: Imperiled.	> 20 yrs 13	<=20 y 40	
<u>Global Rank:</u> G5T2	Presence:	40	
T2: Imperiled. G5: (species) Secure, considering populations outside California.	Present Extant	Pos Exti	
	53	0	

 A
 B
 C
 D
 X
 U

 10
 20
 8
 0
 0
 15

 Copulation Status:

 Historic
 Recent

 >20 yrs
 <=20 yrs</td>
 40

Present	Possibly	Presumed
Extant	Extirpated	Extirpated
53	0	0

Notes 🗊

Threatened by road widening and non-native plants. Possibly threatened by logging, grazing, and trampling. To submit rare plant observation data, use the <u>CNDDB field</u> <u>survey form</u>. Please see also the CNPS <u>Rare Plant Data</u> page. **Date Added**: 1994-01-01 Last Update: 2018-07-23

Location 🗊 Elevation: 15 - 880 meters California Endemic: no Other States: Oregon California Counties and Islands: name (code) Del Norte (DNT), Humboldt (HUM), Mendocino (MEN) Quads: name (DWR code) USGS code Albion (553A) 3912327, Bridgeville (635A) 4012347, Redcrest (635B) 4012348, Myers Flat (635D) 4012337, Scotia (636A) 4012441, Taylor Peak (636B) 4012442, Capetown (637A) 4012443, Petrolia (637D) 4012433, Board Camp Mtn. (652B) 4012366, Iaqua Buttes (653B) 4012368, Owl Creek (653C) 4012358, Yager Junction (653D) 4012357, Fields Landing (654B) 4012462, Fortuna (654C) 4012452, Hydesville (654D) 4012451, Ferndale

(655D) 4012453, Denny (669B) 4012384, Grouse Mtn. (670C) 4012376, Korbel (671C) 4012378, Maple Creek (671D) 4012377, Arcata North (672A) 4012481, Eureka (672C)(*?) 4012472, Bald Hills (688B) 4112328, Orick

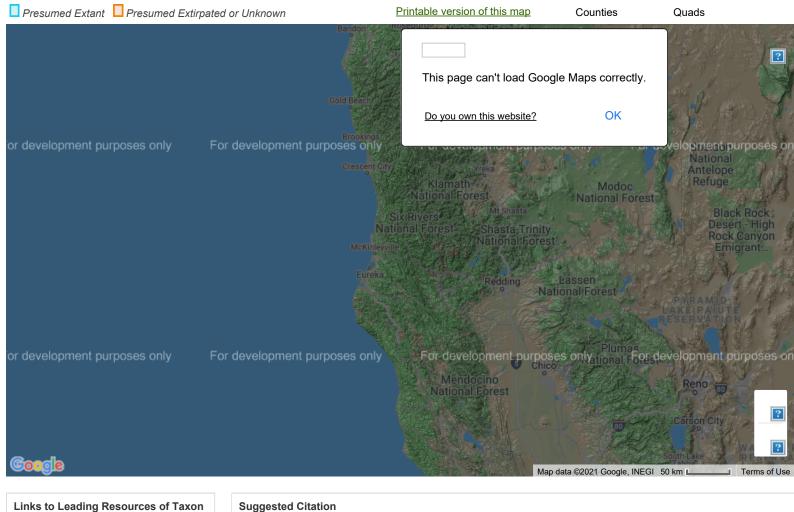
Definitions of codes preceding a county and/or quad:

* Presumed extirpated

Notes:

- ? Uncertain about distribution or identity
- ?* Uncertain about distribution, but presumed extirpated if once present
- (?) Occurrence confirmed, but possibly extirpated

Species may be present in other areas where conditions are favorable. This data should NOT be substituted for pre-project review or for on-site surveys.



Links to Leading Resources of Taxon Information

- USDA PLANTS
- <u>Calflora</u>
- <u>Consortium of California</u> <u>Herbaria</u>
- <u>CalPhotos</u>
- <u>California Department of</u> <u>Fish and Wildlife:</u> <u>CNDDB Quick Viewer</u>

California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 16 March 2021].

Search the Inventory

Simple Search Advanced Search

Glossary

Information

About the Inventory About the Rare Plant Program CNPS Home Page

Contributors

The California Database The California Lichen Society California Natural Diversity Database

Questions and Comments

rareplants@cnps.org

PLN-12154-CUP and PLN-2018-15197 Maple Creek Ranch Corp.

Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities

STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF FISH AND WILDLIFE

DATE: March 20, 2018*

TABLE OF CONTENTS

1.	INTRODUCTION AND PURPOSE	. 1
2.	BOTANICAL FIELD SURVEYS	. 4
3.	REPORTING AND DATA COLLECTION	. 7
4.	BOTANICAL FIELD SURVEYOR QUALIFICATIONS	11
5.	SUGGESTED REFERENCES	11

1. INTRODUCTION AND PURPOSE

The conservation of special status native plants and their habitats, as well as sensitive natural communities, is integral to maintaining biological diversity. The purpose of these protocols is to facilitate a consistent and systematic approach to botanical field surveys and assessments of special status plants and sensitive natural communities so that reliable information is produced and the potential for locating special status plants and sensitive natural communities is maximized. These protocols may also help those who prepare and review environmental documents determine when botanical field surveys are needed, how botanical field surveys may be conducted, what information to include in a botanical survey report, and what qualifications to consider for botanical field surveys. These protocols are meant to help people meet California Environmental Quality Act (CEQA)¹ requirements for adequate disclosure of potential impacts to plants and sensitive natural communities. These protocols may be used in conjunction with protocols formulated by other agencies, for example, those developed by the U.S. Army Corps of Engineers to delineate jurisdictional wetlands² or by the U.S. Fish and Wildlife Service to survey for the presence of special status plants.³

¹ Available at: <u>https://files.resources.ca.gov/ceqa/</u>

^{*} Minor editorial revisions were made to this document on February 3, 2021

² Available at: <u>https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-</u> Permits/techbio/

³ U.S. Fish and Wildlife Service Survey Guidelines: <u>https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/</u>

Department of Fish and Wildlife Trustee and Responsible Agency Mission

The mission of the California Department of Fish and Wildlife (CDFW) is to manage California's diverse wildlife and native plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. CDFW has jurisdiction over the conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations (Fish & G. Code, § 1802). CDFW, as trustee agency under CEQA Guidelines section 15386, provides expertise in reviewing and commenting on environmental documents and provides protocols regarding potential negative impacts to those resources held in trust for the people of California.

Certain species are in danger of extinction because their habitats have been severely reduced in acreage, are threatened with destruction or adverse modification, or because of a combination of these and other factors. The California Endangered Species Act (CESA) and Native Plant Protection Act (NPPA) provide additional protections for such species, including take prohibitions (Fish & G. Code, § 2050 *et seq.*; Fish & G. Code, § 1908). As a responsible agency, CDFW has the authority to issue permits for the take of species listed under CESA and NPPA if the take is incidental to an otherwise lawful activity; CDFW has determined that the impacts of the take have been minimized and fully mitigated; and the take would not jeopardize the continued existence of the species (Fish & G. Code, § 2081, subd. (b); Cal. Code Regs., tit. 14 § 786.9, subd. (b)). Botanical field surveys are one of the preliminary steps to detect special status plant species and sensitive natural communities that may be impacted by a project.

Definitions

Botanical field surveys provide information used to determine the potential environmental effects of proposed projects on special status plants and sensitive natural communities as required by law (e.g., CEQA, CESA, and federal Endangered Species Act (ESA)).

Special status plants, for the purposes of this document, include all plants that meet one or more of the following criteria:

- Listed or proposed for listing as threatened or endangered under the ESA or candidates for possible future listing as threatened or endangered under the ESA (50 C.F.R., § 17.12).
- Listed or candidates for listing by the State of California as threatened or endangered under CESA (Fish & G. Code, § 2050 et seq.).⁴ In CESA, "endangered species" means a native species or subspecies of plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease (Fish & G. Code, § 2062). "Threatened species" means a native species or subspecies of plant that,

⁴ Refer to current online published lists available at: <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline</u>

although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by CESA (Fish & G. Code, § 2067). "Candidate species" means a native species or subspecies of plant that the California Fish and Game Commission has formally noticed as being under review by CDFW for addition to either the list of endangered species or the list of threatened species, or a species for which the California Fish and Game Commission has published a notice of proposed regulation to add the species to either list (Fish & G. Code, § 2068).

- Listed as rare under the California Native Plant Protection Act (Fish & G. Code, § 1900 et seq.). A plant is rare when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens (Fish & G. Code, § 1901).
- Meet the definition of endangered, rare, or threatened species under CEQA Guidelines section 15380, subdivisions (b) and (d), which may include:
 - Plants tracked by the California Natural Diversity Database (CNDDB) as California Rare Plant Rank (CRPR) 1 or 2;⁵ and
 - Plants that may warrant consideration on the basis of declining trends, recent taxonomic information, or other factors. This includes plants tracked by the CNDDB as CRPR 3 or 4.⁶
- Considered locally significant plants, that is, plants that are not rare from a statewide perspective but are rare or uncommon in a local context such as within a county or region (CEQA Guidelines, § 15125, subd. (c)), or as designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include plants that are at the outer limits of their known geographic range or plants occurring on an atypical soil type.

Sensitive natural communities are communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status plants or their habitat. CDFW's *List of California Terrestrial Natural Communities*⁷ is based on the best available information, and indicates which natural communities are considered sensitive at the current stage of the California vegetation classification effort. See the Vegetation

- ⁵ See CNDDB's Special Vascular Plants, Bryophytes, and Lichens List for plant taxa with a CRPR of 1 or 2: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline
- ⁶ CRPR 3 plants (plants about which more information is needed) and CRPR 4 plants (plants of limited distribution) may warrant consideration under CEQA Guidelines section 15380. Impacts to CRPR 3 plants may warrant consideration under CEQA if sufficient information is available to assess potential impacts to such plants. Impacts to CRPR 4 plants may warrant consideration under CEQA if sufficient enough to affect their overall rarity. Data on CRPR 3 and 4 plants should be submitted to CNDDB. Such data aids in determining and revising the CRPR of plants. See CNDDB's Special Vascular Plants, Bryophytes, and Lichens List for plant taxa with a CRPR of 3 or 4: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline
- ⁷ Available at: <u>https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#natural communities lists</u>

Classification and Mapping Program (VegCAMP) website for additional information on natural communities and vegetation classification.⁸

2. BOTANICAL FIELD SURVEYS

Evaluate the need for botanical field surveys prior to the commencement of any activities that may modify vegetation, such as clearing, mowing, or ground-breaking activities. It is appropriate to conduct a botanical field survey when:

- Natural (or naturalized) vegetation occurs in an area that may be directly or indirectly affected by a project (project area), and it is unknown whether or not special status plants or sensitive natural communities occur in the project area;
- Special status plants or sensitive natural communities have historically been identified in a project area; or
- Special status plants or sensitive natural communities occur in areas with similar physical and biological properties as a project area.

Survey Objectives

Conduct botanical field surveys in a manner which maximizes the likelihood of locating special status plants and sensitive natural communities that may be present. Botanical field surveys should be floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. "Focused surveys" that are limited to habitats known to support special status plants or that are restricted to lists of likely potential special status plants are not considered floristic in nature and are not adequate to identify all plants in a project area to the level necessary to determine if they are special status plants.

For each botanical field survey conducted, include a list of all plants and natural communities detected in the project area. More than one field visit is usually necessary to adequately capture the floristic diversity of a project area. An indication of the prevalence (estimated total numbers, percent cover, density, etc.) of the special status plants and sensitive natural communities in the project area is also useful to assess the significance of a particular plant population or natural community.

Survey Preparation

Before botanical field surveys are conducted, the botanical field surveyors should compile relevant botanical information in the general project area to provide a regional context. Consult the CNDDB⁹ and BIOS¹⁰ for known occurrences of special status plants and sensitive natural communities in the project area prior to botanical field surveys. Generally, identify vegetation and habitat types potentially occurring in the project area based on biological and physical properties (e.g., soils) of the project area

- ⁸ Available at: <u>https://www.wildlife.ca.gov/Data/VegCAMP</u>
- 9 Available at: https://www.wildlife.ca.gov/Data/CNDDB
- ¹⁰ Available at: <u>https://www.wildlife.ca.gov/Data/BIOS</u>

and surrounding ecoregion.¹¹ Then, develop a list of special status plants and sensitive natural communities with the potential to occur within the vegetation and habitat types identified. The list of special status plants with the potential to occur in the project area can be created with the help of the CNDDB QuickView Tool¹² which allows the user to generate lists of CNDDB-tracked elements that occur within a particular U.S. Geological Survey 7.5' topographic quad, surrounding quads, and counties within California. Resulting lists should only be used as a tool to facilitate the use of reference sites, with the understanding that special status plants and sensitive natural communities in a project area may not be limited to those on the list. Botanical field surveys and subsequent reporting should be comprehensive and floristic in nature and not restricted to or focused only on a list. Include in the botanical survey report the list of potential special status plants and sensitive natural communities that was created, and the list of references used to compile the background botanical information for the project area.

Survey Extent

Botanical field surveys should be comprehensive over the entire project area, including areas that will be directly or indirectly impacted by the project. Adjoining properties should also be surveyed where direct or indirect project effects could occur, such as those from fuel modification, herbicide application, invasive species, and altered hydrology. Surveys restricted to known locations of special status plants may not identify all special status plants and sensitive natural communities present, and therefore do not provide a sufficient level of information to determine potential impacts.

Field Survey Method

Conduct botanical field surveys using systematic field techniques in all habitats of the project area to ensure thorough coverage. The level of effort required per given area and habitat is dependent upon the vegetation and its overall diversity and structural complexity, which determines the distance at which plants can be identified. Conduct botanical field surveys by traversing the entire project area to ensure thorough coverage, documenting all plant taxa observed. Parallel survey transects may be necessary to ensure thorough survey coverage in some habitats. The level of effort should be sufficient to provide comprehensive reporting. Additional time should be allocated for plant identification in the field.

Timing and Number of Visits

Conduct botanical field surveys in the field at the times of year when plants will be both evident and identifiable. Usually this is during flowering or fruiting. Space botanical field survey visits throughout the growing season to accurately determine what plants exist in the project area. This usually involves multiple visits to the project area (e.g., in early, mid, and late-season) to capture the floristic diversity at a level necessary to determine

¹¹ Ecological Subregions of the United States, available at: <u>http://www.fs.fed.us/land/pubs/ecoregions/</u> <u>toc.html</u>

¹² Available at: <u>https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data</u>. When creating a list of special status plants with the potential to occur in a project area, special care should be taken to search all quads with similar geology, habitats, and vegetation to those found in the project area.

if special status plants are present.¹³ The timing and number of visits necessary to determine if special status plants are present is determined by geographic location, the natural communities present, and the weather patterns of the year(s) in which botanical field surveys are conducted.

Reference Sites

When special status plants are known to occur in the type(s) of habitat present in a project area, observe reference sites (nearby accessible occurrences of the plants) to determine whether those special status plants are identifiable at the times of year the botanical field surveys take place and to obtain a visual image of the special status plants, associated habitat, and associated natural communities.

Use of Existing Surveys

For some project areas, floristic inventories or botanical survey reports may already exist. Additional botanical field surveys may be necessary for one or more of the following reasons:

- Botanical field surveys are not current;¹⁴
- Botanical field surveys were conducted in natural systems that commonly experience year to year fluctuations such as periods of drought or flooding (e.g., vernal pool habitats or riverine systems);
- Botanical field surveys did not cover the entire project area;
- Botanical field surveys did not occur at the appropriate times of year;
- Botanical field surveys were not conducted for a sufficient number of years to detect plants that are not evident and identifiable every year (e.g., geophytes, annuals, and some short-lived plants);
- Botanical field surveys did not identify all plants in the project area to the taxonomic level necessary to determine rarity and listing status;
- Fire history, land use, or the physical or climatic conditions of the project area have changed since the last botanical field survey was conducted;
- Changes in vegetation or plant distribution have occurred since the last botanical field surveys were conducted, such as those related to habitat alteration, fluctuations in abundance, invasive species, seed bank dynamics, or other factors; or

¹³ U.S. Fish and Wildlife Service Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants available at: <u>https://www.fws.gov/sacramento/es/</u> <u>Survey-Protocols-Guidelines/</u>

¹⁴ Habitats, such as grasslands or desert plant communities that have annual and short-lived perennial plants as major floristic components, may require multiple annual surveys to fully capture baseline conditions. In habitats dominated by long-lived perennial plants, such as forests, surveys that were not conducted within the previous five years may not adequately represent the current baseline conditions and should be re-conducted.

Recent taxonomic studies, status reviews or other scientific information has
resulted in a revised understanding of the special status plants with potential to
occur in the project area.

Negative Surveys

Adverse conditions from yearly weather patterns may prevent botanical field surveyors from determining the presence of, or accurately identifying, some special status plants in the project area. Disease, drought, predation, fire, herbivory, or other disturbance may also preclude the presence or identification of special status plants in any given year. Discuss all adverse conditions in the botanical survey report.¹⁵

The failure to locate a known special status plant occurrence during one field season does not constitute evidence that the plant occurrence no longer exists at a location, particularly if adverse conditions are present. For example, botanical field surveys over a number of years may be necessary if the special status plant is an annual or short-lived plant having a persistent, long-lived seed bank and populations of the plant are known to not germinate every year. Visiting the project area in more than one year increases the likelihood of detecting special status plants, particularly if conditions change. To further substantiate negative findings for a known occurrence, a visit to a nearby reference site may help ensure that the timing of botanical field surveys was appropriate.

3. REPORTING AND DATA COLLECTION

Adequate information about special status plants and sensitive natural communities present in a project area will enable reviewing agencies and the public to effectively assess potential impacts to special status plants and sensitive natural communities and will guide the development of avoidance, minimization, and mitigation measures. The information necessary to assess impacts to special status plants and sensitive natural communities is described below. For comprehensive, systematic botanical field surveys where no special status plants or sensitive natural communities were found, reporting and data collection responsibilities for botanical field surveyor remain as described below, excluding specific occurrence information.

Special Status Plant and Sensitive Natural Community Observations

Record the following information for locations of each special status plant and sensitive natural community detected during a botanical field survey of a project area.

• The specific geographic locations where the special status plants and sensitive natural communities were found. Preferably this will be done by use of global positioning system (GPS) and include the datum¹⁶ in which the spatial data was

¹⁶ NAD83, NAD27 or WGS84

¹⁵ U.S. Fish and Wildlife Service Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants available at: <u>https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/</u>

collected and any uncertainty or error associated with the data. If GPS is not available, a detailed map (1:24,000 or larger) showing locations and boundaries of each special status plant population and sensitive natural community in relation to the project area is acceptable. Mark occurrences and boundaries as accurately as possible;

- The site-specific characteristics of occurrences, such as associated species, habitat and microhabitat, structure of vegetation, topographic features, soil type, texture, and soil parent material. If a special status plant is associated with a wetland, provide a description of the direction of flow and integrity of surface or subsurface hydrology and adjacent off-site hydrological influences as appropriate;
- The number of individuals in each special status plant population as counted (if population is small) or estimated (if population is large);
- If applicable, information about the percentage of each special status plant in each life stage such as seedling, vegetative, flowering, and fruiting;
- The density of special status plants, identifying areas of relatively high, medium and low density of each special status plant in the project area; and
- Digital images of special status plants and sensitive natural communities in the project area, with diagnostic features.

Special Status Plant and Sensitive Natural Community Documentation

When a special status plant is located, data must be submitted to the CNDDB. Data may be submitted in a variety of formats depending on the amount and type of data that is collected.¹⁷ The most common way to submit data is the Online CNDDB Field Survey Form,¹⁸ or equivalent written report, accompanied by geographic locality information (GPS coordinates, GIS shapefiles, KML files, topographic map, etc.). Data submitted in digital form must include the datum¹⁹ in which it was collected.

If a sensitive natural community is found in a project area, document it with a Combined Vegetation Rapid Assessment and Relevé Field Form²⁰ and submit the form to VegCAMP.²¹

Voucher Collection

Voucher specimens provide verifiable documentation of special status plant presence and identification and a scientific record. This information is vital to conservation efforts and valuable for scientific research. Collection of voucher specimens should be

¹⁷ See <u>https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data</u> for information on acceptable data submission formats.

¹⁸ Available at: <u>https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data</u>

¹⁹ NAD83, NAD27 or WGS84

²⁰ Available at: <u>https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit</u>

²¹ Combined Vegetation Rapid Assessment and Releve Field Forms can be emailed to VegCAMP staff. Contact information available at: https://www.wildlife.ca.gov/Data/VegCAMP

conducted in a manner that is consistent with conservation ethics, and in accordance with applicable state and federal permit requirements (e.g., scientific, educational, or management permits pursuant to Fish & G. Code, § 2081, subd. (a)). Voucher collections of special status plants (or possible special status plants) should only be made when such actions would not jeopardize the continued existence of the population. A plant voucher collecting permit²² is required from CDFW prior to the take or possession of a state-listed plant for voucher collection purposes, and the permittee must comply with all permit conditions.

Voucher specimens should be deposited in herbaria that are members of the Consortium of California Herbaria²³ no later than 120 days after the collections have been made. Digital imagery can be used to supplement plant identification and document habitat. Record all relevant collector names and permit numbers on specimen labels (if applicable).

Botanical Survey Reports

Botanical survey reports provide an important record of botanical field survey results and project area conditions. Botanical survey reports containing the following information should be prepared whenever botanical field surveys take place, and should also be submitted with project environmental documents:

Project and location description

- A description of the proposed project;
- A detailed map of the project area that identifies topographic and landscape features and includes a north arrow and bar scale;
- A vegetation map of the project area using Survey of California Vegetation Classification and Mapping Standards²⁴ at a thematic and spatial scale that allows the display of all sensitive natural communities;
- A soil map of the project area; and
- A written description of the biological setting, including all natural communities; geological and hydrological characteristics; and land use or management history.

Detailed description of survey methodology and results

- Names and qualifications of botanical field surveyor(s);
- Dates of botanical field surveys (indicating the botanical field surveyor(s) that surveyed each area on each survey date), and total person-hours spent;
- A discussion of the survey preparation methodology;
- A list of special status plants and sensitive natural communities with potential to

²² Applications available at: <u>https://www.wildlife.ca.gov/Conservation/Plants/Permits</u>

²³ A list of Consortium of California Herbaria participants is available at: <u>http://ucjeps.berkeley.edu/</u> <u>consortium/participants.html</u>

²⁴ Available at: <u>https://www.wildlife.ca.gov/data/vegcamp/publications-and-protocols</u>

occur in the region;

- Description(s) of reference site(s), if visited, and the phenological development of special status plant(s) at those reference sites;
- A description and map of the area surveyed relative to the project area;
- A list of all plant taxa occurring in the project area, with all taxa identified to the taxonomic level necessary to determine whether or not they are a special status plant;
- Detailed data and maps for all special status plants and sensitive natural communities detected. Information specified above under the headings "Special Status Plant and Sensitive Natural Community Observations," and "Special Status Plant and Sensitive Natural Community Documentation," should be provided for the locations of each special status plant and sensitive natural community detected. Copies of all California Native Species Field Survey Forms and Combined Vegetation Rapid Assessment and Relevé Field Forms should be sent to the CNDDB and VegCAMP, respectively, and included in the project environmental document as an Appendix;²⁵
- A discussion of the potential for a false negative botanical field survey;
- A discussion of how climatic conditions may have affected the botanical field survey results;
- A discussion of how the timing of botanical field surveys may affect the comprehensiveness of botanical field surveys;
- Any use of existing botanical field surveys and a discussion of their applicability to the project;
- The deposition locations of voucher specimens, if collected; and
- A list of references used, including persons contacted and herbaria visited.

Assessment of potential project impacts

- A discussion of the significance of special status plant populations in the project area considering nearby populations and total range and distribution;
- A discussion of the significance of sensitive natural communities in the project area considering nearby occurrences and natural community distribution;
- A discussion of project related direct, indirect, and cumulative impacts to special status plants and sensitive natural communities;
- A discussion of the degree and immediacy of all threats to special status plants and sensitive natural communities, including those from invasive species;
- A discussion of the degree of impact, if any, of the project on unoccupied,

²⁵ It is not necessary to submit entire environmental documents to the CNDDB.

potential habitat for special status plants; and

 Recommended measures to avoid, minimize, or mitigate impacts to special status plants and sensitive natural communities.

4. BOTANICAL FIELD SURVEYOR QUALIFICATIONS

Botanical field surveyors should possess the following qualifications:

- Knowledge of plant taxonomy and natural community ecology;
- Familiarity with plants of the region, including special status plants;
- Familiarity with natural communities of the region, including sensitive natural communities;
- Experience with the CNDDB, BIOS, and Survey of California Vegetation Classification and Mapping Standards;
- Experience conducting floristic botanical field surveys as described in this document, or experience conducting such botanical field surveys under the direction of an experienced botanical field surveyor;
- Familiarity with federal, state, and local statutes and regulations related to plants and plant collecting; and
- Experience analyzing the impacts of projects on native plant species and sensitive natural communities.

5. SUGGESTED REFERENCES

- Bonham, C.D. 1988. Measurements for terrestrial vegetation. John Wiley and Sons, Inc., New York, NY.
- California Native Plant Society, Rare Plant Program. Most recent version. Inventory of rare and endangered plants (online edition). California Native Plant Society. Sacramento, CA. Available at: http://www.rareplants.cnps.org/.
- California Native Plant Society. Most recent version. A manual of California vegetation. California Native Plant Society. Sacramento, CA. Available at: http://www.cnps.org/ cnps/vegetation/manual.php.
- California Department of Fish and Wildlife, California Natural Diversity Database. Most recent version. Special vascular plants, bryophytes and lichens list. Updated guarterly. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID= 109383&inline.
- Elzinga, C.L., D.W. Salzer, and J. Willoughby. 1998. Measuring and monitoring plant populations. BLM Technical Reference 1730-1. U.S. Dept. of the Interior, Bureau of Land Management. Denver, Colorado. Available at:

- Jepson Flora Project (eds.) Most recent version. Jepson eFlora. Available at: <u>http://ucjeps.berkeley.edu/eflora/</u>.
- Leppig, G. and J.W. White. 2006. Conservation of peripheral plant populations in California. Madroño. 53:264-274.
- Mueller-Dombois, D. and H. Ellenberg. 1974. Aims and methods of vegetation ecology. John Wiley and Sons, Inc. New York, NY.
- U.S. Fish and Wildlife Service. 1996. Guidelines for conducting and reporting botanical inventories for federally listed plants on the Santa Rosa Plain. Sacramento, CA.
- U.S. Fish and Wildlife Service. 1996. Guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants. Sacramento, CA.

Van der Maarel, E. 2005. Vegetation Ecology. Blackwell Science Ltd. Malden, MA.

This document is available online at: <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline</u>