PLANNING DIVISION
HUMBOLDT COUNTY PLANNING & BUILDING DEPARTMENT
3015 H STREET | EUREKA, CA 95501

Initial Study and Draft Mitigated Negative Declaration

1. **Project Title**: Adesa Organic, LLC Conditional Use Permit and Special Permit. APNs 315-145-002, 315-211-003, 315-211-004, 315-146-018 and 315-222-003; Case Nos.: CUP16-452; Apps Nos.: 11923

2. **Lead agency name and address**: Humboldt County Planning & Building Department, 3015 H Street, Eureka, CA 95501-4484; Phone: (707) 445-7541; Fax (707) 445-7446

3. **Contact person and phone number**: Cliff Johnson, Supervising Planner (707) 268-3721; fax: 707-445-7446; email: cjohnson@co.humboldt.ca.us

4. **Project location**: The project site is located in Humboldt County, in the Maple Creek area, on the east side of Maple Creek Road, approximately 8.0 miles south from the intersection of Butler Valley Road and Maple Creek Road to a private road, on the property known to be in Section 2 of Township 03 North, Range 03 East and Section 35 of Township 04 North, Range 03 East Humboldt Base and Meridian. The site address is 23550 Maple Creek Road, Korbel, CA 95550.

5. **Project sponsor's name and address**:

Applicants	**Owners**	**Agent**
Adesa Organic, LLC	AMT, LLC	Stein Coriell, Project Planner
Attn: Laura Borusas	C/O Equity Holders Rep, LLC	SHN Engineering and Geologists
730 7th St. Suite 202.	585 Mt. Curre Blvd.	812 W. Wabash Ave.
Eureka, CA 95501	St. Paul, MN 55116	Eureka, CA 95501

6. **General plan designation**: Agricultural Grazing Density: 20-160 acres per dwelling unit; Timberland (T): 23 acres of APN 315-211-004, Density: 40-160 acres per dwelling unit; Humboldt County General Plan, Inland General Plan (2017); Slope Stability: High Instability (3).

7. **Zoning:** Agricultural Exclusive (AE), with a Special Building Site combining zone specifying that the minimum parcel size is the per the subdivision map of record (B-5); Timber Production Zone (TPZ): 13.5 acres of APN 315-211-003. No project facilities are located in the TPZ-zoned areas on the project site.

8. **Description of project**: Adesa Organic, LLC is applying for a Conditional Use Permit for 86,400 square feet of new mixed-light cannabis cultivation, a drying facility, a storage facility, associated cloning/propagation facilities and other improvements in accordance with Humboldt County Code Section 314-55.4 of Chapter 4 of Division I of Title III, Commercial Medical Marijuana Land Use Ordinance (CMMLUO). The business is proposed to operate on one legal parcel consisting of three APNs (315-145-002, 315-211-003 and 315-211-004) and totaling 443 acres, with a street address of 23550 Maple Creek Road, Korbel, CA 95550. A total of four permits are being requested in accordance with the parcel size allowances specified in section 55.4.8.2.1.1 of the CMMLUO. Four permits, two for 22,000 square feet of mixed-light cultivation and two for 21,200 square feet of mixed-light cultivation, are requested.

   The project is located in the hills south of Korbel and east of Kneeland in Humboldt County. The parcels are located northeast of the Mad River and about 6 miles south of the community of Maple Creek. The current ranch complex at 23333 Maple Creek Road was built between July and November 2004, and the pond and three small barns in the vicinity of the eastern portion of the project area were built between 2006 and 2009 (Roscoe and Associates 2017). The parcel has a history of cattle ranching, and a section was previously part of "Big Bend Ranch". No recent timber

harvest has occurred. The Adesa Organic, LLC parcels are currently under a Williamson Act contract, which has been in place prior to the current landowner obtaining the parcel. The current landowner and tenants have maintained the Williamson Act contract; cattle from a neighboring ranch currently graze on the parcel.

The IS/MND also addresses certain maintenance and repair actions to culverts and man-made reservoirs requested by the California Department of Fish and Wildlife ("CDFW") and identified in a draft Lake and Streambed Alteration Agreement ("LSAA"). One of these project's CDFW project PO-1, would remove an existing man-made instream reservoir that may be, according to CDFW, contributing sediment and warm water to Cowan Creek. CDFW Project PO-1, and all of the other maintenance and repair actions identified in the LSAA, are separate from the Adesa project for purposes of CEQA because they have independent utility. The Project does not require this work; it is requested by CDFW to address an existing condition whether or not the Project is approved. Accordingly, the IS/MND discloses the impacts of PO-1 for informational purposes.

Adesa Organic, LLC Cultivation and Associated Facilities

The project includes the use of existing facilities on the project site and proposes the construction of additional facilities:

- Existing Agriculture-Exempt Barn – Storage Space: One existing 1,664-square-foot agriculture-exempt barn constructed in 2009 is proposed to be used for agricultural storage (sheet 433A Site Map, SHN June 2019). The project proposes to install rooftop solar panels on this structure.
- Existing Agriculture-Exempt Barn – Drying Space: A second 3,200-square-foot agriculture-exempt barn constructed in 2009 is proposed as the drying facility (sheet 433A Site Map, SHN June 2019). This structure is proposed to be remodeled and expanded by about 50%.
- Proposed Cultivation Area: Two 43,200-square-foot mixed-light greenhouse cultivation areas are proposed at Site 433A (sheet 433A Site Map, SHN June 2019). These greenhouses would be a single, combined structure similar to those provided by Prins Greenhouses (Prins Greenhouses 2018) and would be equipped with light-deprivation kits that include an automated system that will pull fire-retardant, light-blocking curtains composed of three layers of polyolefin and polyester over the greenhouse sections to prevent light spillage. The greenhouses would be modularized with poly-wall separations allowing multiple, independently-controlled chambers. Greenhouse floors would be permeable. A utility area would be present on the north side of the structure and would contain the fertilizing irrigation system, electrical system, generator shed, and three 10,000-gallon water tanks. Fourteen stand-alone air conditioning units would be placed along the east side of the structure. An on-site propagation area may be utilized, at no more than 10% of the size of then total cultivation area.
- Phasing: The applicant may phase the development of the mixed-light greenhouses with an initial startup of full sun outdoor cultivation or temporary hoop houses with light dep and small wattage lighting. If small wattage lighting is used, tarps shall be manually pulled over hoop houses. The phasing will allow for less power intensive cultivation to occur while the photovoltaic system is being developed.
- Proposed Bathroom and Onsite Wastewater Disposal System: An ADA-compliant bathroom is proposed to be constructed near the existing building on APN 315-211-003 and in proximity of the existing agriculture-exempt barn that will be used as a storage area. The associated leach-fields to serve this onsite wastewater disposal system are shown on the site plan (sheet 433 A Site Map, SHN June 2019).
- Proposed Photovoltaic System and Battery Sheds: An approximately10,000-12,000-square-foot photovoltaic (PV) system is proposed with an associated 500-square-foot battery shed on the hillside to the north of the greenhouses (Borusas 2019). The PV system would be located near the proposed cultivation area (sheets 433A Site Map, SHN June 2019). The PV system is proposed to consist of an array of low, ground-mounted panels. The PV system would be constructed in sections to meet operational need.

- Proposed Generators and Diesel Tanks: Two 500-kilowatt (kW) diesel-powered generators are proposed near Site 433A (sheet 433A Site Map, SHN June 2019). The generators will be self-enclosed and will provide power to the project, in combination with the PV array and proposed rooftop photovoltaic panels. Two 5,000-gallon diesel tanks are proposed, both at Site 433A, each with adequate secondary containment required by 40 CFR 264.193(e).
- Proposed Rainwater Catchment Ponds: Two rainwater catchment ponds are proposed for construction in order to provide the primary source of irrigation water required for the cannabis cultivation operation. Pond A, proposed for a location near the processing facility (sheet C-1), will have a surface area of up to 53,835 square feet and an average depth of up to 8 feet for a storage capacity of up to 3,221,000 gallons. Pond B, proposed for a location west of the cultivation area and away from other infrastructure (sheet C-1), will have a surface area of up to 18,010 square feet and an average depth of up to 8 feet for a storage capacity of up to 1,077,000 gallons. The second pond would only be built on an as-needed basis.
- Wells: There is an existing, permitted well located to the north of the proposed cultivation area (sheet 433A Site Map, SHN June 2019), which would provide a potential source of irrigation water and sanitation water for the cultivation and processing operation. The well water would serve as a backup to rainwater catchment and would be stored in the ponds, as needed, to meet any forbearance requirements and irrigation or operational needs.
- Proposed Parking Area: The proposed parking area is located adjacent to the existing agriculture-exempt barns that will be used for drying and storage (sheet 433A Site Map, SHN June 2019), and would provide parking spaces for up to 3 shuttle vehicles identified in the applicant's transportation plan that mandates the use of company shuttles for transporting employees to the project site. One ADA-compliant parking space is proposed and is the only area in the parking lot that is proposed to be paved.

In addition to these facilities, a number of other small facilities are proposed, including fire hydrants, garbage units, compost areas, electrical service lines, water tanks and fencing (sheets 433A Site Map, SHN June 2019).

There is a third existing agriculture-exempt barn located on the project site that is not related to the cannabis activities.

Cultivation and Drying Activities

Adesa Organic, LLC proposes three harvest cycles per year. The project plans to stagger operations such that there is a harvest every week from mid-April until the first week of November. Approximately 4,104 square feet of flowering canopy will be harvested every week. Each flowering cycle is expected to take 64 days.

Cultivation activities will occur year-round, with a "hibernation period" between November and mid-January when only a portion of the "mother plant" section of the greenhouse is kept vegetated. In mid-January, the first round of clones is cultivated. First harvest occurs mid-April and continues in staggered succession until the first week of November as described above. This will require supplemental lighting during both the vegetative and flowering phases of cultivation (see Lighting). Amendments, fertilizers, nutrients and other materials used in cultivation operations will be stored in the proposed storage building. All materials are certified organic and Material Safety Data Sheets for proposed fertilizers and pesticides have been submitted to the County as part of the application.

Processing will not occur onsite. There is a proposed drying facility on APN 315-211-003. The drying room will be temperature and humidity controlled. Flowers are minimally processed at harvest, with removal of fan leaves, and then dried and cured. Trimming and packaging will occur at an offsite facility by a licensed processor. Operations will be conducted in a clean and sanitary environment and all employees will follow sanitary guidelines to prevent mold, mildew or bacterial contamination of cannabis product. Employees will have access to hand washing facilities, face masks and gloves for handling cannabis.

Hours/Days of Operation and Number of Employees
There will be approximately fifteen full-time employees and up to five part-time employees for the Adesa Organic, LLC operations. Part-time employees will be hired during harvest for up to 10 days per month. There will be at least one security guard at the greenhouse location and at the processing facility. The project proposes approximate operating hours of 9:30 a.m. to 5:00 p.m. daily.

Access/Parking
The project is accessed from Butler Valley Road which is a County-maintained road and is not identified as needing evaluation in the Humboldt County Department of Public Works referral response. From Butler Valley Road, the project site is accessed via approximately 8 miles of Maple Creek Road, which is a County-maintained road that provides access to rural residential, agricultural and public facilities, including Maple Creek School. The applicant provided documentation of evidence that the entire section of Maple Creek Road from Butler Valley Road to the intersection of the private driveway leading to the project site is equivalent to a Road Category 4 Standard. This report, accompanied by photographs, showed that much of the road is at least 20 feet wide and also documents points that are narrower than 20 feet. The road is also described as having turnouts, wide shoulders and driveway entrances in places that will allow passing.

The applicant retained SHN Consulting Engineers and Geologists to prepare a road evaluation report for the 1.1-mile section of private road between Maple Creek Road and the barn complex. The road is an average of 15 feet wide and with a grade that varies between 0-15%. The report identified the road as being very low traffic with 10 or fewer average daily trips. Recommended improvements included installing additional turnouts and rocking the surface (SHN December 2016a). The Department of Public Works referral response indicates that the intersection of Maple Creek Road and the Adesa Organic, LLC access road will need to be upgraded to meet the County visibility ordinance and encroachment ordinance standards.

Designated parking is located near the drying building and will include at least one ADA-accessible spot. The proposed parking lot would provide parking spaces for up to 3 shuttle vehicles identified in the applicant's transportation plan, in addition to spaces for 3 more vehicles and one ADA-compliant parking space. The ADA-compliant parking space is the only area in the parking lot that is proposed to be paved. Emergency vehicle turnaround is located near the proposed pond on the Adesa Organic, LLC project and is depicted on the site plans.

Traffic
The project proposes to minimize the usage of Maple Creek Road by having a company van or vans pick up employees in Eureka and Arcata each day to shuttle them to the project site for their shifts. The company shuttle will pick employees up at their places of residence in order to limit trips and greenhouse gas emissions. The transportation plan for the project requires that employees utilize these shuttles to minimize vehicle trips on Maple Creek Road. A fuel truck will visit the site every two weeks to deliver diesel fuel. The Road Evaluation Report submitted in December 2016 estimated the average daily trips to the site at 10 or fewer at full build-out, for the project.

Soils
The project cultivation activities for Adesa Organic, LLC are partially located on prime soils. The applicant has justified the move from 100% prime soils as necessary to protect cultural resources, lessen the potential impact to a Golden Eagle nest, and to overall consolidate operations. The proposed new location is on a previously graded area, approximately 40% of which is on prime soils. A prime agricultural soil assessment conducted by Dirty Business Soil Consulting and Analysis for the five APNs for Adesa Organic, LLC projects concluded that there is a total of 18.4 acres (800,365 square feet) of prime agricultural soil between the parcels (DBS 2018).

The average Storie Index rating of the mapped prime agricultural soils is 84.4%. All areas of mapped prime agricultural soil are shown on the project site plans. The slopes of all mapped areas are less than 15%. A soil fertility management plan will be used from a crop management company to

continuously test the soil nutrient levels and recommend organic amendments to rebalance the soil so that it can be recycled.

The project would have been required to incorporate mitigation measures from the cultural report prepared for the project that included covering the site with geotextile fabric and capping this area with culturally sterile fill soil. Although the proposed cultivation was 100% located on prime soils, these soils were effectively not being used.

Lighting
The applicant proposes to use mixed lighting for cultivation which means that at certain times of the year artificial lighting will be used in the greenhouse structures. The vegetative greenhouse space will have supplemental light to ensure a consistent 16 hours of sunlight every day from 6:00 a.m. to 10:00 p.m. The light plan for the flower space will also adjust with the season to ensure 12 hours of sunlight from 8:00 a.m. to 8:00 p.m. The amount of supplemental light used will depend on the sunrise and sunset times. The approximate number of hours per day that supplemental lighting will be used is contained in the lighting plan contained in the Cultivation and Operations plan submitted for the projects.

To ensure that light does not escape from the greenhouse structures at night, all illuminated areas within the greenhouse structures will be equipped with a light-deprivation kit. An automated system will prevent light spillage by drawing fire-retardant, light-blocking curtains composed of three layers of polyolefin and polyester over the lighted greenhouse sections (Borusas April 2018, Svensson 2018). During the initial phase of the project the applicant may use temporary hoop houses with low wattage lights and a manual tarp system. The CMMLUO requires that all mixed-light operations comply with dark sky standards.

Stormwater Management and Site Drainage
Development of the proposed project increases the amount of impervious surface on the parcels only slightly. The drying facility is an existing agriculturally-exempt structure that will be expanded by about 50%. The other proposed accessory structures will generally be small and detached.

The greenhouses will have permeable floors, but the greenhouses' permanently covered exteriors will create runoff. All runoff will be collected as a primary water source. Other areas, such as most of the proposed parking lot and driveways will not be turned into completely impervious surface. The ADA-compliant parking space will be fully paved. Improvements for managing road runoff are included in the Road Evaluation Report prepared by SHN Consulting Engineers and Geologists (SHN December 2016a). The project is not located in an area that is subject to Humboldt County Low Impact Development Standards.

All excess irrigation runoff will be captured and recycled through an Everfilt mixed-media filtration system. No excess irrigation water is anticipated to run off site. Site topography is relatively flat at the cultivation and processing sites, with the slopes of these sites being 5-15%. There will be erosion control measures surrounding the water tanks in case of any accidental leaking. Use of OMRI-certified organic amendments will also reduce the potential for stormwater pollution and any adverse impacts to the watershed. The Adesa Organic, LLC project is enrolled as a Tier 2 discharger under the North Coast Regional Water Quality Control Board (NCRWQCB) Cannabis Cultivation Waste Discharge Regulatory Program (CCWDRP). The Waste Discharge Identification number for the Adesa Organic, LLC project is WDID# 1B161705CHUM. A separate Water Resources Protection Plan has been developed for the project.

Riparian Habitat and Wetlands
Riparian habitat and wetlands occur in various places on the project parcels. There are five separate mapped creeks present across the two legal parcels, including Cowan Creek, two unnamed tributaries to Cowan Creek, an unnamed tributary to Wilson Creek and an unnamed tributary of the Mad River. All proposed cultivation areas, proposed support structures, and the proposed processing

facility are located outside the minimum buffers required by the Humboldt County SMAWO Ordinance.

Tree removal of trees less than 12 inches in diameter is proposed for the construction of turnouts for the 1.1-mile access road and for the new access road to the proposed pond. No other proposed project facilities require or will involve tree removal. All proposed project facilities for both Adesa Organic, LLC are in areas that have expansive, unforested natural openings.

Water Sources and Usage

Water is primarily sourced from rainwater, collected from precipitation onto greenhouse roofs and ponds. The project will be able to collect approximately 2,888,000 gallons of rainfall each year from water falling directly onto two proposed ponds. The project will also collect approximately 3,312,000 gallons annually off of the greenhouse roofs. The total water that will be collected by rainfall catchment is approximately 6,201,000 gallons annually. There is an existing, permitted well located to the north of proposed cultivation area (sheet C-2, SHN February 2018a), which would provide a potential source of irrigation water and source for the drying facility and bathroom. The well water would serve as a backup to rainwater catchment and would be stored in the ponds as needed to meet irrigation or operational needs, and subject to forbearance if determined hydrologically connected to surface waters of the State.

The Adesa Organic, LLC project proposes to install three 10,000-gallon water storage tanks at its cultivation area for a total of 30,000 gallons of hard tank storage.
The project also proposes to store water in two lined, open ponds. Pond A, located near the processing facility (sheet C-1, SHN February 2018a), will have a surface area of up to 53,835 square feet and an average depth of up to 8 feet for a total storage capacity of up to 3,221,000 gallons. Pond B, located to the east of the cultivation area, away from other infrastructure (sheet C-1, SHN February 2018a), will have a surface area of up to 18,010 square feet and an average depth of up to 8 feet for a total storage capacity of up to 1,077,000 gallons. The total available water storage among the two proposed ponds and all hard tanks is 4,330,000 gallons. However, Pond B would only be installed on an as needed basis.

Annual water usage is estimated to be 1,864,000 gallons for the Adesa Organic, LLC project. The ADA bathroom facility is also anticipated to require 468,000 gallons annually. The total annual water usage is estimated to be 2,332,000 gallons.

Drinking water for employees will be imported to the project site and provided in water coolers placed in all work areas throughout the project area.

The project site plans show an existing well on the other parcel. This is not currently proposed for use for cultivation or processing activities.

On-site Wastewater System

The project proposes a new onsite sewage disposal system to meet the needs of staff. This system will be constructed in accordance with the Humboldt County Department of Environmental Health sewage disposal system requirements. A site-specific Septic Suitability Report (SHN October 2016) has been prepared for the project in accordance with the standards of the Humboldt County Division of Environmental Health, to assess soil and groundwater conditions for this system, determine feasibility and the necessary size of the system, and guide the proposed development. The system will include toilet and handwashing facilities in the proposed ADA-compliant bathroom near the processing and storage facilities. The proposed leach fields are shown on the project site plan (Sheet 433A Site Plan, SHN June 2019).

Electrical Service

The project proposes the use of a mix of solar PV systems and generators to meet the energy demands of the mixed-light cultivation. Electrical infrastructure between generation systems and

project facilities requiring power will need to be developed. The solar PV systems will have a maximum power output of 690 kW. Rooftop solar is also proposed on the agricultural storage building.

Generators proposed for the Adesa Organic, LLC project include two 500-kW Type 4 diesel-powered units. The generators will be self-enclosed and will provide power in combination with the proposed PV system. The Adesa Organic, LLC project will use up to approximately 135,859 gallons of diesel annually. A total of up to 10,000 gallons of diesel fuel storage will be installed for the Adesa Organic, LLC project, in two separate 5,000-gallon above-ground tanks.

Security

All greenhouses and processing buildings will be under off-site wireless camera supervision, including all doors, gates, storage and processing facilities. The drying facility and greenhouses will have a security officer present during all business hours. All employees will be background screened and only managers will have keys to locked areas such as the greenhouse, drying, curing, processing and storage facilities. All doors and gates will have motion-sensor activated cameras and lights. All doors will also have sensors and wireless transmission to notify when doors are opened outside business hours. A seed-to-sale software for tracking cannabis product will be implemented as part of the project as part of state requirements. Plants will be labeled, finished product will be accounted for by plant, and exchanges between distributors will take place in places with camera supervision. Those with access to the track-and-trace system will go through mandatory compliance training.

Easements

The project will be required to secure and record an easement for perpetual use and access to the portion of the 1.1-mile access road that traverses APN 315-222-008.

9. **Surrounding land uses and setting**: The project site is located to the south of the community of Maple Creek, in a very rural area of Humboldt County. The approximately 433-acre parcel of the Adesa Organic, LLC project is currently developed with three ag-exempt structures. The other approximately 185-acre parcel is developed with an existing residence and four other ag-exempt structures. The project site is accessed by Maple Creek Road, a County-maintained road that is generally up to Category 4 standards. The Mad River is located approximately 1 mile southwest of the project area. All project facilities are located in relatively flat (<15% slope), open areas outside the 100-year flood zone. The project parcels contain prime agricultural soils and are in an area of high instability. The project parcels are surrounded by other agricultural lands, timber production lands, and rural residences.

10. **Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement): A Lake and Streambed Alteration Agreement (LSAA) with the California Department of Fish and Wildlife will be required for work involving stream crossings. This LSAA application has been submitted, and it includes information regarding the ponds and the wells to determine hydrologic connectivity, if any. The State Water Resources Control Board, Division of Water Rights may make a separate determination regarding the connectivity of the existing and proposed wells; their permit requirements for the well sources and the ponds will be subject to this determination. A Construction General Permit will be required from the NCRWQCB. A less than 3-acre conversion exemption will be required from CALFIRE. Locally, permits from Humboldt County Building Division, Public Works Division, and Division of Environmental Health are required. A license from the California Department of Food and Agriculture will be required for the commercial cannabis cultivation prior to the start of operation.

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1?** Consultation with Native American tribes traditionally and culturally associated with the project area has been an ongoing part of the process. Specifically, an invitation for Tribal Consultation pursuant to AB 52 was sent to all tribes identified as potentially being affected by the NAHC on January 2, 2019. The Bear River Band of Rohnerville Rancheria was the only tribe that accepted the request and consultation was initiated. A cultural resources report and subsurface investigation have both been prepared by a

qualified archaeologist and the tribe has been able to weigh in on the planning process, including measures to protect culturally significant resources.

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ Aesthetics	☒ Agriculture Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Energy
☒ Geology/Soils	☒ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☒ Hydrology / Water Quality	☒ Land Use / Planning	☐ Mineral Resources
☒ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☒ Transportation	☒ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project COULD have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project COULD have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

6.30.2020
Date

CLIFF JOHNSON
Printed name

Humboldt County Planning & Building Department
For

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take into account the whole action involved, including off-site was well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 21, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addresses. Identify which effects from the above checklist were within the scope of and adequately analyze in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plan, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats, however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue identify:

a) The significant criteria or threshold, if any, used to evaluate each question; and

b) The mitigation measure identified, if any, to reduce the impact to less than significant.

CHECKLIST, DISCUSSION OF CHECKLIST RESPONSES, PROPOSED MITIGATION

1. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

Setting:

Humboldt County is an area of diverse visual character. The project site is a rural area characterized by rolling hills and varying topographical gradients, with extensive natural grassland open areas framed by forestland that consists of a mix of oak woodland and Douglas fir stands. The area predominantly features pasture and other agricultural land, including existing agricultural buildings and other associated agricultural improvements such as developed ponds and springs, intermixed with stands of forestland. This patchwork of open agricultural land and forest stands is spread across the diverse topography of rolling hills that varies greatly while generally sloping southward toward the Mad River. Adjoining properties include similar characteristics and uses, and there are sparse residences spread across typically large rural properties. The diverse topography of rolling hills, combined with the intermixed stands of mature forest, acts to shield the project site from surrounding viewpoints of neighboring properties and roads.

The project is accessed by an existing 1.1-mile private, gated road that travels on an upward gradient through the property from its intersection with Maple Creek Road below. Project facilities are located at elevations ranging from 2,300 to 2,360 feet elevation. Maple Creek Road, the nearest public road, is located at a mean elevation of 2,040 feet (Google Earth 2018). The project as proposed is not visible from Maple Creek Road due to the combination of distance, elevation difference, and mature forest stands obscuring the proposed operation from the road (Google Earth 2018). SR 36 is located approximately 13 miles from the project site, across the Mad River and Van Duzen River and separated by a mountain range, and the project would not be visible from any point on SR 36 because of distance and topography (Google Earth 2018). The project is located 1.5 miles from the nearest public land in the Six Rivers National Forest, and the topography precludes visibility from this publicly accessible land as well (Google Earth 2018). The project is located 1.3 miles from the Mad River at its closest point, and approximately 1,470 feet in elevation above the Mad River, with intervening forest stands and topography precluding visibility from locations along the Mad River. (Google Earth 2018).

The Mad River has not been designated under the 1968 Wild and Scenic Rivers Act (National Wild & Scenic Rivers System 2018). There are no officially designated scenic highways in Humboldt County (Caltrans 2018), and the County has not designated any resources (Humboldt County 2017a).

Analysis:

a) Finding: The project will not have a substantial adverse effect on a scenic vista. *No Impact.*

Discussion: A scenic vista is defined as a viewpoint that provides expansive views of a highly-valued landscape (such as an area of remarkable scenery or a resource that is indigenous to the area) for the benefit of the public. There are no designated scenic vistas in the area, and the project as proposed is naturally shielded from all identified opportunities for public view by a combination of distance, topography, and forest cover. No Impact would occur and no mitigation would be necessary.

b) Finding: The project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. *No impact*.

Discussion: According to the California Scenic Highway Mapping System, there are no designated state scenic highways in the project vicinity. SR 36 is listed as an "Eligible State Scenic Highway," but the project site is not visible from the highway due to intervening topography, distance, and forest cover (Google Earth 2018). The project site does not contain any landmark trees, rock outcroppings, or buildings of historic significance. Therefore, the project would not contribute any impact toward substantial damage of scenic resources, including trees, rock outcroppings, or historic buildings within view of a state scenic highway. No impact would occur and no mitigation would be necessary.

c) Finding: The project will not substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). *Less than significant impact.*

Discussion: Sensitive viewer groups typically include residents, recreationists, and motorists. As described above in the "Setting" for Aesthetic Resources, the combination of intervening topography, forest cover, and distance would preclude recreationists or motorists from being able to see any infrastructure associated with the proposed project. It would be possible for up to three neighboring residences to be able to see infrastructure associated with the Adesa Organic site. The proposed, potentially visible buildings would include greenhouse structures of 86,400 square feet. The associated solar arrays for powering these structures are proposed as rooftop installations and would not be visible from adjacent properties. The potentially visible agricultural buildings would be consistent with the existing agricultural use and context of the surrounding area, and the visible structures would occupy a consolidated footprint of less than an acre combined. The consistency of the proposed structures with the agricultural context, the scope of the visual footprint, and the number of potentially affected sensitive viewers indicate that the project will not degrade the existing visual character or quality of the site and its surroundings. Potential impacts would be less than significant, and no mitigation would be necessary.

d) Finding: The project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. *Less than significant impact with mitigation incorporated*.

Discussion: The project proposes to use mixed lighting for cultivation, which means that at certain times of the year artificial lighting will be used in the greenhouse structures. The vegetative greenhouse space will have supplemental light to ensure a consistent 16 hours of sunlight every day from 6:00 a.m. to 10:00 p.m. The illumination plan for the flower space will also adjust with the season to ensure 12 hours of sunlight from 8:00 a.m. to 8:00 p.m. The amount of supplemental light used will depend on the sunrise and sunset times. To ensure that light does not escape from the greenhouse structures at night, all illuminated areas within the greenhouse structures will be equipped with a light-deprivation kit. An automated system will prevent light spillage by drawing fire-retardant, light-blocking curtains composed of three layers of polyolefin and polyester over the lighted greenhouse sections (Borusas April 2018, Svensson 2018). The CMMLUO requires that all cultivation lighting be shielded such that little to no light escapes and that the light source comply with International Dark Sky Association standards for Lighting Zone 0 and Lighting Zone 1. Under the CMMLUO requirements, all commercial cultivation shall be required to shield lighting,

including any low wattage mixed-light operations that occur during preliminary phases. Compliance with the ordinance requirements will ensure that cultivation lighting does not create a source of light and glare that adversely affects day or nighttime views in the area.

Outdoor lighting specifications have not yet been developed for the project. Outdoor lighting, if not properly sized and directed, can create a source of light and glare. The requirement to develop and implement a comprehensive lighting pollution prevention plan is included as a project mitigation measure, and will reduce the potential impacts to less than significant. With development and implementation of proposed mitigation, impacts would be reduced to a level of less than significant.

Mitigation:

AES-1 Light Pollution Prevention Plan

Prior to issuance of any permits or clearances the applicant shall provide to the County Planning Division a lighting plan demonstrating that all outdoor lighting for the proposed project would not deliver or have the potential to deliver light pollution, from sunset to sunrise. The lighting plan shall meet the International Dark Sky Association standards and be approved by the County Planning Division prior to the issuance of building permits.

Findings:

a) The project will not have a substantial adverse effect on a scenic vista: **No impact**.

b) The project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway: **No impact**.

c) The project will not substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point): **Less than significant impact.**

d) The project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area: **Less than significant impact with mitigation.**

2. AGRICULTURE & FORESTRY RESOURCES.

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☒	☐	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

Setting:

The project site for the Adesa Organic, LLC project is one legal parcel (APNs 315-145-002, 315-211-003, 315-211-004) consisting of approximately 443 acres (Humboldt County GIS 2018). The property consists of one more adjacent legal parcel (APNs 315-146-018 and 315-222-003) consisting of approximately 185 acres (Humboldt County GIS 2018). Major portions of both properties are planned Agricultural Grazing (AG) in the Humboldt County General Plan (Humboldt County 2017a), and are zoned Agriculture Exclusive (AE), with a Special Building Site combining zone specifying that the minimum parcel size is the per the subdivision map of record (B-5).

There is a 13.5-acre patch of land on the Adesa Organic, LLC property (APN 315-211-003) that is zoned Timberland Production Zone (TPZ); no project facilities exist or are proposed in the TPZ-zoned area. There is also a separate 23-acre patch on the Adesa Organic, LLC property (APN 315-211-004) that is designated Timberland in the Humboldt County General Plan (Humboldt County 2017a). Part of this 23-acre patch of plan-designated Timberland overlaps with forest, and part of it excludes forest, instead encompassing a portion of an adjacent meadow. No project facilities other than a section of existing access road are

proposed in naturally forested areas. It should be noted that the areas zoned TPZ do not overlap the areas that are planned Timberland (Humboldt County GIS 2018).

There are additional forest stands on the subject properties, other than the areas zoned TPZ and planned Timberland. None of the proposed project facilities, aside from a small portion of the existing access road between Maple Creek Road and the project site, are located within actual forested land. The landscape consists of open meadows dominated by grassland vegetation with patches of mixed conifer and oak forest. The project is proposed for development only on the open meadow areas zoned Agriculture Exclusive.

The Farmland Mapping and Monitoring Program of the California Resources Agency has not yet mapped farmland in Humboldt County (California Department of Conservation 2018). A Prime Agricultural Soils Report prepared for the subject properties by Dirty Business Soil Consulting and Analysis, LLC, for the five APNs concluded that there is a total of 18.4 acres (800,365 square feet) of prime agricultural soil among the parcels (DBS 2018). The Prime Agricultural Soils Report used the following methodology:

- Prime agricultural soil assessments were conducted by desktop assessment of existing Natural Resource Conservation Service surveys, Humboldt County GIS portal, and field assessment to determine the Storie Index or Land Capability Classification.
- Based on the examination of previous methods, it was determined that the Storie Index could be effectively utilized to assess prime agricultural soils throughout this property.

Storie Index scores of prime agricultural soils ranged from 81-90.3% overall, with an average score of 84.4%. All sites are located on upland soils, with deep, moderately to well-developed profiles, 6-feet in depth. Surface soil texture ranges from silt loam to loam. All slopes are less than 15%, with half of the sites ranging between 0-8%, and the other half ranging between 8-14%. Drainage for all sites is moderately-well-drained to well-drained. All pH values are below 7.3, which indicates no accumulation of alkaline minerals in soil. All Electrical Conductivity measurements were below 4 dS/m indicating no accumulation of phytotoxic nutrients. Soil acidity ranges from very strongly acid to strongly acid, with pH ranging from 4.6 to 5.4. Erosion and microrelief were used to vet low-risk cultivation areas; all assessed sites had little to no erosional and microrelief features (DBS 2018). All areas of mapped prime agricultural soil are shown on the project site plans.

All project parcels for Adesa Organic, LLC are under current Williamson Act contracts, with active leases for grazing of beef cattle (Borusas April 2018).

Analysis:

a) Finding: The project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. *Less than significant impact*.

Discussion: A prime agricultural soil assessment conducted by Dirty Business Soil Consulting and Analysis for the five APNs concluded that there is a total of 18.4 acres (800,365 square feet) of prime agricultural soil between the parcels (DBS 2018). The average Storie Index rating of the mapped prime agricultural soils is 84.4%.

All areas of mapped prime agricultural soil are shown on the project site plans. The project site plans further indicate the placement of two contiguous 43,200 square foot mixed-light greenhouses for Adesa Organic, LLC partially on prime agricultural soil.
The Adesa Organic greenhouses were moved from a previously proposed location fully on prime agricultural soils. The change in location was necessitated by the need to avoid sensitive cultural resources at the previous site. The new location was chosen after consultation with the Bear River Band of Rohnerville Rancheria such that project impacts would be minimized. The bulk of the new

site is located on a previously graded area near other Adesa facilities, partially on prime agricultural soils.

All mixed-light greenhouses will have permeable floors as required by the CMMLUO. In addition, a soil fertility management plan from a crop management company will be implemented to continuously test the soil nutrient levels and recommend organic amendments to rebalance the soil so that it can be recycled.

In addition to the mixed-light greenhouses, additional infrastructure proposed for placement on prime agricultural soil includes a small portion of one water storage pond, an emergency turnaround area and fire hydrant. All of the proposed uses that would occur on the prime agricultural soils are agricultural uses or are considered accessory to agricultural uses. Therefore, the proposed project will not convert prime or unique farmland or farmland of statewide importance to non-agricultural use.

b) Finding: The project will not conflict with existing zoning for agricultural use, or a Williamson Act contract. *No impact*.

Discussion: The Humboldt County General Plan designates the majority of the project area as Agricultural Grazing (AG) (Humboldt County 2017a). AG lands may be used for the production of food, fiber, plants, timber, and timber agriculturally related uses. The entire project area is zoned Agricultural Exclusive (AE) with a combined zoning district of B-5(160) (Humboldt County GIS 2018). 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. Principal uses include general agricultural uses, and accessory agricultural uses and structures (Humboldt County 2018).

All project parcels for Adesa Organic, LLC are under current Williamson Act contracts, with active leases for grazing of beef cattle, and the landowner wishes to continue both the cattle grazing leases and Williamson Act enrollment (Borusas April 2018). In order to maintain compatibility between grazing and cannabis cultivation uses, an applicant-proposed operating restriction to install cattle exclusion fencing as appropriate would be included as part of the project (Borusas April 2018).

The Medical Marijuana Regulation and Safety Act, Health and Safety Code section 11362.777(a) provides that medical cannabis is an agricultural product. The facilities proposed to cultivate and process it under this application are considered accessory to the agricultural use under the Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO). The CMMLUO provides for the cultivation and processing of medical cannabis within the zoning districts where agriculture is a principally permitted use, including AE-zoned parcels, with limits and in compliance with performance standards that will preserve space for more traditional agricultural activities. Based on this determination of consistency with agricultural use and agricultural zoning, Humboldt County has determined that cannabis cultivation is a compatible use on lands subject to Williamson Act contracts.

The total footprint of all proposed agricultural and accessory infrastructure for cultivation of cannabis, including the ponds, is approximately 10.75 acres. The total size of the remaining areas on these properties available for ranching activities would include approximately 612 acres. Continuing a leased ranching operation across both properties is considered viable given the proposed footprint of the cannabis operation. The project was presented to the Williamson Act committee on June 20, 2018 who voted 4-0 that the project is consistent with the Williamson Act Guidelines and the Land Conservation Contract.

Therefore, the project would result in a less than significant impact with respect to conversion of farmland to nonagricultural use, conflicts with zoning for agricultural use, or a Williamson Act contract. There would be no impact, and no mitigation is necessary.

c) Finding: The project will not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526). *Less than significant impact.*

Discussion: While there are forest stands on the Adesa Organic, LLC property that are zoned Timberland Production Zone (TPZ), no project facilities would be located in the TPZ-zoned areas. The project as proposed would not conflict with existing TPZ zoning, and the project's proposed installations and operations would not cause any rezoning of existing forest land.
There is one small portion of the property that is zoned TPZ, and no project elements will be proposed within this area. There is a small portion of the property designated as Timberland under the Humboldt County General Plan, however this area is almost entirely open meadow area. Only a small portion of the access driveway may encroach into this area that is planned for Timberland and no removal of timber would occur in this location. The project would not prevent the growing and harvesting of timber. The potential for timber harvest would not be affected in the short-term or the long-term by any of the proposed project's activities. Therefore, the proposed project will not conflict with existing zoning for, or cause rezoning of, forest land or timberland. Impacts would be less than significant, and no mitigation would be necessary.

d) Finding: The project will not result in the loss of forestland or conversion of forest land to non-forest use. *Less than significant impact with mitigation*.

Discussion: The installation of proposed cultivation and processing facilities—and related infrastructure such as ponds, support buildings, solar PV arrays, and other structures—is all located in natural open areas on the subject property, and would not require the removal of any trees. The proposed improvements to the 1.1-mile access road that connects project facilities to Maple Creek Road passes through forest land, and could potentially require removal of small trees in order to create the turn-outs needed to bring this section of road up to Road Category 4 equivalence, as required by Humboldt County Code. Based on the Road Evaluation Report prepared for the property (SHN December 2016a), four new turn-outs are identified, each of which is located in an area that is partially open, with trees of less than 12 inches in diameter present in some locations. The applicant would be required to secure a Less Than 3 Acre Conversion Exemption from the California Department of Forestry and Fire Protection (CALFIRE) for any tree removal associated with the proposed road upgrade. The total of all trees to be removed for the road improvements will be less than 20, all of which are under 12" in diameter at breast height (DBH) and therefore are not significant timber resources or forest habitat. With the limited scope of potential tree removal based on the turn-off locations identified in the SHN Road Evaluation Report and the requirement for permitting and conditions through CALFIRE and restocking of commercial tree species removed at a 2:1 ratio, the contributing impact of the project to the loss or conversion of forest land has been determined to be less than significant with mitigation.

e) Finding: The project will not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. *Less than significant impact*.

Discussion: The proposed project will not produce significant growth inducing or cumulative impacts that will result in the conversion of farmland or forest land. Growth inducing impacts are generally caused by projects that have a direct or indirect effect on economic growth, population growth, or land development. The project, at full build-out, would employ approximately 20 persons in full-time or part-time work. There would be approximately fifteen full-time employees and up to five part-time employees for the Adesa Organic, LLC operations. Part-

time employees would be hired during harvest for up to 10 days per month. The economic benefits of this proposed employment would not be such that people might be attracted to the area as a result.

On-site processing facilities would only serve this project; therefore, there is no potential for new cannabis cultivation operations to be permitted on farmland and forestland in the vicinity of the project area that would export cannabis material to the proposed facility.

Therefore, the project would not lead to a conversion of farmland to non-agricultural use or forest land to non-forest use in the area surrounding the site.

Applicant Proposed Operating Restrictions:

AFR-1. In order to maintain compatibility between grazing uses and cannabis cultivation and processing operations, cattle exclusion fencing will be installed around proposed project facilities. The proposed fence will be constructed of chain link and be 8 feet in height. This fence will directly surround the greenhouse area and appurtenant structures and will be separated from the sound dampening fencing surrounding the generator and tanks.

Mitigation:

AFR-1 Less Than 3 Acre Conversion Exemption

The applicant shall secure a Less Than 3 Acre Conversion Exemption from CALFIRE for any tree removal associated with the project, including tree removal required for the road improvements (turn-outs) identified in the Road Evaluation Report for the project.

AFR-2 Timberland Mitigation

Timber species over 12 inches in diameter at breast height shall not be removed as part of the proposed project. Prior to the initiation of cultivation activities, native timber species shall be replanted on the property at a 2:1 ratio for every commercial timber species that is removed for proposed road improvements.

Findings:

a) The project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use: **Less than significant impact.**

b) The project will not conflict with existing zoning for agricultural use, or a Williamson Act contract: **Less than significant impact.**

c) The project will not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526): **Less than significant impact.**

d) The project will not result in the loss of forest land or conversion of forest land to non-forest use: **Less than significant impact with mitigation.**

e) The project will not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use: **Less than significant impact.**

3. AIR QUALITY. Where available, the significant criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors affecting a substantial number of people)?	☐	☐	☒	☐

Setting:

The project site is located in Humboldt County, which lies within the North Coast Air Basin (NCAB). The NCAB extends for 250 miles from Sonoma County in the south to the Oregon border. The climate of NCAB is influenced by two major topographic units: the Klamath Mountains and the Coast Range provinces. The climate is moderate with the predominant weather factor being moist air masses from the ocean. Average annual rainfall in the area is approximately 50 to 60 inches with the majority falling between October and April. Predominate wind direction is typically from the northwest during summer months and from the southwest during storm events occurring during winter months.

Project activities are subject to the authority of the North Coast Unified Air Quality Management District (NCUAQMD) and the California Air Resources Board (CARB). The NCUAQMD is listed as "attainment" or "unclassified" for all the federal and state ambient air quality standards except for the state 24-hour particulate (PM_{10}) standard, which relates to concentrations of suspended airborne particles that are 10 micrometers (microns) or less in size.

In determining whether a project has significant air quality impacts on the environment, agencies often apply their local air district's thresholds of significance to projects in the review process. The District has not formally adopted specific CEQA significance thresholds, but rather utilizes the Best Available Control Technology (BACT) emissions rates for stationary sources as defined and listed in the NCUAQMD Rule and Regulations, Rule 110 – New Source Review and Prevention of Significant Deterioration, Section 5.1 – BACT (pages 8-9) (www.ncuaqmd.org).

Sensitive receptors near the project site primarily include sparse residential uses to the south and west.

Analysis:

a) Finding: The project will not conflict with or obstruct implementation of the applicable air quality plan. *Less than significant impact.*.

Discussion: The project site is located within the North Coast Air Basin which encompasses approximately 7,767 square miles. The North Coast Air Basin includes Del Norte, Humboldt, Trinity, and Mendocino counties, as well as the northern and western portions of Sonoma County. Air quality in Del Norte, Humboldt, and Trinity counties is regulated by the North Coast Unified Air Quality Management District (NCUAQMD). The NCUAQMD's primary responsibility is to achieve and maintain federal and state air quality standards, subject to the powers and duties of the California Air Resources Board (CARB). The North Coast Air Basin is currently listed as being in "attainment" or is "unclassified" for all Federal health protective standards for air pollution (ambient air quality standards). However, the air district has been designated "nonattainment"

for particulate matter less than ten microns in size (PM_{10}) under State 24-hour standards (NCUAQMD April 2018a). PM_{10} air emissions include chemical emissions and other inhalable particulate matter with an aerodynamic diameter of less than 10 microns. PM_{10} emissions include, but are not limited to, smoke from wood stoves, dust from traffic on unpaved roads, vehicular exhaust emissions, and airborne salts and other particulate matter naturally generated by ocean surf.

Applicable Air Management Attainment Plan

A potentially significant impact to air quality would occur if the project would conflict with or obstruct the implementation of the applicable air management or attainment quality plan. The NCUAQMD prepared the Particulate Matter Attainment Plan, Draft Report, in May 1995. This report includes a description of the planning area (North Coast Unified Air District), an emissions inventory, general attainment goals, and a listing of cost-effective control strategies. The NCUAQMD's attainment plan established goals to reduce PM_{10} emissions and eliminate the number of days in which standards are exceeded. The plan includes three areas of recommended control strategies to meet these goals: transportation, land use, and burning. Control measures for these areas are included in the Attainment Plan. The project design incorporates control measures identified in the PM_{10} Attainment Plan appropriate to this type of project, such as:

1) A transportation plan that requires all employees of the proposed project to vanpool in employer-provided shuttles, reducing the number of vehicle trips daily from 78 to 10 at peak shift and full build-out. This will reduce vehicle miles traveled and associated vehicular exhaust emissions generated by the proposed cannabis operations. Additionally, the reduction in the number of vehicles traveling the graveled private drive will reduce any vehicle dust generation. This measure represents a significant reduction in PM_{10} generated by traffic on the unpaved sections of Maple Creek Road and the 1.1-mile private drive.
2) The Road Evaluation Report (SHN November 2016) for the 1.1-mile section of private road that connects the proposed facility to Maple Creek Road recommends rocking the entire length of this road to improve road condition and durability; improvements to the access road are incorporated as part of this proposed project. This measure will reduce PM_{10} generated by operational traffic to the proposed cannabis facilities.
3) The project proposes to meet energy requirements through a combination of diesel generators and solar PV arrays. The solar PV arrays would meet much of the projected power need for the proposed project and reduce the amount of diesel exhaust generated, reducing PM_{10} generated by operational energy generation. However, even if diesel is used to completely meet project needs, later analysis shows that this is a less than significant impact to air quality.
4) The project involves constructing agricultural facilities on parcels predominantly zoned AE. The total footprint of all proposed agricultural and accessory agricultural infrastructure, including solar PV arrays and ponds, is approximately 184,958 square feet, or 4.25 acres. The total size of the AE-zoned areas of the cumulative associated properties is approximately 614 acres. The AE zoning regulation allows for a maximum lot coverage of 35 percent. Therefore, if the entire combined project site was developed to its maximum potential under the zoning definition, approximately 214 acres would be developed. The proposed project is consistent with the land use restrictions of the zoning ordinance, and would result in reduced ground disturbance when compared with some other agricultural land uses, which could result in ground disturbance of a larger area.
5) The proposed facility will use forced-air gas heating instead of woodstoves or fireplaces which will significantly reduce PM_{10} emissions generated from heating during long-term operation of the project.

The 1995 Particulate Matter Attainment Plan provides some insight into the severity of the 24-hour PM_{10} nonattainment status for the North Coast Air Basin. From 1989 through 1993, PM_{10} levels exceeded the standard an average of 38 days per year (NCAQMD 1995). However, the number of exceedance days in 2011, 2012 and 2013 were 6, 0 and 12, respectively (County of Humboldt 2017b). This showed a marked decrease in the severity of the nonattainment over the past few decades.

Construction Air Impacts

Mobile sources of emissions include equipment and vehicles used during short-term construction. According to NCUAQMD Rule 102, the Air District does not currently require permits for the operation of heavy equipment used for construction (except pavement burners) or agricultural operations (NCUAQMD April 2018a). There are no "target" air quality standards/limits in this area; however, heavy equipment is generally subject to off-road equipment emission standards from the California Air Resources Board (CARB), and exceeding those standards may constitute a "nuisance" condition, and can be mitigated by proper equipment maintenance. Emissions from construction equipment will occur for a limited period of time and the equipment will be maintained to meet current emissions standards as required by the CARB and the NCUAQMD.

The project has the potential to generate dust, a source of PM_{10}, from the following sources: 1) dust generated during construction from heavy equipment activity; 2) dust generated from vehicle/truck traffic on unpaved road sections during construction. All activities at the project site are required to meet NCUAQMD Air Quality standards, including Regulation 1, which prohibits nuisance dust generation and is enforceable by the District. The NCUAQMD currently enforces dust emissions according to the CA Health and Safety Code (Section 41701) which limits visible dust emissions that exceed 40% density to a maximum of 3 minutes for any one-hour period. NCUAQMD District Rule 104 states that "*reasonable precautions shall be taken to prevent particulate matter from becoming airborne*." The EPA has determined that dust generally settles out of the atmosphere within 300 feet of the source (EPA 2009).

During short-term construction activities, the following dust control measures will be implemented to reduce nuisance dust generation (See Operating Restriction AQ-1):

1. All exposed surfaces (e.g. parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. Adjacent paved public roads shall be kept clean of loose dirt tracked onto the roadways from the construction site.
4. All vehicle speeds shall be limited to 15 miles per hour.

Due to the size of the combined projects' construction footprint (approximately 4.5 acres), the comparatively large project site size (a combined 618 acres), and existing vegetation, most of the dust associated with the construction equipment use and vehicle/truck traffic would settle out on-site or be trapped by the surrounding tree canopy and vegetation on the project parcel. The measures above would reduce the total amount of dust produced. The closest sensitive receptors are the residences in the vicinity, but because of the limited activity that will occur, the rapid dissipation of the dust, and the low density of residences, impacts will be less than significant.

New Source Review and Project Emissions Estimation

The NCUAQMD Rule and Regulations, Rule 110 – New Source Review and Prevention of Significant Deterioration (NSRPSD) lists significance thresholds for new stationary sources. The rule provides for no net increase in emissions from new or modified stationary sources which emit, or have the potential to emit, 25 tons per year or more of any non-attainment pollutant or its precursors (NSRPSD page 2). BACT shall be applied to any new emissions unit for pollutants emitted in excess of the significance thresholds listed in the NSRPSD (page 7). The significance thresholds for PM_{10}

are 80 lbs/day and 15 tons/year. Offsets shall be required for new stationary sources, including generators, which have the potential to emit non-attainment pollutants in excess of 25 tons/year.

Vehicle use of the unpaved section of private drive will result in PM_{10} emissions. Assuming sufficient gravel is applied to the 1.1-mile driveway, per the Road Evaluation Report prepared for the project, the estimated PM_{10} emissions from road use is anticipated to be 0.98 ton/year. This assumes an uncontrolled vehicle-mile PM_{10} factor of 0.494 pounds of PM_{10} per mile traveled, calculated by AP-42 EPA emission factor documentation standards (EPA 2009).

An estimated supplemental light use is anticipated to be approximately 1,500 hours per year. The applicant plans to use a combination of solar and diesel generator use for supplemental lighting and HVAC power. With a project that will be developed in phases, it is difficult to estimate the generator fuel usage. However, the maximum fuel usage that will be allowed before the 15 ton/year threshold is reached can be determined. Assuming 14 tons of PM_{10} can be generated (15-ton limit, less 0.98 ton of fugitive dust emissions), the proposed project can use up to 658,000 gallons of diesel fuel per year and still remain under the required threshold. Even if solely diesel generation was used to meet the project energy needs, the projected fuel use is less than 135,859 gallons (Diesel Service and Supply 2019). With the installation of the proposed solar arrays, the project diesel usage will be far less. Based on these calculations, the project will not exceed either the significance thresholds requiring BACT or the offset threshold.

Determination

Although the proposed project would represent an incremental increase in air emissions in the air district, project-related impacts have been properly anticipated in the regional air quality planning process and will be reduced through appropriate control measures. Based on the above analysis, the proposed project would not obstruct implementation of the NCUAQMD Attainment Plan for PM_{10}. Impacts would be less than significant.

b) Finding: The project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. *Less than significant impact*.

Discussion: The North Coast Unified Air District is currently listed as being in "attainment" or is "unclassified" for all Federal health protective standards for air pollution (ambient air quality standards). However, under State ambient air quality standards, the air district has been designated "nonattainment" for particulate matter less than ten microns in size (PM_{10}) (NCUAQMD April 2018a).

The NCUAQMD has advised that, generally, an activity that individually complies with the state and local standards for air quality emissions will not result in a cumulatively considerable increase in the countywide PM_{10} air quality violation. In general, construction activities that last for less than one year, and use standard quantities and types of construction equipment, are not required to be quantified and are assumed to have a less than significant impact (NCUAQMD April 2018a). The project's proposed footprint and construction duration are consistent with these thresholds.

Furthermore, the analysis in part a) shows that the project does not exceed the threshold requiring BACT for new stationary sources, nor does the project pose a cumulatively considerable increase in PM_{10}, given the improving particulate matter concentrations and far fewer days that exceed the state threshold.

Therefore, the project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant, and no mitigation would be necessary.

c) Finding: The project will not expose sensitive receptors to substantial pollutant concentrations. *Less than significant impact*.

Discussion: Sensitive receptors (e.g. children, senior citizens, and acutely or chronically ill people) are more susceptible to the effect of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, parks, childcare centers, hospitals, convalescent homes, and retirement homes. Sensitive receptors near the project site primarily include sparse residential uses to the south and west.

As indicated by the air quality impact analysis under subsections a) and b), with mitigation the proposed project would not produce significant quantities of criteria pollutants (e.g., PM_{10}) during short-term construction activities or long-term operation. In addition, the proposed project would not create a carbon monoxide (CO) hot spot. Carbon monoxide hot spots are generally associated with areas where traffic reaches 100,000 vehicle trips per day. There are no project activities that generate anywhere near this sort of traffic volume of equivalent emissions.

As part of the proposed cultivation, certified organic pesticides and fungicides will be used. Nursery operations involving the application of wet or dry chemicals such as organic pesticides would be conducted inside greenhouses and therefore not susceptible to wind dispersal to sensitive receptors. Therefore, the proposed project will not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant and no mitigation would be necessary.

d) Finding: The project will not result in other emissions such as those leading to objectionable odors affecting a substantial number of people. *Less than significant impact*.

Discussion: During long-term operation of the project there is the potential to impact air quality due to odors that would be generated by the proposed cultivation and processing activities. Sensitive receptors near the project site are limited because of the size of the parcels and the project's location in a sparsely populated rural area.

Odors that would be generated in processing building would be abated with an air ventilation/filter system containing carbon filters to ensure odors generated by the proposed facility are minimized. Primarily because of the location of the project, and in part due to the referenced filtration system, the proposed project would not create objectionable odors affecting a substantial number of people. Impacts would be less than significant, and no mitigation would be necessary.

Applicant Proposed Operating Restrictions

AQ-1. During construction activities the following dust control measures will be implemented to reduce nuisance dust generation:

1. All exposed surfaces (e.g. parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. Adjacent public roads shall be kept clean of loose dirt tracked onto the roadways from the construction site.
4. All vehicle speeds shall be limited to 15 miles per hour.

AQ-2. All employees of the proposed project will be required to vanpool in employer-provided shuttles, reducing the number of vehicle trips on a daily basis from 78 to 10 at peak shift and full build-out, reducing vehicular exhaust emissions generated by the proposed cannabis operations, with a proportional reduction in fine particulate matter (PM_{10}) generated by traffic on Maple Creek Road.

AQ-3. The entire 1.1-mile section of private road that connects the proposed facility to Maple Creek Road will be rocked for its entire length to improve road condition and reduce dust.

AQ-4. The processing building will be designed with a ventilation/filter system to prevent dust generated from escaping the structures and impact surrounding land uses.

Findings:

a) The project will not conflict with or obstruct implementation of the applicable air quality plan: **Less than significant impact..**

b) The project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard: **Less than significant impact.**

c) The project will not expose sensitive receptors to substantial pollutant concentrations: **Less than significant impact.**

d) The project will not result in other emissions such as those leading to objectionable odors affecting a substantial number of people: **Less than significant impact.**

4. BIOLOGICAL RESOURCES. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Setting:

A Natural Resources Assessment was conducted by SHN Consulting Engineers and Geologists (SHN 2017) for the proposed project area. Biological scoping for the Natural Resources Assessment included a review of the following sources:

- California Natural Diversity Database (CNDDB) query for the Mad River Buttes and surrounding USGS 7.5-minute topographic quadrangles (Board Camp Mtn., Grouse Mtn., Iaqua Buttes, Korbel, Maple Creek, Owl Creek, Showers Mtn., and Yager Junction);
- California Department of Fish and Wildlife (CDFW) Golden Eagle occurrence report
- Biogeographical Information and Observation System's Rarefind database;
- Electronic Inventory of Rare and Endangered Vascular Plants of California query for a list of all plant species reported for project area, and surrounding USGS. 7.5-minute topographic quadrangles;
- Special Vascular Plants, Bryophytes, and Lichens of California List from the California Department of Fish and Wildlife (CDFW);
- Special Animals of California List from the CDFW;
- United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation was queried for threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of the proposed project and/or may be affected by the proposed project;
- USFWS Threatened and Endangered Species Active Critical Habitat Report GIS database;
- California Flora Database;

- California Consortium of Herbaria;
- CALFIRE Fire and Resource Assessment Program vegetation land cover dataset, "Fveg15";
- eBird Database from the Cornell Lab of Ornithology; and
- California Wildlife Habitat Relationships from the CDFW.
- Green Diamond Resource Company Northern Spotted Owl (NSO) known location data

From these sources, a list of potential target special status species for the study area was compiled. A field investigation was conducted in coordination with staff from the CDFW. A total of 98 hours of field observations were made within the study area. The site visits included seasonally appropriate surveys for botanical species reported from the region that had a moderate or higher potential for occurrence, habitat assessments were conducted for animal species during site visits, and observations were recorded (SHN 2017). Three unoccupied NSO activity centers were identified within the project vicinity, the closest of which is 1.1 miles north of the project site (SHN August 2018).

The Natural Resources Assessment reported the following wildlife habitat types within the project vicinity: Perennial Grassland, Annual Grassland, Wet Meadow, Lacustrine, Freshwater Emergent Wetland, Riverine, Montane Riparian, Redwood, Douglas-fir, Montane Hardwood, Montane Hardwood-Conifer, and Coastal Oak Woodland. Common wildlife species expected within the study area are those typically associated with grasslands, oak woodlands, and mixed coniferous forests of northwestern California (SHN 2017). The proposed project area is relatively undeveloped, and it is likely that wildlife uses nearly all portions of the project area and adjacent properties as movement corridors, and especially the perennial drainages and associated vegetation (SHN 2017).

There are five separate mapped creeks present across the two legal parcels, including Cowan Creek, two unnamed tributaries to Cowan Creek, an unnamed tributary to Wilson Creek, and an unnamed tributary of the Mad River. Both riparian habitat and wetlands occur on the two legal parcels, as discussed below.

Special Status Plant Species

Based on the Natural Resources Assessment conducted as described above (SHN 2017), 62 special status plant species have been reported from the region consisting of the study area's quadrangle and surrounding quadrangles. Of the special status plant species reported in the region, 33 plant species were considered to have a low potential to occur within the study area and 29 species to have a moderate or higher potential to occur within the study area. However, only one special status plant species, northern meadow sedge (*Carex practicola*), was observed at the site after extensive botanical surveys. This species was observed at two wetland locations within the proposed project area (SHN 2017; SHN February 2018a).

A California Natural Diversity Database (CNDDB) search of special status plant species within a 1.5-mile radius of the proposed projects sites found the following: coast fawn lily (*Erythronium revolutum*), two occurrences; and Howell's montia (*Montia howellii*), one occurrence (CNDDB 2018). Neither of these species was found within the proposed project sites.

Special Status Animal Species

The Natural Resources Assessment conducted by SHN included a review of special status animal species (SHN 2017). Of the 47 special status animal species they concluded had the potential to occur, 38 animal species were considered to have no or low potential to occur at the project site, while nine species had a moderate to high potential to occur (SHN 2017). Species with a moderate to high potential to occur included: olive-sided flycatcher (*Contopus cooperi*), black-capped chickadee (*Contopus cooperi*), red-breasted sapsucker (*Sphyrapicus ruber*), northern spotted owl (*Strix occidentalis caurina*, NSO), Sonoma tree vole (*Arborimus pomo*), Pacific tailed frog (*Ascaphus truei*), northern red-legged frog (*Rana aurora*), southern torrent salamander (*Rhyacotriton variegatus*), and western bumblebee (*Bombus occidentalis*).

The northern red-legged frog was the only special status animal species detected within the study area. This species was observed in a branch of Cowan Creek with perennial water flow; this site does not overlap with the proposed project area as depicted in the site plans (SHN 2017, SHN February 2018a). This species was also observed on June 19, 2018 by an SHN biologist in the reservoir identified by CDFW as PO-1, a project for removal in accordance with Draft LSAA 1600-2018-0047-R1.

A CNDDB search of a 1.5-mile radius around proposed project sites yielded the following results: northern spotted owl, 29 CNDDB occurrences (26 positive observations and 3 activity centers); Pacific tailed frog, two occurrences; southern torrent salamander, one occurrence; summer-run steelhead (*Oncorhynchus mykiss irideus*), one occurrence; and porcupine (*Erethizon dorsatum*), three historic occurrences (CNDDB 2018). However, based on information obtained from Green Diamond Resource Company, the closest spotted owl sites being monitored are HUM 0657 (~1.8 miles NW), HUM 1035 (~0.6 mi N) and HUM 1038 (~1.1 W) in the project area (Pacific NorthWestern Biological 2018). All sites are unoccupied as of 2018 (SHN August 2018).

The 2017 CNDDB search did not include grasshopper sparrow (*Ammodramus savannarum*) in the results and therefore was not included in the report. Subsequently, two grasshopper sparrow occurrences were documented on the property in May 2018. Potential impacts were identified and recommendations were prepared by SHN in a letter dated November 1, 2019 (SHN 2019) to the project applicant, County of Humboldt, and CDFW.

Pacific NorthWestern Biological Resources Consultants, Inc. prepared a Biological Assessment addendum for Golden Eagle and Bald Eagle as an addendum to the SHN Natural Resources Assessment (PNWB 2018). A subsequent protocol-level survey was conducted in March and April 2019, and a report documenting that survey was prepared in October 2019. (PNWB 2019). The assessment identified one known Golden Eagle nest 1.6 miles south of the primary project area, across the Mad River. Some improvements to the access drive will occur closer to the nest than the primary project area, but these improvements will be temporary and no less than 1.2 miles from the nest. No project related activities will occur any closer than 1.2 miles from the nest. The assessment includes an "Approximate suspected nest area 2018" on the map, but also indicates that in personal communication with Keith Slauson, Biologist for an adjacent project (Mad River Estates), he confirmed the bird's use of the nest in 2019 1.6 miles away for the main project site, on the south side of the Mad River. This conclusion was recently confirmed again during a survey dated March 3, 2020. (SHN survey notes March 2020.)

Special Status Species Habitats and Sensitive Natural Communities

The closest designated critical habitat is for northern spotted owl which is approximately one mile to the southwest and one and half miles to the east (ECOS 2018). Additionally, critical habitat for summer-run steelhead is mapped one mile southwest of the proposed project area along the main stem of the Mad River (ECOS 2018).

The following Sensitive Natural Communities were observed within the study area as well (SHN 2017):

Oregon white oak (*Quercus garryana*) woodland Alliance, California bay (*Umbellularia californica*) forest Alliance, and California oat grass (*Danthonia californica*) prairie Provisional Alliance. In addition, Upland Douglas-fir Forest, a CNDDB Sensitive Community, exists within one mile of proposed project areas.

Riparian habitat and wetlands occur in various places on each of the project parcels, including five separate mapped creeks with associated riparian habitat. Streamside Management Areas (SMAs) for these waterways are mapped in the Humboldt County GIS. SHN Consulting Engineers and Geologists prepared a Preliminary Jurisdictional Wetland and Other Waters Delineation report for the project area. The report concluded that there are fourteen three-parameter riverine and palustrine wetlands present on the project site with a total area of 2.64 acres (114,869 square feet). SHN also identified approximately 0.69 acre (30,224 square feet) of "Other Waters of the U.S." by determining the location of the ordinary high-water mark (OHWM) along the various drainages on the parcels (SHN December 2016b).

All locations with a shrub or tree canopy layer within the study area may provide suitable nesting habitat for a diverse assemblage of resident and migratory birds. Additionally, some species may nest in tall grasses or wetland areas. Water courses and their associated riparian zones may also provide wildlife movement corridors due to their complex structure, providing cover and hiding places from predators.

Analysis:

a) Finding: The project will not have a substantial adverse effect, either directly or through habitat modifications on any special status species listed on local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife (CDFW) or the United States Fish and Wildlife Service (USFWS). *Less than significant impact with mitigation incorporated*.

Discussion: As described above, SHN Consulting Engineers and Geologists prepared a Natural Resources Assessment of the project site. The study concluded that 28 species of special status plants have a moderate potential to occur within the study area, and one species is present. Northern meadow sedge was the only listed plant encountered, and both populations occur within wetland areas. The study also concluded that eight species of special status animals have a moderate potential to occur within the study area, and only one species was documented as present. California red-legged frog was observed in a branch of Cowan Creek with perennial water flow; no part of the project is proposed for the area where the occurrence was documented (SHN 2017, SHN February 2018a). The documented occurrence of this species in June of 2018 was within the direct influence of CDFW project PO-1, which is not a part of the Project but nevertheless included for informational purposes. Supplemental information to the Natural Resources Assessment to include grasshopper sparrow (Ammodramus savannarum) was prepared by SHN in November 2019. The grasshopper sparrow makes inconspicuous ground nests in short grass prairies. Impacts to this species may occur if construction activities occur during the nesting season. This species migrates to southern climates in the fall and is not expected to occur at the project site from September through March. With incorporation of Mitigation Measure Bio-8, these impacts can be reduced to less-than-significant.

Pacific NorthWestern Biological Resources Consultants prepared an addendum that addressed Northern Spotted Owl. There are three unoccupied NSO activity centers in the project vicinity, the closest of which is 1.1 mile from the project site. According to this addendum the project will not result in the removal of NSO habitat.

Pacific NorthWestern Biological Resources Consultants also prepared an addendum in 2018 that addressed Golden Eagle as well as a subsequent protocol-level survey for Golden Eagle in 2019. Protocol-level surveys for Golden Eagle were also completed by SHN Consulting Engineers in 2020. These reports confirmed: (i) the Project site is well located with an adequate buffer distance away (i.e. greater than one mile)from the nearest golden eagle nest as well as observed flight paths of the golden eagle individuals themselves, and (ii) the Project site provides lower quality habitat in comparison to much higher habitat that is abundantly available closer to the nest site for this pair of golden eagles. The documented GOEA nest site is located at approximately 1,000 feet above sea level, which is approximately 1,320 feet below the project site at approximately 2320 feet above sea level. No improvements from the project will be in the line of sight from the GOEA nest or from observed perches and flight paths of the eagles.

All project related impacts (both temporary and permanent) are over 1 mile from the known nesting site. The project is consistent with the US Fish and Wildlife Service Pacific Southwest Region Migratory Birds Program recommended Buffer zones for Ground-based Human Activities around Nesting Sites of Golden Eagles in California and Nevada (December 2017, USFWS) which recommends a one-mile no-disturbance buffer surrounding golden eagle nesting sites in California and Nevada. This document recommends a no-disturbance buffer of 1 mile for most human activity, including industrial, agricultural, and construction activity.

Due to the potential for some of these species to exist at the project site, the SHN Natural Resources Assessment (SHN 2017) contains recommendations to reduce potential impacts. These have been incorporated into mitigation measures that will reduce project impact levels to less than significant. The general measures proposed include the following:

- The project must attempt to avoid impacts to special status species and habitats present within the study area, specifically the two northern meadow sedge populations, northern red-legged frog habitat, wetlands and SMAs, Oregon white oak woodlands, California bay forests, and California oat grass prairies. Where project construction activities occur within close proximity (100 feet) to special status resources, these resources must be demarcated by high visibility construction fencing during the project construction period in a manner sufficient to avoid unintentional impacts. See measure BIO-6.
- If impacts to special status resources occur as a result of road crossing improvements, these impacts must be mitigated at a 3:1 ratio. See measure BIO-4.
- Construction-related ground disturbance activities, such as, grading and culvert repair projects, must include an erosion and sediment control plan that includes Best Management Practices (BMPs) to avoid and minimize sediment transport.
- Limit ground disturbance and vegetation clearing to the minimal extent necessary to accomplish project goals.
- All constructed ponds must be kept free of American bullfrog (*Lithobates catesbeianus*) infestations to prevent this non-native species from impacting special status aquatic species, such as, the northern red-legged frog. See measure BIO-2.
- Project-related vegetation clearing should occur outside the bird nesting season, which is generally considered to be March 15 through August 1. If project-related brush clearing or structural work on buildings within the vicinity of nesting bird habitat must occur during the breeding season, nesting bird surveys should be performed in those locations by a qualified biologist to ensure that active nests are not destroyed or disturbed.
- Use native and locally sourced plant material for landscaping and revegetation.
- Ensure that future development or new fencing does not prevent wildlife movement by maintaining sufficient movement corridors outside of the project area.
- Refrain from the improper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide.
- For any proposed mixed-light cultivation, shield greenhouses so that little to no light escapes.

In the referral response of the California Department of Fish and Wildlife commenting specifically on the potential impacts of the proposed project (CDFW 2017), there is a recommendation to consider the potential for noise and light impacts to wildlife, including northern spotted owl, and a request that the project be accompanied by both a noise pollution prevention plan and a light pollution prevention plan that minimize these potential impacts.

Noise impacts from the proposed project were analyzed in a series of three acoustic studies (Hybrid Tech February 2018, Hybrid Tech April 2018, Frank Hubach and Associates 2020). The acoustic studies focused on attaining the standard of 50dB at 100 feet or the edge of northern spotted owl habitat, whichever is closer. The studies found that the project, if properly mitigated for noise reduction, would produce 47 dB at the acoustic receiver modeled at the treeline nearest to the proposed generators. The acoustic study's proposed noise mitigation measures have been included as mitigation measure NOI-1, and are detailed in this Initial Study under Section 12 for Noise. Specific actions of the mitigation measure include:

- 8-foot-tall block wall and supplemental 2-foot barrier of not less than two pounds per square foot surface weight surrounding the generators
- 8-foot-tall block wall and supplemental 4-foot barrier of not less than two pounds per square foot surface weight surrounding the array of RTUs

- The block walls shall be continuous with solid metal doors with neoprene door jams. The walls shall be a minimum of 8 inches thick and be constructed of solid block or be filled after construction with grout or sand.

Based on the application of this mitigation measure, the Adesa Organic, LLC site is not anticipated to have a significant impact. Additional mitigation includes the requirement that all sites must comply with the noise standard of 50 dBA at 100 feet or treeline, whichever is closer (Mitigation NOI-3).

There is also the potential for construction-related noise to impact northern spotted owl. To reduce the potential for construction noise impact to special status species, mitigation measure BIO-1 has been added to the project requiring that no construction work will occur in the northern spotted owl nesting season (February 1st- July 31st). A wildlife biologist with experience in northern spotted owl protocol determined that while the general area has northern spotted owl presence, site specific avoidance measures are not necessary (Pacific NorthWestern Biological 2018). This was based on an assessment that no suitable NSO nesting habitat is found within 0.25-mile of the project, no timber of significant size is being removed, and the project is shown to be compliant with the noise criteria. Regardless of northern spotted owl presence, no proposed activity generating noise levels 20 or more decibels above ambient noise levels or with maximum noise levels above 90 decibels may occur during the northern spotted owl nesting season. Additionally, mitigation measure NIO-3 will ensure that ongoing operations do not cause noise impacts that could disturb the species.

The project proposes to use supplemental lighting in mixed-light greenhouses, which will sometimes occur during nighttime hours. To ensure that light does not escape from the greenhouse structures at night, all illuminated areas within the greenhouse structures will be equipped with a light-deprivation kit. An automated system will prevent light spillage by drawing fire-retardant, light-blocking curtains composed of three layers of polyolefin and polyester over the lighted greenhouse sections. During initial phases of the project which may occur in temporary hoop houses with low wattage lighting, tarps will be used to shield all lighting. County ordinance requires that all cultivation lighting be shielded such that little to no light escapes.

Outdoor lighting specifications have not yet been developed for the project. Outdoor lighting, if not properly sized and directed, can create a source of light and glare. The requirement to develop and implement a comprehensive lighting pollution prevention that meets IDSA requirements for Lighting Zone 1 and Lighting Zone 2 per the CMMLUO and requires County approval AES-1 and detailed in this Initial Study in Section 1 under Aesthetics.

The potential introduction of the non-native and invasive American bullfrog *(Lithobates catesbeianus*) into the proposed water catchment ponds could have potentially adverse impacts on the northern red-legged frog, which has been documented on the subject property as described in the SHN Natural Resources Assessment (SHN 2017). A mitigation measure (BIO-2), has been added to prevent the bullfrog from becoming established in the proposed rainwater catchment ponds and thus reduce the potential for impact to the northern red-legged frog.

As pumps will be used to transport water to and from the rainwater catchment ponds, there is the potential for adverse impact to amphibians, including the northern red-legged frog, of being drawn into pumps. A mitigation measure (BIO-3) has been added to the project that will require water pumps used for the operation to contain screens meeting the CDFW fish screening criteria in order to protect amphibian species, including the northern red-legged frog.

With the application of these mitigation measures, the proposed project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

b) Finding: The project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. *Less than significant impact with mitigation*.

Discussion: As analyzed in the SHN Natural Resources Assessment, several Sensitive Natural Communities are present on the associated properties, including Oregon white oak, California bay forest, and the California oat grass prairie. In addition, Upland Douglas-fir Forest exists within one mile of the project area. Because the proposed project involves new construction on existing building sites and open, grassland areas, and does not include removal of any trees of greater than 12 inches dbh, there will not be any significant impact on Oregon white oak, California bay or Upland Douglas-fir forests. Further, project facilities have been sited in areas avoiding California oat grass prairie (SHN 2017 and SHN February 2018a).

Riparian habitat and wetlands occur in various places on each of the project parcels, including five separate mapped creeks with associated riparian habitat. Streamside Management Areas (SMAs) for these waterways are mapped in the Humboldt County GIS. SHN Consulting Engineers and Geologists prepared a Preliminary Jurisdictional Wetland and Other Waters Delineation report for the project area. The report concluded that there are fourteen three-parameter riverine and palustrine wetlands present on the project site with a total area of 2.64 acres (114,869 square feet). SHN also identified approximately 0.69 acre (30,224 square feet) of "Other Waters of the U.S." by determining the location of the ordinary high-water mark along the various drainages on the parcels (SHN December 2016b).

All proposed cultivation areas, proposed support structures, and the proposed processing facility are located outside riparian habitat as delineated for the project area (SHN February 2018a). One existing agriculture-exempt structure is partially located within the 100-foot SMA buffer of Cowan Creek; this site is not in a delineated jurisdictional wetland.

In one location, a water pipe is proposed to be installed in a roadway that crosses a stream. Several proposed improvements to the access road between the Adesa Organic, LLC parking lot and the intersection with Maple Creek Road will also require stream crossing improvements (SHN December 2016a), as Class II watercourses intersect with the road. These improvements will be conducted in the dry season during low to no water flow. A section of the access road between the two parcels, which is proposed for realignment and improvement, is also within the 50-foot SMA buffer near wetlands (SHN February 2018a). These project components present the potential for impact to riparian vegetation. The total disturbance that may occur to riparian habitat as a result of the road improvements and culvert replacements is expected to not exceed 3,000 square feet of area (Humboldt County GIS analysis, SHN Road Evaluation 2017, CDFW draft LSAA 2018) and are intended to improve riparian habitat through upsizing culverts.

A mitigation will be added to the project (BIO-4) requiring the replacement of any riparian vegetation and other impacted special status vegetation alliances, at a 3:1 ratio, that are impacted by actions associated with the project identified above. The replacement of vegetation will occur at appropriate locations on the project site and could include the enhancement of existing wetland and riparian areas at the site. A mitigation plan will be prepared by a qualified biologist and submitted to regulatory agencies for review and concurrence prior to any construction that encroaches on SMAs, wetlands, or riparian areas.

To protect the riparian habitat and wetlands on the project site during construction activities, another mitigation measure (BIO-5) has been added to the project requiring installation and maintenance of temporary fencing on the edge of SMAs and delineated wetlands immediately adjacent to the project. The fencing will be installed prior to the beginning of construction activities and will be removed after the final inspection is completed by the Building Division. The

fencing will prevent construction equipment from encroaching into an SMA or wetland and impacting riparian and wetland habitats. Additionally, another mitigation measure (BIO-6) requires fencing around other sensitive biological communities when project activities will occur within 100 feet of these communities.

With the application of these mitigation measures, the proposed project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

c) Finding: The project will not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. *Less than significant impact.*

Discussion: There are five separate mapped creeks present across the two legal parcels, including Cowan Creek, two unnamed tributaries to Cowan Creek, an unnamed tributary to Wilson Creek and an unnamed tributary of the Mad River.

SHN Consulting Engineers and Geologists prepared a Preliminary Jurisdictional Wetland and Other Waters Delineation report for the project area (SHN December 2016b). The report concluded that there are 14 three-parameter riverine and palustrine wetlands present on the project site with a total area of 2.64 acres (114,869 square feet). SHN also identified approximately 0.69 acre (30,224 square feet) of "Other Waters of the U.S." by determining the location of the ordinary high-water mark along the various drainages on the parcels. Therefore, a total of 3.33 acres (145,093 square feet) of Waters of the U.S. have been identified on the project sites.

All proposed cultivation areas, proposed support structures, and the proposed processing facility are located outside of delineated wetlands and "Other Waters of the U.S." In one location, a water pipe is proposed to be installed in a roadway that crosses a stream. Several proposed improvements to the access road between the Adesa Organic, LLC parking lot and the intersection with Maple Creek Road will also require stream crossing improvements (SHN December 2016a), as Class II watercourses intersect the road. A section of the access road between the two parcels, which is proposed for realignment and improvement, is also within the 50-foot SMA buffer near wetlands (SHN February 2018b).

No filling, hydrological interruption, or other impacts to wetlands or regulated waters are anticipated from the proposed scope of work associated with the project. Potential habitat impacts are discussed and mitigated above in section b). The project as proposed and in compliance with regulatory requirements would not have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means. Impacts would be less than significant, and mitigation would not be necessary.

CDFW project PO-1 (in accordance with the Draft LSAA) is for the purpose of removing an existing instream reservoir that may be, according to CDFW, contributing sediment and warm water to Cowan Creek. This project, which is unrelated to the Project because it is being requested by CDFW to address an existing condition whether or not the Project is approved, includes stream channel restoration. A permit from the North Coast Regional Water Quality Control Board is being sought for this project. This discussion is provided for informational purposes only.

d) Finding: The project will not Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. *Less than significant impact.*

Discussion: The project's fully built-out footprint not including road construction and improvements, is approximately 10.75 acres. This includes the proposed pond and undeveloped areas between

Adesa Organic, LLC site 433A infrastructure. The total area of the associated parcels is approximately 618 acres. The proposed project is not sited in riparian areas, oak woodlands, or coniferous forests—areas identified in the SHN Natural Resources Assessment as the principal wildlife corridors (SHN 2017). Because of the project's avoidance of habitats and areas that are principal wildlife corridors, and because the footprint of the proposed project is relatively small in the context of the surrounding lands that will remain undeveloped, the impact to wildlife movement is anticipated to be less than significant. In addition, the Adesa Organic, LLC project has consolidated operations to a single site. The cultivation sites will no longer straddle one of the main riparian corridors passing through the parcel.

Wildlife can be expected to generally avoid those areas of development proposed under the project, but project sites will not interrupt likely existing wildlife corridors. In addition, no new large-scale fencing is proposed for the project that could impede the movement of wildlife. The cattle exclusion fencing will be limited to the area directly surrounding the greenhouses and will be constructed within riparian buffers. Additionally, there are no further improvements proposed within riparian buffers aside from water and electrical lines that will be placed within the existing road alignment and crossing.
Therefore, the proposed project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. The impact will be less than significant, and no mitigation is necessary.

e) Finding: This project does not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. *Less than significant impact with mitigation measures.*

Discussion: Removal of trees less than 12 inches in diameter is proposed for the construction of turnouts for the 1.1-mile access road that connects project sites with Maple Creek Road; the California Department of Forestry and Fire Protection (CALFIRE) has indicated that a Less than 3-Acre Conversion Exemption will be required for any tree removal associated with the proposed project. Mitigation is also proposed to require that all commercial timber species removed shall be replaced t a 2:1 ratio. The requirement to secure a valid Less than 3-Acre Conversion Exemption is included as mitigation measure AFR-1 and the requirement for restocking is included as mitigation measure AFR-2and are detailed in this Initial Study under Agriculture and Forestry Resources. This mitigation measure is consistent with regulations established in Humboldt County's Commercial Medical Marijuana Land Use Ordinance (CMMLUO) regarding tree removal associated with cannabis cultivation.

No other proposed project facilities require or will involve tree removal. All proposed project facilities are located in areas that have expansive, unforested natural openings, and are not zoned Timberland Production Zone. As established natural openings, these areas of the proposed project do not require a Less than 3-Acre Conversion Permit or documentation in a Registered Professional Forester's Timberland Conversion Report.

In addition to the policies guiding the stewardship of biological resources in the CMMLUO and in the Humboldt County General Plan (Humboldt County 2017a), the County maintains Streamside Management Areas (SMAs) to protect sensitive fish and wildlife habitats and to minimize erosion, runoff, and other conditions detrimental to water quality. All proposed cultivation areas and other processing areas are located outside the minimum 100-foot buffers required by the Humboldt County Streamside Management Area Ordinance.

One existing agriculture-exempt structure is partially located within the 100-foot SMA buffer of Cowan Creek. The proposed project also includes installation of rooftop solar on the agriculture-exempt building partially within the SMA buffer zone. Several proposed improvements to the access road between the Adesa Organic, LLC parking lot and the intersection with Maple Creek

Road will require stream crossing improvements (SHN December 2016a), as Class II watercourses intersect with the road. The SMA expressly allows "maintenance, construction, replacement or construction" of such necessary roadways within the buffer zone. (County Code, § 61.1.9.3.1.1.) The overall impact of improving this road within the SMA will likely cause the least amount of environmental impact. The project will require a discretionary permit for improvements of the access roads identified above, construction of water lines and other ancillary facilities, and for permitting the existing agriculture-exempt structure and its continued maintenance within the SMA buffer zone. By securing and following the requirements for development in a SMA, and by incorporating mitigation measures BIO-4 and BIO-5 as described in section c) as applicable in SMAs, impacts would be reduced to a level of less than significant.

In addition, CDFW project PO-1 is located within this SMA. Project PO-1, which includes removing an existing man-made instream reservoir that may be, according to CDFW, contributing sediment and warm water to Cowan Creek, is expressly allowed under the SMA. (General Plan Policy BR-S6 (authorizing "fishery, wildlife and aquaculture enhancement and restoration project").) CDFW Project PO-1 is unrelated to the Project because it is being requested by CDFW to address an existing condition whether or not the Project is approved, and is accordingly discussed here for informational purposes only.

Therefore, with mitigation as appropriate, this project does not conflict with any local policies or ordinances protecting biological resources. The impacts are less than significant with mitigation.

f) Finding: The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. *No impact*.

Discussion: According to the USFWS Environmental Conservation Online System (ECOS 2018), the project site is not located within any adopted Habitat Conservation Plans for Humboldt County.

Habitat Conservation Plans in Humboldt County include the following: 1) Green Diamond Resource Company California Timberlands& Northern Spotted Owl (formerly Simpson Timber Company); 2) Humboldt Redwood Company (formerly Pacific Lumber, Headwaters); and 3) Regli Estates. These Habitat Conservation Plans primarily apply to forest lands in the County, and none of those forest lands overlap with the proposed project.

Therefore, the project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There is no impact, and no mitigation is necessary.

Mitigation:

See AES-1, , NOI-1, NOI-2, and NOI-3 for mitigation measures that are also required to limit impacts to biological resources to less than significant.

BIO-1 Limits of Construction Period for Northern Spotted Owl and other raptors

No construction work shall occur during the northern spotted owl nesting season (February 1st- July 31st) unless a wildlife biologist with experience in northern spotted owl protocol surveys completes a biological assessment of the property to determine whether the area has northern spotted owl presence and whether site specific avoidance measures are necessary to avoid any impact to the species. Any measures developed by the biologist must be adhered to during the nesting season. Regardless of northern spotted owl or other raptor presence on the property, no proposed activity generating noise levels 25 or more decibels above ambient noise levels or with maximum noise levels above 90 decibels shall occur at 100 feet from the project site or edge of habitat, whichever is closer, during the northern spotted owl nesting season.

BIO-2 Pond Maintenance to Prevent Bullfrog Infestation

All constructed ponds shall be kept free of American bullfrog infestations to prevent this non-native species from impacting special status aquatic species, such as the northern red-legged frog. To prevent significant bullfrog populations from developing due to the aquatic environment provided by the rainwater catchment ponds, the following measures shall be implemented as part of the project:

a) Controlling the bullfrog population following colonization will be achieved by draining the rainwater catchment ponds throughout the summer until no water remains at the end of the principal cultivation and irrigation period. This shall be repeated for 2 years to disrupt bull frog life cycles.
b) Direct removal methods shall be used, should de-watering be ineffective for the removal of bullfrog populations.
c) Monitoring for bullfrog populations shall occur on an annual basis in order to prevent subsequent establishment.

BIO-3 Screening of Water Pumps

To prevent impacts to wildlife species including amphibians and reptiles during the term of the project, water pumps used for the operation shall contain screens meeting the CDFW fish screening criteria (http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp).

BIO-4 Replacement of Riparian Vegetation and Special Status Vegetation Alliances

Any riparian vegetation and special status vegetation alliances (identified in section 6.3.2 of the Natural Resources Assessment prepared by SHN) that are impacted by project activities, including but not limited to road improvement and maintenance, shall be replaced at a 3:1 ratio. The replacement of riparian vegetation will occur on the project site and could include enhancement of existing wetland and riparian areas. A mitigation plan will be prepared and submitted to regulatory agencies for review and concurrence prior to any construction that encroaches on SMAs, wetlands, or riparian areas.

BIO-5 Fencing During Construction to Protect Wetlands and Streamside Management Areas

To protect the riparian habitat at the project site during construction activities, temporary fencing shall be installed and maintained on the edge of SMAs and delineated wetlands. The fencing shall be installed prior to the beginning of construction activities and shall be removed after the final inspection is completed by the Building Department.

BIO-6 Demarcation of Special Status Biological Resources

To protect special status biological resources, all resource populations, including the two northern meadow sedge populations, northern red-legged frog habitat, Oregon white oak woodlands, California bay forests, and California oat grass prairies, must be demarcated by high visibility construction fencing during the project construction period in a manner sufficient to avoid unintentional impacts when project construction activities (aside from transportation along roads) will occur within 100 feet of these resources.

BIO-7 Minimize Northern red-legged frog impacts

To protect northern red-legged frogs during restoration activities in CDFW project PO-1, conduct excavation activities August-October.

BIO-8 Nesting Bird Surveys to Protect Migratory Birds including Grasshopper Sparrow

Project-related vegetation clearing should occur outside the bird nesting season, which is generally considered to be March 15 through August 1. If project-related brush clearing or structural work on buildings within the vicinity of nesting bird habitat must occur during the breeding season, nesting bird surveys should be performed in those locations by a qualified biologist to ensure that active nests are not destroyed or disturbed.

Findings:

a) The project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service: **Less than significant impact with mitigation.**

b) The project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service: **Less than significant impact with mitigation.**

c) The project will not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means: **Less than significant impact.**

d) The project will not Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites: **Less than significant impact.**

e) The project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance: **Less than significant impact with mitigation.**

f) This project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan: **No impact.**

5. CULTURAL RESOURCES. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Setting:

A cultural resources study for the project site was prepared prior to approval of the CMMLUO Permits for the cannabis cultivation operations proposed on the site. The study included a records search, Native American Heritage Commission (NAHC) inquiry, coordination with local tribes, and pedestrian survey of the site (Roscoe and Associates 2017). In addition, a Phase II Subsurface Investigation of the *Cowan Creek 433 Site A* was conducted (Roscoe and Salisbury 2017).

The project area is within the ethnographic territory of the Mad River Whilkut tribe. As part of preparation for a cultural resources survey, representatives of the Whilkut Tribe, Bear River Band of the Rohnerville Rancheria THPO were contacted. Erika Cooper, Rohnerville Rancheria THPO, was present during archaeological field investigation as a Native American representative on December 14, 2016 and helped formulate recommendations regarding protection of cultural resources during the proposed project (Roscoe and Associates 2017).

A search of records at the Northwest Information Center (NWIC) revealed that a portion of the project area has been subject to previous cultural resources investigation, and that a total of four cultural resources surveys have been conducted within ¼ mile of the proposed project (Roscoe and Associates 2017). These investigations collectively resulted in the identification of three Native American archaeological sites within ¼ mile study area. Site P-12-1969 is located outside of the direct project area, approximately 40 meters east of the project road forming the private driveway at 23333 Maple Creek Road (Roscoe and Associates 2017). The other two archaeological sites are more than 180 meters from the current project area. These sites will be avoided during the project.

At the time of the pedestrian survey, the project site was mostly undeveloped and used for grazing and hay production. Two surface resources were identified: Cowen Creek 433 Site A and Cowen Creek 433 Site B (Roscoe and Associates 2017). Based on surface observations of a moderately-dense lithic scatter, Cowen Creek 433 Site A was subjected to a Phase II subsurface investigation which consisted of manual excavation of three half-meter-square units and one meter-square unit. Sixteen hand auger samples to determine the limits of the feature were also taken. The subsurface investigation resulted in a recommendation for eligibility for the California Register of Historic Resources under Criterion 4 as well as possibly under Criterion 1 (Roscoe and Salisbury 2017). Upon further consultation with the THPO of the Bear River Tribe, the greenhouse locations were moved and consolidated to an area away from the highest concentration of Native American artifacts.

Analysis:

a) Finding: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5. *Less than significant with mitigation incorporated.*

Discussion: A Cultural Resources Investigation of the project site conducted by Roscoe and Associates in April 2017 found no historical resources as defined in CEQA, Article 4, 15064.5 (a).

Although no historic-age resources were found during the records search, tribal coordination, or field survey, there is always the possibility that previously unknown historic resources exist below

ground surface. There is the potential for subsurface excavation activities to uncover previously unknown subsurface archaeological resources. Implementation of standard cultural resource construction mitigation (Mitigation Measure CUL-2) regarding inadvertent discovery would reduce potential impacts to a level of less than significant.

b) Finding: The project would not cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5. *Less than significant with mitigation incorporated.*

Discussion: A Cultural Resources Investigation of the project site conducted by Roscoe and Associates in April 2017 found two archaeological resources as defined in CEQA, Article 4, 15064.5 (a). Two pre-contact resources have been recorded within the project site, and upon notification of the results of the cultural resources survey, the THPO of Bear River expressed concerns. A Phase II subsurface investigation of Cowen Creek 433 Site A, resulted in a recommendation for eligibility for the California Register of Historic Resources under Criterion 4 as well as possibly under Criterion 1. Subsequent to the excavation in June 2017, a meeting was held on July 13, 2017 with Bear River Tribal Council member Edwin Smith, THPO Erika Cooper, and Mr. Roscoe. At that meeting, the Bear River agreed that the proposed cannabis cultivation greenhouses and other proposed project elements be constructed within the identified archaeological site, provided that specific mitigation measures are followed.Subsequent to this meeting the County, THPO Erika Cooper and the applicant met on May 9, 2019 to discuss relocating the proposed cannabis cultivation greenhouses to keep all disturbance out of the area of the identified archaeological site. Updated plans showing the revised location were submitted to Bear River THPO on June 26, 2019. The revised location will allow for the archaeological site to remain undisturbed. All project related impacts will not be constructed within the area of the identified archaeological site.

In addition, the implementation of standard cultural resource construction mitigation (Mitigation Measure CUL-2) regarding inadvertent discoveries will be applied to the entire project.

The application of these mitigation measures would reduce potential impacts to a level of less than significant (Roscoe and Salisbury 2017).

With the proposed mitigation measure, the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

c) Finding: The project would not disturb any human remains, including those interred outside of formal cemeteries. *Less than significant impact with mitigation incorporated.*

Discussion: As indicated in the Cultural Resource Investigation completed by Roscoe and Associates (2017), there are no known human remains on the project site. However, due to the potential of discovering unknown human remains during the proposed construction activities, the inadvertent discovery protocol recommended in the Cultural Resources Investigation has been included as Mitigation Measure CUL-2 (see discussion under subsection b) above).

With the proposed mitigation measures, the proposed project would not disturb any human remains.

Mitigation:

CUL-1 Protocols for Construction Specific to Cowen Creek Documented Site

1. A qualified, trained archaeological monitor must be present during the mechanical excavation of soils and sediments from the pond area.
2. All project-related activities involving heavy equipment (excavators, bulldozers, pickup-trucks, etc.) adjacent to the archaeological site boundaries; which includes the location of the

greenhouse, leach fields, photovoltaic installation, sheds, etc., must be conducted with an archaeological monitor present.

3. It is also recommended that all project-related ground disturbance activities in the vicinity of both archaeological sites identified be monitored by qualified cultural resources monitors.

CUL-2 Inadvertent Discoveries of Cultural and Paleontological Resources, and Human Remains

The following provides means of responding to the circumstances of a significant discovery during the cultural monitoring of the final implementation of the proposed agricultural development within the project parcel. If cultural materials for example: 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 recommendation for further action.

In the event that paleontological resources are discovered, work shall be stopped within 20 meters (66 feet) of the discovery and a qualified paleontologist shall be notified. The paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. If fossilized materials are discovered during construction, excavations within 66 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agency to determine procedures that would be followed before construction is allowed to resume at the location of the find.

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.

Findings:

a) The project will not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5: **Less than significant impact with mitigation incorporated.**

b) The project will not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5: **Less than significant impact with mitigation incorporated.**

c) The project will not disturb any human remains, including those interred outside of formal cemeteries: **Less than significant impact with mitigation incorporated.**

6. ENERGY. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☒	☐	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Setting:

The Adesa Organic, LLC project includes the development of 86,400 square feet of mixed-light cannabis cultivation. This is the primary project activity which requires the bulk of total energy demand. Besides cannabis cultivation, the project also includes the use of two existing ag-exempt structures for cannabis drying and materials storage, plus the development of several outbuildings, a photovoltaic array and battery storage, a new ADA-compliant restroom, and at least one off-stream pond.

The State of California has the ambitious goal of obtaining all electric power from 100% renewable resources by 2045. The State uses the Renewable Portfolio Standard (RPS) to incrementally move toward this goal year over year, with an interim target of 60% of electricity generated from renewable sources by 2030. The RPS applies to large investor-owned utilities, electric service provides, and community choice aggregators. The standards are not directly applied to energy consumers, but they do illustrate the state goals for obtaining energy from renewable sources.

The Humboldt County 2017 General Plan Energy Element outlines the goals, policies, standards, and implementation measures regarding energy resources within the County. Goals include increasing energy efficiency and conservation, increasing the energy supply from renewable resources, reducing transportation energy consumption, and moving Humboldt County toward energy self-sufficiency.

Analysis:

a) Finding: The project will not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction of operation. *Less than significant impact with mitigation incorporated.*

Discussion: Mixed-light cannabis cultivation requires electrical energy for supplemental lighting, ventilation and air conditioning, nutrient and water pumping, and other cultivation-related activities. The Adesa Organic, LLC project has provided a lighting schedule that shows how many hours of supplemental light will be necessary to achieve the desired growth schedule, with greater requirements during the winter months when there are fewer hours of natural daylight. The proposed energy source for the supplemental lighting and greenhouse ventilation units is a mix of diesel generators and photovoltaic arrays.

The project's maximum diesel usage without any photovoltaic installation is approximately 135,859 gallons per year at full build-out. This is roughly 61,430 kWh per day of energy consumption for all the various project elements.

The potential use of over one hundred thousand gallons of diesel represents a significant unnecessary energy consumption for cannabis cultivation. Mitigation is proposed to ensure that the project develops adequate solar generation capacity that reduces diesel consumption to primarily times when solar generation is unreliable (i.e. extended periods of overcast or cloudy weather). While not a code requirement for this project as the project was submitted and reviewed under the CMMLUO, the CCLUO requires a minimum of 80% non-renewable sources for

energy needs. This CCLUO standard was developed to limit wasteful, inefficient, or unnecessary consumption of energy resources and with this standard the EIR for the CCLUO was determined to not have a significant impact on energy consumption and resources. Accordingly, application of this standard as a mitigation measure for the proposed Adesa Organics, LLC project is justified and will reduce the potential impact of unnecessary consumption to a less than significant level. The proposed mitigation requires that the project source a minimum of 80% of their electrical energy from renewable sources. Alternatively, the project could interconnect into the local grid and obtain renewable electrical energy from a local utility.

With this mitigation measure implemented (Mitigation ENE-1), the project will not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, specifically diesel fuel, during project construction of operation.

b) Finding: The project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. *Less than significant impact*.

Discussion: The Adesa Organic, LLC project plan to use a combination of solar photovoltaic arrays and diesel generators to meet project energy needs. The project is not connected to the electrical grid and will develop and maintain its own, independent electrical energy generation system. The project proposes to meet at least 50% of its electrical energy needs from renewable sources within 3 years and 80% of its electrical energy needs from renewable sources within 6 years of operation.

If the project is ever interconnected to the local grid the electrical energy would be provided by Pacific Gas and Electric Company. Assuming PG&E maintains its ability to meet the state RPS requirements, the project would not conflict with or obstruct these standards. The project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Note: While the project as proposed by the applicant would not obstruct a state or local plan for renewable energy, mitigation is proposed by the county that will further increase the project's reliance on renewable energy.

Mitigation:

ENE-1 Renewable Energy Generation Standards
The applicant shall ensure a minimum of 80% of project electrical energy is generated by renewable sources. This shall be accomplished through the use of solar arrays on-site with generator for backup. Alternatively, the project could interconnect into the local grid and obtain electrical energy from a local utility providing power generated from up to 80% renewable sources.

Findings:

a) The project will not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction of operation: **Less than significant impact with mitigation incorporated**.

b) The project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency: **Less than significant impact**.

7. GEOLOGY AND SOILS. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Setting:

The Safety Element of the Humboldt County General Plan (Humboldt County 2017a) describes the Geologic Resources that occur within the County, and Humboldt County Web GIS contains geologic hazard data for the subject property (Humboldt County GIS 2018). A Geotechnical Report was produced for this specific site assessing geologic conditions and risk factors, and measures to address risks (SHN November 2016). The Division of Mines and Geology Special Publication 42 delineates Alquist-Priolo earthquake zones (Division of Mines and Geology 2018). All of these sources were used in preparation of this section.

Surface Description

The project site is located off Maple Creek Road, approximately 20 miles southeast of Eureka, California. The subject parcel consists of open hillside pastures and some forested areas along riparian zones. The proposed developments are in the open pastures, avoiding forested areas, drainages, and delineated wetlands. Existing slopes in the vicinity of proposed features have a generally southern aspect and slope gradients ranging from relatively level to approximately 30%. Project infrastructure is all proposed in areas with a slope of less than 15%. Elevations range from 2,300 to 2,360 feet above mean sea level.

Geology and Soils

Based on geologic mapping (Fraticelli 1987), the project site is located on a tectonic mélange, referred to as the Central Belt of the Franciscan Complex, consisting of resistant blocks in a highly sheared argillaceous matrix. Areas in the vicinity of the site are mapped as having a high presence of sandstone.

The areas of proposed development are underlain by one to several feet of dark brown, soft to stiff sandy silt topsoil. Shallow weathered sandstone bedrock was found at a depth of 1 foot in an area near the proposed ADA bathroom/ shower facility; this area appears to have been previously graded. Shallow bedrock can also be expected on the tops of the broad "knobs" that exist on the open hillside pastures. In areas where shallow bedrock is absent, the dark brown sandy silt topsoil is underlain by light brown, medium dense silty sand, with increasing amounts of gravel with depth, and bedrock at depths of 6 feet and greater. A test pit located near the East Cowan Creek drainage encountered silty gravel at a depth of 6 feet. Groundwater was not encountered in any of the four test pits dug for the Geotechnical Report (SHN November 2016). In general, the shallow soil column (that is, the upper 10 feet) can be expected to vary spatially over the project area, with varying thickness of topsoil and depth to bedrock. Based on the results of field and laboratory testing, including and analyzing the results of 8 test pits, the geologic subgrade at the project site is classified as Site Class C (very dense soil and soft rock), in accordance with Table 20.3-1 in American Society of Civil Engineers ASCE 7-10 (ASCE 2010).

Seismicity

The site and entire Northern California Region are located in a seismically active area. Division of Mines and Geology Special Publication 42 does not show any Alquist-Priolo earthquake zones within or nearby the project site. Further geologic reconnaissance and review of published geologic data do not indicate that active faults are mapped through or adjacent to the site, nor is there any geomorphic evidence of prior faulting (SHN November 2016). The Eaton Roughs fault zone is mapped approximately one-third mile to the west; however, this fault zone is not thought to have moved in recent times (last movement estimated as occurring 750,000 to 1.6 million years ago) (USGS and CGS 2006). Thus, the probability of surface fault rupture is considered to be very low. Humboldt County Web GIS identifies the subject property as having a Seismic Safety Classification of 3, which is High Instability (Humboldt County GIS 2018), and the Geotechnical Report for the site emphasizes that the foundations for any planned structures should be designed to resist earthquake shaking (SHN November 2016). Based on the absence of young (Holocene-age), loose, saturated, non-cohesive soils in the project area, the site's susceptibility to liquefaction is considered very low (SHN November 2016), and according to Humboldt County GIS data, the subject property is not subject to liquefaction.

Slope Stability

Slope stability refers to the landslide susceptibility of slope-forming materials, which increases in areas of high seismicity, steep slope, and high rainfall, but may be triggered by any of the following: (1) type and structure of earth materials; (2) steepness of slope; (3) water; (4) vegetation; (5) erosion; and (6) earthquake-generated ground shaking.

Slopes within the proposed development areas range from near-level to 15%, with all proposed development located on slopes of less than 15%. Areas adjacent to proposed development have slopes ranging up to approximately 30%. No evidence of slope failure was observed during site reconnaissance for the Geotechnical Report, and the slope stability hazard was characterized as low (SHN November 2016). Humboldt County Web GIS data does not identify any areas of historic landslides on the subject property (Humboldt County GIS 2018).

Analysis:

a) i) Finding: The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Divisions of Mines and Geology Special Publication 42. *Less than significant impact.*

Discussion: Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude and nature of fault rupture can vary for different faults or even along different strands of the same fault. Surface rupture can

damage or collapse buildings, cause severe damage to roads and pavement structures, and cause failure of overhead as well as underground utilities.

There are no earthquake faults delineated on Alquist-Priolo Fault Zone maps within the project area (Division of Mines and Geology 2018). The Eaton Roughs fault zone is mapped approximately one-third mile to the west; however, this fault zone is not thought to have moved in recent times, with the last movement estimated as occurring 750,000 to 1.6 million years ago (USGS and CGS 2006). Thus, the probability of surface fault rupture is considered to be very low. Since the project area is not traversed by a known active fault and is not within 200 feet of an active fault trace, surface fault rupture is not considered to be a significant hazard for the project site.

Therefore, the project will not expose people or structures to substantial adverse effects from a fault rupture.

a) ii) Finding: The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. *Less than significant impact with mitigation incorporated.*

Discussion: Earthquakes on active faults in the region have the capacity to produce a range of ground shaking intensities in the project area, as ground shaking may affect areas hundreds of miles distant from an earthquake's epicenter. Ground motion during an earthquake is described by the parameters of acceleration and velocity as well as the duration of the shaking. Because the project site is located within a seismically active region, some degree of ground motion resulting from seismic activity in the region is expected during the long-term operation of the project.

The State of California provides minimum standards for building design through the California Building Code (CBC). Where no other building codes apply, CBC Chapter 29 regulates excavation, foundations, and retaining walls. The CBC applies to building design and construction in the State and is based on the federal Uniform Building Code used widely throughout the country. The CBC has been modified for California conditions with numerous more detailed and/or more stringent regulations. Specific minimum seismic safety and structural design requirements are set forth in CBC Chapter 16. The Code identifies seismic factors that must be considered in structural design. The Geotechnical Study prepared for the project site in support of this proposed project (SHN November 2016) concluded that the project as proposed is the project is feasible and safe from a geotechnical standpoint, provided that the Geotechnical Study's recommendations are implemented during design and construction. The major geotechnical considerations for development of the proposed structures and foundations include the potential for strong seismic shaking and the variability of the soil column over the project area (particularly, thickness of topsoil and depth to bedrock). The Geotechnical Report makes a number of recommendations specific to the project and the site, in the areas of (1) Site Preparation and Grading, (2)Foundations for Structures, (3) Engineered Fill, (4)Water and Diesel Tanks, (5)Solar Array, (6) Greenhouse Structures, (7) ADA Parking Area, and (8) Other Considerations. Mitigation Measure GEO-1 includes all of the site-specific recommendations of the Geotechnical Report, and would reduce the risks and impacts to a level of less than significant.

Therefore, with the proposed mitigation measures, the proposed project will not expose people or structures to substantial adverse effects involving strong seismic ground shaking.

a) iii) Finding: The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. *Less than significant impact*

Discussion: Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables and buildings with shallow foundations.

According to the Humboldt County Web GIS system, the project site is not designated as an area subject to liquefaction. Further, based on the absence of young (Holocene-age), loose, saturated, non-cohesive soils in the project area, the site's susceptibility to liquefaction is considered very low (SHN November 2016). Design and construction of the project would incorporate appropriate engineering practices to ensure seismic stability as required by the California Building Code (CBC). The project would not expose people or structures to potential substantial adverse effects involving seismic-related ground failure, including liquefaction. Impacts would be less than significant and no mitigation would be necessary.

a) iv) Finding: The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. *Less than significant impact.*

Discussion: Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material, either triggered by static (i.e., gravity) or dynamic (i.e., earthquake) forces. Earthquake motions can induce significant horizontal and vertical dynamic stresses in slopes that can trigger failure. Earthquake-induced landslides can occur in areas with steep slopes that are susceptible to strong ground motion during an earthquake. The youthful and steep topography of the coast range is known for its potential for landslides.

Slopes within the proposed development areas range from near-level to 15%, with all proposed development located on slopes of less than 15%. Areas adjacent to proposed development have slopes ranging up to approximately 30%. No evidence of slope failure was observed during site reconnaissance for the Geotechnical Report, and the slope stability hazard was characterized as low (SHN November 2016). Humboldt County Web GIS data does not identify any areas of historic landslides on the subject property (Humboldt County GIS 2018). Based on these paired analyses, the potential risk to people or structures from landslide is determined to be low, and there will be a less than significant impact.

Therefore, the proposed project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

b) Finding: The project will not result in substantial soil erosion or the loss of topsoil. *Less than significant impact.*

Discussion: This project proposes the new installation of infrastructure for the cultivation and processing of cannabis products. Grading, ground disturbance, and the removal of on-site groundcover and vegetation within the project footprint will occur during construction of the proposed structures, access roads, parking areas, rainwater catchment ponds, water lines, water tanks, septic system, solar PV arrays, generators, and diesel tanks. As described on the Proposed Site Plan, the footprint of the project's facilities covers approximately 184,958 square feet, or 4.25 acres. Cut earthwork will be reused onsite. The size of the area identified for soil removal and its relatively level slope is not anticipated to contribute a significant impact to soil erosion.

Building Code requirements relating to soil stability will be adhered to during construction as part of the Building Permit. Given the relatively flat topography of the project site and that the project's Conditions of Approval stipulate employment of Best Management Practices (BMP's) and the standard erosion control measures of the Humboldt County General Plan, the project is

not expected to result in significant soil erosion or loss of topsoil during the construction phase or for the life of the project.

The project does not involve the removal of any vegetation outside of the project footprint that could result in erosion. Roof runoff will be directed to the rainwater catchment tanks, which will pump the water to ponds for use in irrigation activities. Proposed buildings and facilities are set back at least 100 feet from the nearest surface water features. The potential to impact the hydrology of the drainage features adjacent to the site is discussed in Section 9 (Hydrology and Water Quality), along with appropriate mitigation and applicant-proposed operating restrictions to minimize impacts to a less than significant level.

Therefore, the proposed project will not result in substantial soil erosion or the loss of topsoil.

c) Finding: The project will not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. *Less than significant impact.*

Discussion: Slopes within the proposed development areas range from near-level to 15%, with all proposed development located on slopes of less than 15%. Areas adjacent to proposed development have slopes ranging up to approximately 30%. No evidence of slope failure was observed during site reconnaissance for the Geotechnical Report, and the slope stability hazard was characterized as low (SHN November 2016). Further, Humboldt County Web GIS data does not identify any areas of historic landslides on the subject property (Humboldt County GIS 2018).

The Geotechnical Report, in assessing hazards, did not identify any possibility of lateral spreading or subsidence associated with the site-specific geology of the proposed project area or on any portion of the subject property.

According to the Humboldt County Web GIS system, the project site is not designated as an area subject to liquefaction. Based on the absence of young (Holocene-age), loose, saturated, non-cohesive soils in the project area, the site's susceptibility to liquefaction is considered very low (SHN November 2016).

Therefore, the proposed project will not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

d) Finding: The project will not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. *Less than significant impact.*

Discussion: Expansive soils possess a "shrink-swell" characteristic. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time due to expansive soils, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.

The geotechnical report prepared for the property identified the soils at the project site as having a low expansive potential (SHN November 2016). Therefore, the project would not be located on expansive soils creating substantial risks to life or property. Impacts would be less than significant and no mitigation would be necessary.

e) Finding: The project will not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. *Less than significant impact.*

Discussion: The project is located in a rural area approximately 8 miles east of the community of Maple Creek which does not have a wastewater treatment system. As such, the proposed project will be served by a new on-site wastewater treatment system. As shown on the Site Map, a bathroom facility will be located east of the existing agricultural-exempt storage building, and primary and 100% reserve leach fields serving the on-site wastewater treatment system will be located just east of the two 43,200 square foot greenhouses. Ground elevations of the leach field areas range from approximately 2,308 to 2,312 feet for the primary area and 2,317 to 2,319 for the reserve area. The ground elevation of the bathroom facility addition is 2,305 feet. Due to the required gain in elevation, effluent from the bathroom facilities' holding tanks will be pumped westward approximately 400 feet and disposed of in a shallow, low pressure pipe distribution system. The 200-foot portion of this 400-foot delivery that follows the roadway alignment and crosses the eastern branch of Cowan Creek will be encased in conduit, to protect the drainage and provide additional integrity to withstand vehicular traffic loads (SHN October 2016).

A site-specific Septic Suitability Report has been prepared for the project in accordance with the standards of the Humboldt County Division of Environmental Health, to assess soil and groundwater conditions for this system, determine feasibility, and guide the proposed development. The scope of the report's field and laboratory investigation included a site reconnaissance, excavation of soil test pits and percolation test holes, and laboratory textural analysis of soil samples collected from the test locations. The report concludes that the soils present in the areas proposed for the primary and 100% reserve leach fields are adequate for the proposed on-site wastewater treatment system, and there exists sufficient area to construct the proposed developments, including the primary and 100% reserve area leach fields. The report further concludes that all new developments may be sited in such a manner that setbacks from property lines, foundations, wetlands, drainages, and slopes meet Humboldt County regulations (SHN October 2016). The recommendations of the Septic Suitability Report are an applicant-proposed operating restriction.

Therefore, the proposed project will not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewer is not available for the disposal of wastewater. Impacts would be less than significant and no mitigation would be necessary.

f) Finding: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. *Less than significant with mitigation incorporated.*

Discussion: A Cultural Resources Investigation of the project site conducted by Roscoe and Associates in April 2017 found no paleontological resources as defined in CEQA, Article 4, 15064.5 (a). However, there is a potential for fossils to be discovered and inadvertently damaged during project construction even in areas with a low likelihood of occurrence. Therefore, Mitigation Measure CUL-2 regarding inadvertent discovery of paleontological resources has been included for the project for both cultural and paleontological resources. See Cultural Resources section for the applicable measures.

Applicant Proposed Operation Restrictions:

GEO-1. Construction activities will incorporate Best Management Practices and the standard erosion control measures of the Humboldt County General Plan. These measures will be incorporated in all building and grading permit applications and will be implemented at the time of ground disturbance.

GEO-2. Construction and operation of the on-site wastewater treatment system will adhere to all specifications and recommendations included in the site-specific Septic Suitability Report (SHN October 2016) for the project.

Mitigation:

GEO-1 Geotechnical Report Compliance

The applicant shall comply with all recommendations from the SHN Geotechnical Report (SHN November 2016), which makes site-specific development recommendations to reduce risks and impacts in the areas of (1) Site Preparation and Grading, (2)Foundations for Structures, (3) Engineered Fill, (4)Water and Diesel Tanks, (5)Solar Array, (6) Greenhouse Structures, (7) ADA Parking Area, and (8) Other Considerations.

GEO-2 Geologist Review of Plans

The grading, foundation design, drainage plans, and plan specifications shall be reviewed by a registered geologist prior to approval by the County.

Findings:

a) i) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Divisions of Mines and Geology Special Publication 42: **Less than significant impact.**

a) ii) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking: **Less than significant impact with mitigation.**

a) iii) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction: **Less than significant impact.**

a) iv) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides: **Less than significant impact.**

b) The project will not result in substantial soil erosion or the loss of topsoil: **Less than significant impact.**

c) The project will not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse: **Less than significant impact.**

d) The project will not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property: **Less than significant impact.**

e) The project will not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water: **Less than significant impact.**

f) The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. **Less than significant with mitigation incorporated.**

7. GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emission, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Setting:

As a result of revisions to the CEQA Guidelines that became effective in March 2010, lead agencies are obligated to determine whether a project's GHG emissions significantly affect the environment and to impose feasible mitigation to eliminate or substantially lessen any such significant effects. The County of Humboldt completed a draft Climate Action Plan for the General Plan Update in January 2012. The plan contains GHG reduction strategies designed to achieve the goal of limiting GHG emissions to 1990 emissions levels by 2020. The North Coast Unified Air Quality Management District (NCUAQMD) and Humboldt County have not adopted any thresholds of significance for measuring the impact of greenhouse gas (GHG) emissions generated by a proposed project.

Sources of GHG emissions from the project will occur during short-term construction activities—from construction equipment—and during long-term operation of the project, from diesel generators, HVAC units on structures, and vehicle/truck traffic. As a result of the project's transportation plan requiring employees to use the provided vanpools to travel to and from the work site, during long-term operation of the project, approximately 10 van/truck trips (5 in/5 out) would occur daily from employees and deliveries, once all phases of the project are complete.

Analysis:

a) Finding: The project will not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. *Less than significant impact.*

Discussion: Due to the small scale of the proposed project, this section includes a qualitative discussion of potential GHG/climate change impacts with an emphasis on project features that will reduce construction and operational GHG emissions (see discussion under subsection b) below).

Construction

Construction GHG emissions would be generated by vehicle engine exhaust from construction equipment, on-road hauling trucks, and worker commuting trips. The project is relatively small and construction activities generating GHG emissions would be short-term (less than one year). All construction equipment and commercial trucks would be maintained to meet current emissions standards as required by the California Air Resources Board. Based on compliance with emissions standards, the size of the project, and the duration of the construction period, impacts associated with GHG emissions generation from construction would be less than significant.

Operation

The NCUAQMD and Humboldt County have not adopted any thresholds of significance for measuring the impact of GHG emissions generated by a proposed project. GHG emissions sources during operation would include vehicle traffic from workers and deliveries, use of diesel generators to provide power for the operation, and operation of HVAC units for mixed-light cultivation areas and the proposed processing building. The applicant-proposed operating restriction of requiring all employees to utilize vanpool transportation to and from the site would

limit vehicle trips to and from the site to an estimated 10 van/truck trips per day at full build-out, including employee transportation and deliveries.. The drive between Arcata and the project site is approximately 31 miles one-way. Assuming 10 daily vanpool and other vehicle trips, the project will result in 310 vehicle-miles every day. Assuming an average gas mileage of 12 miles per gallon, annual vehicle CO_2 emissions will be approximately 84 metric tons at peak buildout.

There are two diesel generators proposed as the power source for the combined projects. A pair of 500 kW diesel-powered generators are proposed near the Adesa Organic, LLC site. The generators would be self-enclosed and would provide power to the project, in combination with solar PV arrays to be installed the site. The solar PV arrays are designed to offset both the power needs and the greenhouse gas emissions of the project. Assuming a worst-case scenario where all power comes from diesel generation at full buildout, energy generation will result in approximately 6,160 metric tons of CO_2. This total operational GHG emissions of approximately 6,244 metric tons of CO_2 is still far less than the 250,000 metric ton reporting threshold for new projects.

Stationary source permits will be required from the NCUAQMD for both of the proposed generators; obtaining a stationary source permit for all proposed diesel generators is fully described in the mitigation measure in Section 3, Air Quality. New diesel generators of this size will be required to meet the EPA Tier 4 standards for emission reduction (NCUAQMD April 2018b), further reducing the GHG impacts of the generators to a level of less than significant. Other stationary sources of emissions from the project include the proposed cultivation, processing, and manufacturing buildings which will have HVAC and filter systems for air conditioning, odor reduction, and heating. According to NCUAQMD Rule 102, the Air District does not require permits for HVAC systems (NCUAQMD April 2018a).

Additionally, starting on 2023, the applicant will be required to include records each year upon license renewal for each power source identified for the operation, specifying how much power is provided by a zero net energy renewable source, and the electricity provided by other sources, including the greenhouse gas emissions from these other sources. The applicant must ensure that the average electrical greenhouse gas emissions intensity is not in excess of the average of the local utility provider. If they cannot, they must purchase greenhouse gas credits from a reputable and recognized carbon registry.

With the size of the project and the operating restrictions as described, the proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

b) Finding: The project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. *Less than significant impact.*

Discussion: The project proposes a facility that will involve the cultivation, processing, and manufacturing of cannabis products. For the purposes of this analysis, the proposed project was evaluated against the following applicable plans, policies, and regulations:

1) Humboldt County Draft Climate Action Plan

2) Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO)

3) NCUAQMD Particulate Matter Attainment Plan

Humboldt County Draft Climate Action Plan
Humboldt County prepared a Draft Climate Action Plan prepared in 2012 as part of the General Plan Update which includes a comparison of greenhouse gas emissions from 2006 and 1990. The emissions of carbon dioxide equivalents in unincorporated Humboldt County in 2006 were shown to have declined by approximately a half million metric tons when compared to 1990 levels. This

decrease may be attributed to a decline in industrial emissions in Humboldt County since 1990 related to a decline in the lumber industry and closure of several major industrial facilities related to timber processing.

The County's 2012 Draft Climate Action Plan contains strategies for reducing greenhouse gas emissions. This project, as proposed, mitigated, and conditioned, is consistent with the following GHG reduction strategies listed in the County of Humboldt Climate Action Plan:

- *Conserve natural lands for carbon sequestration.*

  The project involves constructing agricultural facilities on parcels predominantly zoned AE. The total footprint of all proposed agricultural and accessory agricultural infrastructure, including solar PV arrays and ponds, is approximately 184,958 square feet, or 4.25 acres. The total size of the AE-zoned areas of the cumulative associated properties is approximately 614 acres. The AE zoning regulation allows for a maximum lot coverage of 35 percent. Therefore, if the entire combined project site was developed to its maximum potential under the zoning definition, approximately 214 acres would be developed. The project avoids the use or development of the approximately 33 acres of forested areas on the associated properties which are planned Timberland and zoned Timberland Production Zone. The project as proposed would develop less than 1% of the associated parcels, leaving all forest stands and significant vegetation intact, undeveloped, and in a natural state order to sequester carbon.

- *Reduce length and frequency of vehicle trips.*

  The project's transportation plan requires all employees to utilize provided vanpools to access the work site, reducing the potential frequency of vehicle trips from 78 per day to 10 per day at full build-out.

- *Promote the revitalization of communities in transition due to the decline of resource-based industries.*

  This project would provide a new facility for agricultural operations in central-eastern Humboldt County that would help facilitate economic development and the revitalization of the community of Maple Creek and associated nearby rural areas.

- *Ensure that land use decisions conserve, enhance, and manage water resources on a sustainable basis to assure sufficient clean water for beneficial uses and future generations.*

  The primary source of water for the proposed operation will be rainwater. Rainwater capture is not regulated by the State Water Resources Control Board (SWRCB) or California Department of Fish & Wildlife and is encouraged as an alternative to surface water diversions.

Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO)

There are no applicable regulations in the CMMLUO regarding GHG emissions for mixed-light cannabis cultivation or processing.

NCUAQMD Particulate Matter Attainment Plan

The NCUAQMD prepared a Particulate Matter Attainment Plan, Draft Report, in May 1995 with the goal of achieving and maintaining state ambient air quality standards for PM_{10}. This report

includes a description of the planning area (North Coast Unified Air District), and emissions inventory, general attainment goals, and a listing of cost-effective control strategies. The NCUAQMD's attainment plan established goals to reduce PM_{10} emissions and eliminate the number of days in which standards are exceeded. The plan includes three areas of recommended control strategies to meet these goals: transportation, land use and burning. Control measures for these areas are included in the Attainment Plan. Compliance with the control measures in the Particulate Matter Attainment Plan would not only result in a reduction of PM_{10} emissions, but would also result in a reduction of GHG emissions. Control strategies focused on reducing transportation emissions, more efficient land-use patterns, and reducing emissions from burning activities would also reduce the amount of GHG emissions. The project is proposing the following measures consistent with the plan:

- *Burning*

The proposed facility will use forced-air gas heating instead of woodstoves or fireplaces which will significantly reduce GHG emissions generated from heating during long-term operation of the project.

Therefore, the proposed project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Applicant Proposed Operating Restrictions:

GGE-1. Construction equipment will be maintained to meet current emission standards as required by the California Air Resources Board (CARB).

GGE-2. All employees of the proposed project will be required to vanpool in employer-provided shuttles, reducing the number of vehicle trips on a daily basis from 78 to 10 at peak shift and full build-out, reducing vehicular exhaust emissions generated by the proposed cannabis operations.

GGE-3. The proposed project will include installation of solar photo-voltaic power generation facilities to offset greenhouse gas emissions.

GGE-4. The proposed project will use generators that are compliant with EPA Tier 4 standards for emission reduction, consistent with the requirement to obtain a stationary source permit for the generators identified in Mitigation Measure AQ-1.

Findings:

a) The project will not generate greenhouse gas emission, either directly or indirectly, that may have a significant impact on the environment: **Less than significant impact**.

b) The project will not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases: **Less than significant impact**.

9. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Setting:

The Adesa Organic, LLC project site is predominantly undeveloped with some existing structures that have been used to support the agricultural use of the 433-acre property. Grazing has historically and continues at present to be the primary agricultural use of the property. The adjacent parcel contains a rural residence. The residence occupies approximately 1 acre and is not part of the proposed cannabis cultivation project. The agricultural use on the rest of the largely undeveloped 185-acre parcel is also grazing. There are no known past land uses associated with potentially hazardous sites. The California Department of Toxic Substances Control EnviroStor database and the Environmental Protection Agency EnviroFacts databases were reviewed for hazardous sites in the area. No hazardous sites were identified within a three-mile radius of the project site (DTSC 2018, USEPA 2018).

Maple Creek School, located approximately 6 miles west and north by direct line (or 8 miles by road) from the proposed project, is the nearest school to the project site. The Kneeland Airport is the closest airport to the project site, and is just over 6 miles away by direct-line measurement (Humboldt County GIS 2018). The project site is not located within an Airport Compatibility Zone or any other airport land use plan.

Portions of the project site are within a Wildland Fire Rating Zone of "High," and portions of the project site are within a Wildland Fire Rating Zone of "Moderate," indicating that the area is at moderate to high risk of wildland fire (Humboldt County GIS 2018). The subject properties are located in the Kneeland Volunteer Fire Response Area, but are in State Responsibility Area (SRA) lands, which means the site is an area of legal responsibility for fire protection by CALFIRE.

Analysis:

a) Finding: The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. *Less than significant impact.*

Discussion: Based on records searches of the project site and areas within a three-mile radius, there are no hazardous materials sites within 3 miles of the proposed project site (DTSC 2018, USEPA 2018). The proposed project would involve constructing mixed light greenhouses, various small structures to support the agricultural operation, solar PV arrays, an onsite wastewater treatment system and restroom facility, two self-contained diesel generators, and two 5,000-gallon diesel fuel storage tanks each with adequate secondary containment required by 40 CFR 264.193(e).

Construction of the proposed project would involve the use of materials that are generally regarded as hazardous, such as gasoline, diesel fuel, hydraulic fluids, paint, and other similar materials. The risks associated with the routine transport, use, and storage of these materials during construction are anticipated to be relatively small. With appropriate handling and disposal practices, there is relatively little potential for an accidental release of hazardous materials during construction, and the likelihood is small that workers and the public would be exposed to health hazards. Storage and handling of materials during construction would employ BMPs and would be subject to provisions of the project Storm Water Pollution Prevention Plan, which is described in greater detail in Section 9 (Hydrology and Water Quality). BMPs would include provisions for safely refueling equipment, and spill response and containment procedures.

The project site will be developed for the cultivation and drying of cannabis, uses that will involve hazardous materials including fertilizers, pesticides, fungicides, petroleum products including diesel fuel for generators, as well as vehicle and equipment fluids and lubricants. These materials will be transported to the site and used at the facility. No disposal of hazardous materials will occur as part of the proposed project.

Diesel fuel will be stored in two tanks designed for such use, each with adequate secondary containment as required by 40 CFR 264.193(e). There are two 5,000-gallon, above-ground diesel fuel storage tanks proposed for the Adesa Organic, LLC project. A plan for spill prevention, control and countermeasures (SPCC) will be a requirement for both above-ground diesel tanks, as their individual sizes exceed the thresholds for the development of SPCC established by the U.S. EPA and California Environmental Protection Agency (CalEPA). The requirement to develop adequate SPCC for both diesel tanks is included as mitigation measure HWQ-3 under Hydrology and Water Quality, and impacts are analyzed in that section. No further mitigation is required to address the potential hazard of on-site fuel storage.

As described in the Operations and Cultivation Plan for both projects, all amendments, teas, and pesticides or fungicides are certified for organic farming. Pesticides used on the site are limited to the allowable pesticides identified in the NCRWQCB's guidelines, *Legal Pest Management Practices for Marijuana Growers in California*. These and all other potentially hazardous materials other than diesel fuel will be stored in locked storage stations in the storage building, which will be designed with secondary containment. All potentially hazardous materials will be taken back to the storage stations immediately after use as a standard operating procedure. There will be full-body disposable zip-ups with hand and face protections, and ventilation available for employees using these products.

Use of all hazardous materials would be required to comply with all applicable local, state, and federal standards associated with the handling and storage of hazardous material. The applicant would be required to file a Hazardous Materials Business Plan with the County division of Environmental Health. The proposed project will also be subject to the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) Cannabis Cultivation Waste Discharge Regulatory Program (CCWDRP) and the County of Humboldt Medical Marijuana Land Use

Ordinance (CMMLUO). The NCRWQCB program and County ordinance have "standard conditions" applicable to cannabis operations that address impacts from the storage and use of hazardous materials which include the following requirements:

- Any pesticide or herbicide product application be consistent with product labeling and be managed to ensure that they will not enter or be released into surface or groundwater.
- Petroleum products and other liquid chemicals be stored in containers and under conditions appropriate for the chemical with impervious secondary containment.
- Implementation of spill prevention, control, and countermeasures (SPCC) and have appropriate cleanup materials available onsite.

With appropriate storage, handling, and application practices that comply with the requirements of the NCRWQCB and Humboldt County, it is not anticipated that the use of these materials at the facility will pose a significant hazard. The proposed project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

b) Finding: The project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. *Less than significant impact.*

Discussion: As previously described in subsection a), fertilizers, pesticides, fungicides, petroleum products including diesel fuel for generators, as well as vehicle and equipment fluids and lubricants will be stored and used at the proposed project facility. Diesel fuel will be stored in two tanks designed for such use, each with adequate secondary containment as required by 40 CFR 264.193(e). All other potentially hazardous materials other than diesel fuel will be stored in locked storage stations in the proposed drying and processing building, which is designed with secondary containment. All potentially hazardous materials will be taken back to the storage stations immediately after use as a standard operating procedure. There will be full-body disposable zip-ups with hand and face protections, and ventilation available for employees using these products.

The applicant will be required to file a Hazardous Materials Business Plan with the County Division of Environmental Health (DEH) for the storage of the various materials described above at the site. The proposed project will also be subject to the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) Cannabis Cultivation Waste Discharge Regulatory Program and the County of Humboldt Medical Marijuana Land Use Ordinance. The NCRWQCB program and County ordinance have "standard conditions" applicable to cannabis operations that address impacts from the storage and use of hazardous materials which are listed above in subsection a). These include implementation of spill prevention, control, and countermeasures (SPCC) and the maintenance of appropriate cleanup materials onsite. As mentioned in subsection a), the development of a plan for SPCC for each proposed diesel tank will be a requirement of Mitigation Measure HWQ-3, analyzed under Hydrology and Water Quality.

With appropriate storage, handling, and application practices, it is not anticipated that the use of these materials will pose a significant hazard. In the event of foreseeable upset and accident conditions, it is unlikely that these hazardous materials would be released in a manner that would create a significant hazard to the public or the environment.

Therefore, the proposed project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c) Finding: The project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. *No impact.*

Discussion: There are no schools located within one-quarter mile of the project site. Maple Creek School, located approximately 6 miles west and north by direct line (or 8 miles by road) from the proposed project, is the nearest school to the project site. The proposed project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impact would occur, and no mitigation would be necessary.

d) Finding: The project will not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment. *Less than significant impact.*

Discussion: The State's Hazardous Waste and Substances Sites List (Cortese List, Government Code Section 65962.5) identifies sites with leaking underground fuel tanks, hazardous waste facilities subject to corrective actions, solid waste disposal facilities from which there is a known migration of hazardous waste, and other sites where environmental releases have occurred. The California Department of Toxic Substances Control EnviroStor database and the EPA EnviroFacts databases were reviewed for hazardous sites in the area. No hazardous sites were identified within a three-mile radius of the project site (DTSC 2018, EPA 2018). Because the proposed project is not listed as a hazardous materials site, implementation of the project would not create a significant hazard to the public or the environment. No impact would occur, and no mitigation would be necessary.

e) Finding: The project will not, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area. *No impact.*

Discussion: The project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The Kneeland Airport is the closest airport to the project site, and is over 6 miles away (Humboldt County GIS 2018). The project will not result in a safety hazard for people residing or working in the project area. No impact would occur, and no mitigation would be necessary.

f) Finding: The project will not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan. *Less than significant impact.*

Discussion: The project would develop cannabis cultivation and drying facilities on rural property approximately 6 miles south and east of the community of Maple Creek on a direct line. From Butler Valley Road, the project site is accessed via approximately 8 miles of Maple Creek Road, which is a County-maintained road that provides access to rural residential, agricultural and public facilities. The applicant provided documentation of evidence that the entire section of Maple Creek Road from Butler Valley Road to the intersection of the private driveway leading to the project site is equivalent to a Road Category 4 Standard. This report, accompanied by photographs, showed that much of the road is at least 20 feet wide and also documents points that are narrower than 20 feet. The road is also described as having turnouts, wide shoulders and driveway entrances in places that will allow passing (Borusas January 2018). The applicant retained SHN Consulting Engineers and Geologists to prepare a road evaluation report for the 1.1-mile section of private road between Maple Creek Road and the barn complex. The road is an average of 15 feet wide and with a grade that varies between 0-15%. The report identified the road as being very low traffic with less than 10 average daily trips. Recommended improvements included installing additional turnouts and rocking the surface (SHN December 2016a). The Department of Public Works referral response indicates that the intersection of Maple Creek Road and the Adesa Organic, LLC access road will need to be upgraded to meet the County visibility

ordinance and encroachment ordinance standards (Humboldt County 2017a). The project also proposes to improve existing access roads within the project site and construct emergency turnaround and parking areas on the Adesa Organic property to serve the proposed cannabis uses. All of the proposed access improvements will improve emergency access and circulation within the project site.

The project will be required to comply with the Humboldt County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and setback distances for maintaining defensible space (CALFIRE 2017). The improvement plans for the proposed project will be reviewed to verify compliance with the County's Fire Safe Ordinance which will ensure that adequate access for emergency response and evacuation is provided. As such, this project will not interfere with any emergency response or evacuation plan.

Therefore, the proposed project will not impair the implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) Finding: The project will not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. *Less than significant impact.*

Discussion: Fire protection in Humboldt County is provided by local districts, cities, and CALFIRE. The project site is within the Kneeland Volunteer Fire Response Area (structure fires), and is located in State Responsibility Area (SRA) lands, which means the site is an area of legal responsibility for wildland fire protection by CALFIRE. CALFIRE identifies wildland fire rating zones and fire hazard severity zones in SRAs throughout California. Portions of the project site are within a Wildland Fire Rating Zone of "High," and portions of the project site are within a Wildland Fire Rating Zone of "Moderate," indicating that the area is at moderate to high risk of wildland fire (Humboldt County GIS 2018). The fire hazard severity zone for the project is classified as "Very High."

There is potential risk of causing a wildfire during construction or operational activities; this risk would be reduced to a low level by applicant-proposed operating restrictions and by compliance with the Humboldt County Fire Safe Ordinance (County Code Section 31111 et seq.), which CALFIRE has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and setback distances for maintaining defensible space (CALFIRE 2017).

Equipment shall be "fire-safe", i.e. operating under a fire safety plan and equipped with spark arrestors. The access road shall be maintained in a state such that it is improved and rocked per the Road Evaluation Report prepared for the project (SHN December 2016a) and maintained free of vegetation during times of activity.

Fueling of vehicles/equipment during construction activities will occur off-site or be transported and dispensed from pick-up trucks equipped for such a purpose. During operation of the proposed project, diesel fuel will be stored on-site in tanks designed for such purpose, with adequate secondary containment as required by 40 CFR 264.193(e).

An emergency turnaround area will be developed, and a fire hydrant will be installed, as depicted on the Site Plans for the project (SHN February 2018a). Well or pond water will be used to as a water source for fire protection. In addition, the applicant proposes to allow access to the stored rainwater for CALFIRE or local fire departments in the case of an emergency.

Based on project design, applicant-proposed operating restrictions, and compliance with the Humboldt County Fire Safe Ordinance, the proposed project will not expose people or structures,

either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Impacts would be less than significant and mitigation would not be necessary.

Applicant Proposed Operating Restrictions:

HHM-1. Equipment shall be "fire-safe", i.e. operating under a fire safety plan and equipped with spark arrestors. The access road shall be paved or maintained in a state such that it is free of vegetation during times of activity.

HHM-2. Fueling of vehicles/equipment during construction activities will occur off-site or be transported and dispensed from pick-up trucks equipped for such a purpose. During long-term operation of the project, fuel will be stored on-site for equipment use in tanks designed for fuel storage that include adequate secondary containment as required by 40 CFR 264.193(e).

HHM-3. Hazardous materials including fertilizers, pesticides, fungicides, and lubricants and oils will be stored in locked storage stations in the proposed drying and processing building, which is designed with secondary containment. All potentially hazardous materials will be taken back to the storage stations immediately after use as a standard operating procedure.

Findings:

a) The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials: **Less than significant impact**.

b) The project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment: **Less than significant impact**.

c) The project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school: **No impact**.

d) The project will not be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment: **No impact**.

e) The project will not, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area: **No impact**.

f) The project will not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan: **Less than significant impact**.

g) The project will not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires: **Less than significant impact**.

10. HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☒	☐	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
d) In flood hazard, tsunami or seiche zones risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Setting:

The project is located in the Mad River watershed near the unincorporated community of Maple Creek. The Mad River is approximately 100 miles long and drains an area of approximately 500 square miles of coastal hills. Approximately 28 miles southeast of the project site, the Mad River is dammed at Ruth Lake. Both project parcels are located within the Blue Slide Creek – Mad River sub-watershed (HUC 12). Project facilities are located at elevations ranging from 2,300 feet to 2,360. The parcels contain moderately steep slopes; however, project facilities are located in generally flat areas, with slopes varying between 5% and 15%. The site is not connected to a municipal storm drainage system. Existing stormwater infrastructure on the parcel primarily includes road ditches.

There are five separate mapped creeks present across the two legal parcels, including Cowan Creek, two unnamed tributaries to Cowan Creek, an unnamed tributary to Wilson Creek and an unnamed tributary of the Mad River. The Preliminary Jurisdictional Wetland and Other Waters Delineation report for the project area prepared by SHN Consulting Engineers and Geologists identified approximately 0.69 acre (30,224 square feet) of "Other Waters of the U.S." by determining the location of the ordinary high-water mark (OHWM) along the various drainages on the parcels (SHN December 2016b). All have riparian habitat, and the associated streamside management areas (SMAs) for these waterways are mapped in the Humboldt County GIS. None of the proposed cultivation areas, or the drying structure, are located within the 100-foot SMA buffer zone. Some road improvements and the installation of a water line will occur within the SMA area, requiring a Special Permit.

According to FEMA Community Panel #06023C1100F (Effective Date: January 19, 2011), the project is not located within the influence of a 100-year reoccurrence interval (RI) event (FEMA 2018). At its closest

point, the Mad River is approximately 1.3 miles away from proposed project facilities. Project facilities are located at elevations ranging from 2,300 feet to 2,360 feet, while the Mad River is located at an elevation of 730 feet at its closest point (Google Earth 2018). Due to the elevation of the proposed project footprint, there is no potential for flooding from the Mad River. The project is not in an area that is at risk from dam failure, seiche, tsunami or mudflow.

Analysis:

a) Finding: The project will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. *Less than significant impact with mitigation incorporated.*

Discussion: Surface water features on the project site include Cowan Creek and its tributaries, an unnamed tributary to Wilson Creek, and another unnamed tributary of the Mad River. Water quality on the project site is primarily influenced by grazing uses. It is reasonable to assume that the water quality in the vicinity of the project site is typical of the water quality in the nearby rural areas containing residential, commercial, industrial, and agricultural uses.

Construction of the proposed project will require grading and placement of fill for pond construction, grading and earth moving for road improvements, placement of fill for the cultivation site, and other activities that have the potential to discharge sediment from the site. The operation of heavy equipment during construction, refueling of equipment, and storage and use of fuel all have the potential to enter stormwater discharge. Improper storage and use of other materials and improper disposal of construction wastes present additional risks to stormwater quality. Work within the SMA poses an additional risk to water quality, but mitigation of these risks is addressed in the Humboldt County General Plan, which includes required erosion control BMPs BR-S9.

Because project activities will disturb more than one acre of the site, the project will be subject to the requirements State Water Resources Control Board (SWRCB) Construction General Permit (CGP). The SWRCB CGP will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) which documents the stormwater dynamics at the site, the BMPs and water quality protection measures that are used, and the frequency of inspections. BMPs are activities or measures determined to be practicable, acceptable to the public, and cost effective in preventing water pollution or reducing the amount of pollution generated by non-point sources. Implementation of the SWPPP will ensure that surface water quality is protected during construction activities and long-term operation of the project.

The project would increase the amount of impermeable surface by adding a number of new buildings, a paved ADA-accessible parking spot (the remainder of the parking lot would be unpaved), and lined ponds for rainwater catchment. The net increase in impermeable surface is approximately 4.1 acres. Of this, however, the ponds and greenhouse roofs account for approximately 3.7 acres, which will be utilized as part of the water plan to capture and store runoff for cultivation use.

The other 0.2 acre of impervious surface will result in an increase in rate and volume of stormwater runoff. The primary new structure that will contribute to the additional impermeable surface is the ADA-compliant bathroom. To ensure additional runoff from these project improvements does not have the potential to violate any water quality standards, the applicant must develop a landscaping and drainage design that incorporates relevant aspects of low impact design (LID), such as bioswales or infiltration basins. The drainage plan will ensure that the bulk of the additional runoff created by these improvements will infiltrate into the ground. This has been included as Mitigation Measure HWQ-1 for the proposed project.

There are no wastewater facilities in the community of Maple Creek. The proposed project will be served by on-site wastewater treatment systems proposed on the site plan and described in the

operations plan. The project proposes an ADA-compliant bathroom as its own "stand alone" structure. Leach fields for the bathroom are located near the cultivation area and are shown on the site plan. The leach fields are located more than the required minimum distance from wells that provide cultivation and potable water.

A site-specific Septic Suitability Report (SHN October 2016) has been prepared for the project in accordance with the standards of the Humboldt County Division of Environmental Health, to assess soil and groundwater conditions for this system, determine feasibility and the necessary size of the system, and guide the proposed development. The scope of the report's field and laboratory investigation included a site reconnaissance, excavation of soil test pits and percolation test holes, and laboratory textural analysis of soil samples collected from the test locations. The report concludes that the soils present in the areas proposed for the primary and 100% reserve leach fields are adequate for the proposed on-site wastewater treatment system, and there exists sufficient area to construct the developments, including the primary and 100% reserve area leach fields, and that the proposed on-site wastewater treatment system will be designed to adequately treat the estimated wastewater discharge volume and strength from the proposed facility.

The report further concludes that all new developments may be sited in such a manner that setbacks from property lines, foundations, wetlands, drainages, and slopes meet Humboldt County regulations (SHN October 2016). The report has been reviewed for compliance with the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) and Humboldt County Division of Environmental Health (DEH). As such it is not anticipated that the use of these systems for the proposed facility will violate any water quality standards or waste discharge requirements, nor would they cause any degradation to surface water and groundwater resources.

Cannabis irrigation has the potential to result in additional runoff that contains excess nutrients, pesticides or other substances that have the potential to be harmful to waterways on- and off-site. The cultivation and operations plan for the project states that all excess cannabis irrigation runoff will be captured and recycled through a mixed-media water filtration system. No irrigation runoff is anticipated to leave the site. There will be no added nutrient load on surface water resources.

There are two 5,000-gallon above-ground diesel fuel storage tanks proposed for the Adesa Organic, LLC project site. As described in plans submitted by the applicant, all diesel fuel will be stored in tanks designed for such use, each with adequate secondary containment as required by 40 CFR 264.193(e). The potential for diesel fuel spillage presents the possibility for significant adverse impacts to water quality unless fuel spillage is adequately prevented, controlled, and addressed with adequate countermeasures. The applicant has not yet developed a plan for spill prevention, control and countermeasures (SPCC) for the proposed fuel storage tanks. Their individual sizes and volumes exceed the thresholds for the development of SPCC established by the U.S. EPA and California Environmental Protection Agency. Mitigation Measure HWQ-3 requires the development of a plan for spill prevention, control and countermeasures (SPCC) for all three above-ground diesel tanks by a California Registered Engineer, as well as implementation of SPCC for the life of the project. This mitigation measure will reduce the potential impacts to water quality from the on-site fuel storage to less than significant levels.

Therefore, with the application of mitigation measures, the proposed project will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

b) Finding: The project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impede sustainable groundwater management of the basin. *Less than significant impact.*

Discussion: The proposed project is not anticipated to substantially decrease groundwater supplies or affect the production rate of nearby wells because the existing and proposed wells provide only a small portion of the water required by the project. The proposed Adesa Organic, LLC project includes the use of an existing well and proposes the development of a second well.

However, the applicant proposes to use rainwater catchment as the primary source to meet project irrigation needs, supplemented with well water. The proposed rainwater catchment system has sufficient capacity to harvest and store sufficient water to meet project needs even without use of the wells in an average rain year. As the ponds are developed, it is anticipated that the project will rely more heavily on rainwater catchment than on well water for cultivation. Excessive use of well water to meet cultivation needs is not anticipated. The California Department of Fish and Wildlife has yet to make a determination whether each well is jurisdictional and subject to forbearance. If the well is subject to forbearance, the applicant will be required to utilize solely the rainwater catchment system for an established portion of the year, allowing for additional groundwater aquifer recharge during this period.

Groundwater extraction within the Mad River watershed is not extensive. The project area was not included among the areas analyzed in the Sustainable Groundwater Management Act 2019 Basin Prioritization, and the lower Mad River Lowland area was given a "Very Low" priority among the basins analyzed (DWR 2019). Groundwater extraction from the existing well and an additional proposed well are not anticipated to substantially decrease existing groundwater supplies.

Therefore, the proposed project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

c) i) Finding: The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site. *Less than significant impact with mitigation incorporated.*

Discussion: Surface water features on the project site include Cowan Creek and its tributaries, an unnamed tributary to Wilson Creek, and another unnamed tributary of the Mad River. SHN Consulting Engineers and Geologists prepared a Preliminary Jurisdictional Wetland and Other Waters Delineation report for the project area. The report concluded that there are approximately 2.64 acres of three-parameter riverine and palustrine wetlands and approximately 0.69 acre of "Other Waters of the U.S." on the parcels. The project does not propose to modify the stream channels, reduce riparian vegetation, or make any modifications to existing drainages that will result in substantial erosion or siltation on- or off-site.

The project will result in 4.1 acres of additional impervious surfaces, as described in subsection a). Of this, 3.7 acres will direct runoff to pond storage. This water would normally be directed overland via sheet flow and/or shallow concentrated flow to existing drainages on the site. The photovoltaic arrays, while they have many small, discrete impervious areas, do not appreciably contribute to the overall impervious area as runoff from individual panels will fall onto the grass below and infiltrate into the ground.

The Road Evaluation Report prepared by SHN Consulting Engineers and Geologists identified locations along the access road requiring improvements to reduce erosion potential. Measures include rocking the surface of the road so that it is suitable for all-weather travel, placement of rock for energy dissipation, and ditch improvements (SHN December 2016a). Implementation of these recommendations has been added as Mitigation Measure HWQ-2.

The proposed ponds do have the potential to overflow, which could result in substantial erosion or siltation on- or off-site. As an applicant-proposed operating restriction, the ponds will be constructed in accordance with guidance from the California Department of Fish and Wildlife (CDFW). Ponds will be constructed with an armored overflow channel to prevent erosion, and in such a way that when overflow happens or draining is necessary, stored water would be able to infiltrate into the spillway or elsewhere on site without moving a substantial amount of sediment off-site or draining sediment into a stream or other jurisdictional water of the State.

Therefore, project will substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site.

c) ii) Finding: The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. *Less than significant impact with mitigation incorporated.*

Discussion: As discussed in subsection a), an increase in stormwater runoff will occur due to the increase in impervious surface from the proposed project. Stormwater facilities will be designed to detain stormwater on the project site through landscaping and LID improvements around the processing facility. These improvements will reduce peak flows during high rainfall events and have been included as Mitigation Measure HWQ-1.

The proposed rainwater catchment system and associated ponds will effectively mitigate against an increase in runoff due to the impervious greenhouse placement. The remaining small structures are separate and small in area and are not expected to contribute significantly to an increase in runoff.

Neither of the proposed ponds will be connected to adjacent streams. As an applicant-proposed operating restriction, the ponds will be constructed in accordance with guidance from the California Department of Fish and Wildlife (CDFW). Ponds will be constructed with an armored overflow channel to prevent erosion, and in such a way that when overflow happens or draining is necessary, stored water would be able to infiltrate into the spillway or elsewhere on site without creating a hydrological connection or draining overland to a stream or other jurisdictional waters of the State.

Therefore, the proposed project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, that would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

c) iii) Finding: The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, that would create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. *Less than significant impact with mitigation incorporated.*

Discussion: The project site does not drain to a municipal storm drainage system. The project site currently contains drainage infrastructure and additional infrastructure will be constructed as the project is developed. As discussed in subsection c) i), an increase in stormwater runoff will occur due to the increase in impervious surface from the proposed project. This runoff is managed primarily by the rain catchment system and the emergency overflow design of the ponds. As described in subsection a), stormwater facilities will be designed to detain stormwater on the project site using the proposed rainwater catchment ponds and LID improvements around the

drying facility, storage facility, and ADA-compliant bathroom. The proposed stormwater improvements required by Mitigation Measure HWQ-1 will ensure that additional stormwater runoff from the proposed project will infiltrate into the ground on-site.

Therefore, project will not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

d) Finding: The project will not risk release of pollutants due to project inundation in flood hazard, seiche or tsunami risk zones. *No impact.*

Discussion: The project requires the construction of two ponds to store water for cultivation and operational use, which will potentially store up to 4.3 million gallons of water at maximum capacity. In the unlikely event of a failure in the construction of either of these ponds, water would not be directed toward structures or areas where people are working on site. Based on an analysis of the site topography, flows resulting from pond failure would be directed toward two of the streams present on the parcel and not toward any structures. Pond failure would result in a potentially large flow down the streams, but due to the location of the pond and site topography, flows would be directed away from project structures. Because of the location of the project and the relatively small size of the ponds, risk downstream of the ponds is minimal to none.

The project is not in an area that is at risk from seiche, tsunami or flood hazard. The project is not located near a large body of water capable of producing a seiche, is not located near the coast in a tsunami inundation area and is not located next to steep slopes capable of a mudflow event. The steepest slopes on the parcel are located in forested, riparian areas, and there are no historic landslides mapped on the parcels. The project is within the Mad River watershed downstream of Matthews Dam at Ruth Lake. During a major seismic event, the dam could potentially fail, resulting in inundation of downstream areas. However, this poses no threat to the project, as all facilities are located approximately 1,470 feet or higher above the Mad River.

Therefore, the proposed project will not risk release of pollutants due to project inundation In flood hazard, seiche, or tsunami risk zones.

e) Finding: The project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. *Less than significant impact.*

Discussion: There is no water quality control plan or sustainable groundwater management plan specific to the project area. Section b) discusses the current status of the most recent groundwater management plan in the region and that the lower Mad River basin is of "very low" priority in terms of groundwater management. The project is subject to the Construction General Permit and the requirements of a SWPPP that is intended to protect water quality.

In light of these requirements, the proposed project is anticipated to have a less than significant impact in terms of conflicting with or obstructing implementation of a water quality control plan or sustainable groundwater management plan.

Applicant Proposed Operation Restrictions:

HWQ-1. Construction activities will incorporate Best Management Practices and the standard erosion control measures described in BR-S9 Erosion Control of the Humboldt County General Plan. These measures will be incorporated in all building and grading permit applications and will be implemented at the time of ground disturbance.

HWQ-2. To prevent overflow of the rainwater catchment pond from occurring when it is full during a heavy rainfall event, ponds will be constructed in accordance with guidance from the California Department of Fish and Wildlife (CDFW). Ponds will be constructed with an armored overflow channel to prevent erosion, and in such a way that when overflow happens or draining is necessary, stored water would be able to infiltrate into the spillway or elsewhere on site without creating a hydrological connection or draining overland to a stream or other jurisdictional waters of the State.

Mitigation:

HWQ-1 Low Impact Design Improvements to Detain Stormwater

To address the increase in stormwater runoff that will occur due to the increase in impervious surface from the proposed project, the applicant shall design, construct, and maintain stormwater facilities to detain stormwater on the project site through low impact design (LID) improvements such as a pre-treatment pond, bioswales, infiltration basins, and detention basins, as applicable. The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project infiltrates into the ground on-site or is pre-treated prior to discharge without violating any water quality standards or waste discharge requirements. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through a culvert pipe outfall that is armored with rock to provide energy dissipation.

HWQ-2 Implementation of Road Improvements

The applicant will implement all recommendations included in the Road Evaluation Report prepared for the access road off of Maple Creek Road to the Adesa Organic, LLC project (SHN December 2016a). These measures include ditch enhancement and construction, placement of rock energy dissipation material, construction of rolling dips, and rocking the entire length of road, among others.

HWQ-3 Spill Prevention, Control and Countermeasures

A plan for Spill Prevention, Control and Countermeasures (SPCC) shall be developed by a California Registered Engineer for each of the diesel tanks proposed for on-site fuel storage, subject to requirements of the U.S. Environmental Protection Agency and the California Environmental Protection Agency. All SPCC measures shall be implemented during project operations.

Findings:

a) The project will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality: **Less than significant impact with mitigation.**

b) The project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin: **Less than significant impact.**

c) i) The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site*:* **Less than significant impact with mitigation.**

c) ii) The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site: **Less than significant impact with mitigation.**

c) iii) The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage system or provide substantial additional source of polluted runoff: **Less than significant impact with mitigation.**

d) The project will not risk release of pollutants due to project inundation in flood hazard, tsunami or seiche zones: **No impact.**

e) The project will not conflict with or obstruct implementation of a water quality control plan or a sustainable groundwater management plan: **Less than significant impact.**

11. LAND USE AND PLANNING. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐

Setting:

The project area is located on the east side of Maple Creek Road, just northeast of the Mad River and about 6.0 miles south of the community of Maple Creek. The project area is generally located in the hills south of Korbel and east of Kneeland. The project area is primarily surrounded by agricultural lands, timberlands and rural residences.

The project site for the Adesa Organic, LLC project is one legal parcel (APNs 315-145-002, 315-211-003, 315-211-004) consisting of approximately 443 acres (Humboldt County GIS 2018). Major portions of both properties are planned Agricultural Grazing (AG) in the Humboldt County General Plan (Humboldt County 2017a), and are zoned Agriculture Exclusive (AE), with a Special Building Site combining zone specifying that the minimum parcel size is the per the subdivision map of record (B-5).

There is a 13.5-acre patch of land on the Adesa Organic, LLC property that is zoned Timberland Production Zone (TPZ); no project facilities exist or are proposed in the TPZ-zoned area. There is one 23-acre portion of the Adesa Organic, LLC property that has been designated Timberland by the Humboldt County General Plan (Humboldt County 2017a). Part of this 23-acre patch of plan-designated Timberland overlaps with forest, and part of it excludes forest, instead encompassing a portion of an adjacent meadow. No proposed facilities are located in actual, naturally-occurring forestland. A small number of trees of less than 12 inches dbh are proposed to be removed along the road for required turnouts. It should be noted that the areas zoned TPZ do not overlap the areas that are planned Timberland; however, these TPZ and Timberland areas generally conform to forested areas on the landscape—with the exception of the meadow area encompassed by the Timberland designation—and cumulatively cover approximately 36.5 acres of the Adesa Organic, LLC property (Humboldt County GIS 2018).

Table 1 on the following page identifies applicable zoning and land use designations for each property, by APN.

The currently adopted Humboldt County General Plan designates the majority of the project area as Agricultural Grazing (AG) (Humboldt County 2017a). AG lands may be used for the production of food, fiber, plants, timber, and timber agriculturally related uses. The AG designation applies primarily to dry-land grazing areas in relatively small land holdings that support cattle ranching or other grazing supplemented by timber harvest activities that are part of the ranching operation, and other non-prime agricultural lands. Very low intensity residential uses may be allowed if they are incidental to the property and if they support agricultural operations. Density ranges are 20-160 acres/unit.

The project area is zoned Agricultural Exclusive (AE) with a combined zoning district of B-5(160) (Humboldt County GIS 2018). The AE zone is intended to be applied in fertile area 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. Principal uses include general agricultural uses, accessory agricultural uses and structures. The combined zoning district describes building restrictions, and a subdivision limit of 160-acre minimum lot size.

Table 1: Zoning and land use designations for each project property, by legal parcel

Parcel	APN	APN Size	Zoning	Land Use Designation
Adesa Organic, LLC				
443-Acre Legal Parcel	315-145-002	80 acres	Agriculture Exclusive, Special Building Combining Zone (AE-B-5 (160))	Agricultural Grazing (AG)
	315-211-003	233 acres	219.5 acres Agriculture Exclusive, Special Building Combining Zone (AE-B-5 (160): 13.5 acres Timberland Production Zone (TPZ)	Agricultural Grazing (AG)
	315-211-004	130 acres	Agriculture Exclusive, Special Building Combining Zone (AE-B-5 (160))	107 acres Agricultural Grazing (AG) 23 acres Timberland (T)
	Total Acreage	*443 acres (approx.)*		
Adjacent Parcel				
185-Acre Legal Parcel	315-146-018	78 acres	Agriculture Exclusive, Special Building Combining Zone (AE-B-5 (160))	Agricultural Grazing (AG)
	315-222-003	107 acres	Agriculture Exclusive, Special Building Combining Zone (AE-B-5 (160))	Agricultural Grazing (AG)
	Total Acreage	*185 acres*		

The Humboldt County Web GIS Mapping system does not show prime agricultural soil on the parcels. A Prime Agricultural Soils Assessment (DBS 2018) was conducted for both parcels and concluded that the total prime agricultural soil between the two is 800,365 square feet or 18.4 acres. Both parcels are under Williamson Act contracts.

The Adesa Organic, LLC property includes three agriculturally exempt barns and various ponds and fences. However, the only structures that are involved in the proposed project are two of the agriculturally-exempt barns constructed circa 2009. Both will be converted to project facilities, one for agricultural storage and the other for drying cannabis.

The adjacent property includes the following existing structures and development, none of which is in the project area or associated with the proposed project: one residence, three agriculturally exempt barns, one photovoltaic system, various outbuildings, wells, water tanks, ponds and fences.

Analysis:

a) Finding: The project will not physically divide an established community. *No Impact.*

Discussion: The proposed project would involve cannabis cultivation and processing operation on a rural site zoned to allow agricultural land uses. There are no established communities on the project area or adjacent areas. One improved access route is proposed, but would not result in physically dividing an established community.

As part of the proposed project, the applicant would be required to make the improvements outlined in the Road Evaluation Report (SHN December 2016a) included as Mitigation Measure HWQ-1 under Section 9, Hydrology and Water Quality. Impacts to associated resources have been identified and would be reduced to levels that are less than significant. A condition of

project approval will require the applicant to obtain a prescriptive right to use the section of road on an adjacent parcel, and a condition of approval will require the applicant to improve the junction of the access road at its intersection with Maple Creek Road to meet County visibility and encroachment standards.

The improvement of the existing 1.1-mile access road between Maple Creek Road and the Adesa Organic, LLC site would not physically divide an established community. The proposed access routes would result in a beneficial impact, as improvements would help support commercial traffic and ensure connectivity between the properties, which are supported by the same infrastructure. The proposed access improvements would generally follow the length of existing ranch road and would not be extended. The project would also decrease the burden associated with an increase in use of other access roads within the vicinity of the project area.

Given that there are no established communities within the project vicinity, the project and proposed access route development would not result in the physical division of an established community. Therefore, the project would not physically divide an established community, and no impacts would occur as a result of the proposed project.

b) Finding: The proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of mitigating an environmental effect. *Less than significant impact with mitigation incorporated*.

Discussion: The proposed project would not conflict with any goals, policies or objectives in the County's General Plan intended to mitigate potential environmental impacts. Land uses and zoning under the proposed project would remain consistent with the existing land uses and zoning. The agricultural use associated with cannabis cultivation and drying would be consistent with the allowable land uses under the General Plan and Zoning Ordinance. The CMMLUO identified AE-zoned parcels as sites where new cannabis cultivation and processing operations could be allowed, subject to the issuance of a Zoning Clearance Certificate for parcels between 5 and 320 acres; and a Use Permit for parcels 320 acres and above. The proposed project is requesting a Conditional Use Permit for the Adesa Organic, LLC project.

There are some areas within the general boundaries of the subject property of the Adesa Organic, LLC project that are designated Timberland (T) and zoned Timberland Production Zone (TPZ). These areas zoned TPZ and designated T do not overlap.

There are approximately 13.5 acres on the Adesa Organic, LLC property that are zoned TPZ; no project facilities exist or are proposed in the TPZ-zoned area.

There is one 23-acre portion of the Adesa Organic, LLC property that has been designated Timberland by the Humboldt County General Plan (Humboldt County GIS 2018). Part of this 23-acre patch of plan-designated Timberland overlaps with forest, and part of it excludes forest, instead encompassing a portion of an adjacent meadow. No proposed facilities are located in this patch nor in actual, naturally-occurring forestland. As defined in the Humboldt County General Plan, the Timberland designation is "primarily suitable for growing, harvesting and production of timber. Prairie and grazing lands may be intermixed" (Humboldt County 2017a). In addition, the Humboldt County General Plan finds that general agricultural activities are allowable in Timberland-designated areas (Humboldt County 2017a). Therefore, the project as proposed is consistent with the Timberland designation. The project would not prevent the growing and harvesting of timber. Ecosystem services provided by existing forest land would remain intact, and the potential for timber harvest would not be affected in the short-term or the long-term by any of the proposed project's activities.

The proposed improvements to the 1.1-mile access road that connects project facilities to Maple Creek Road passes through forestland, and will require removal of some trees of less than 12

inches in diameter in order to create the turn-outs needed to bring this section of road up to Road Category 4 equivalence, as required by Humboldt County Code. Based on the Road Evaluation Report prepared for the property (SHN December 2016a), four new turn-outs are identified, which will require removal of trees less than 12 inches in diameter in an area zoned AE-B-160. CALFIRE, in their referral response, noted their agency's enforcement responsibility for provisions of the Forest Practice Act of 1973 (CALFIRE 2017). A mitigation measure has been added to the project, identified under Section 2, Agriculture and Forestry Resources, to require the applicant to secure a Less Than 3 Acre Conversion Exemption from CALFIRE for any tree removal associated with the proposed road upgrade and to replace all commercial timber species at a 2:1 ratio. The impacts to forestry resources were assessed and mitigated to a level of less than significant in that section of the Initial Study, and thus no further mitigation is required for that proposed action of the project. The cannabis cultivation and processing project as conditioned would not conflict with the existing Timberland designation or the applicable regulations of the CMMLUO, and would conform with CALFIRE's requirements and jurisdiction over the project as designated in the Forest Practice Act of 1973.

All parcels associated with the proposed project are under Williamson Act contracts. The Williamson Act Committee has determined that cannabis cultivation is compatible with land uses identified as agricultural reserves under the Williamson Act. The County of Humboldt has also determined that cannabis cultivation is a compatible use on lands subject to Williamson Act contracts and concluded that implementation of the CMMLUO would not conflict with the goals or policies of the Williamson Act. The project was presented to the Williamson Act Committee in June 2018 and the committee found the project to be consistent with the Williamson Act Guidelines.

Therefore, the proposed project would not conflict with any goals, policies, or objectives in the County's General Plan or Zoning Ordinance adopted for the purposes of mitigating potential environmental effects. The impact would be less than significant with the application of the mitigation measures described in AFR-1 and AFR-2.

Findings:

a) The project will not physically divide an established community: **No impact.**

b) The project will not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect: **Less than significant impact with mitigation.**

12. MINERAL RESOURCES. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Setting:

Current mineral resource production in the County is primarily limited to sand, gravel and rock extraction. The State Surface Mining and Reclamation Act of 1975 (SMARA) brought about a State policy for the reclamation of mineral lands. The Humboldt County GIS database includes parcels containing mineral resources pursuant to SMARA. According to the Humboldt County GIS system, there are no parcels containing mineral resources in or near the project site (Humboldt County GIS 2018).

Analysis:

a) Finding: The project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. *No impact.*

Discussion: The project site is not within or adjacent to any mining operations according to the County GIS database (Humboldt County GIS 2018). Ground breaking is proposed as part of the proposed project, however, given that there are no known mineral resources within the project area, implementation of the project would not result in the loss of availability of a mineral resource that would be of value to the region or residents of the state. Therefore, no impact would occur.

b) Finding: The project will not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. *No impact.*

Discussion: There are no known mineral deposits of significance on or near the project site. Therefore, implementation of the project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would occur.

Findings:

a) The project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state: **No impact.**

b) The project will not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan: **No impact**.

13. NOISE. Would the project result in:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Setting:

The project site consists of two legal parcels totaling approximately 618 acres that are located east of Maple Creek Road and approximately 6 miles south of the community of Maple Creek. The project parcels are currently used for grazing activities that are proposed to continue during and after project implementation. Current improvements include seven agriculture-exempt structures and one existing residence. The site consists of primarily open areas with sections of timberland and riparian vegetation running along the drainages. Surrounding land uses include agriculture, rural residential and timber harvest. Adesa Organic, LLC project site is approximately 1.1 mile away from the nearest northern spotted owl critical habitat (ECOS 2018).

Ambient noise levels in the project vicinity are consistent with rural agricultural uses. Three data points were taken over 24-hour periods. Ambient noise at three points collected on the project site are reported in the February 2018 Adesa Organic Acoustic Study. Ambient noise levels we observed to be 53-54 dBA. The Adesa Organic Acoustic Study modeled contribution of noise from the primary sources of noise pollution associated with proposed Adesa Organic, LLC project site: generators (two 500-kW), 14 packaged air conditioning units serving the mixed-light greenhouse, and a condensing unit serving the proposed processing building (Hybrid Tech February 2018, Frank Hubach Associates 2020).

Two additional acoustic studies were prepared in April 2018 and March 2020, also focusing on the Adesa Organic site, and including measures to dampen sound from noise-generating operating equipment of the proposed operation at the treeline (Hybrid Tech April 2018, Frank Hubach Associates 2020).

Analysis:

a) Finding: The project will not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. *Less than significant impact with mitigation incorporated.*

Discussion: The project proposes cultivation and drying of cannabis products on a new site near the rural community of Maple Creek. The primary noise sources are generators used to provide power to the operation and air conditioning units for the greenhouse structure.

Noise standards in the Humboldt County General Plan are guided by policies NP-1 and NP-2 in Chapter 13 (Humboldt County 2017a). Policy NP-1 states: "*Minimize stationary noise sources and noise emanating from temporary activities by applying appropriate standards for average and short-term noise levels during permit review and subsequent monitoring*."

Policy NP-2 states, in part: "*Evaluate current noise levels and mitigate projected noise levels when making community planning and zoning decisions to minimize the exposure of community residents to nuisance noise levels*." Table 13-c within the General Plan establishes a Maximum Interior Noise Level resulting from exterior sources of over 70dB for agricultural activities.

The County Medical Marijuana Land Use Ordinance (CMMLUO) further refines and constrains the noise standard for commercial cannabis operations by establishing performance standards for generator noise. Section 314-55.2.11o of the Humboldt County Code states, in part: "*The noise produced by a generator used for cannabis cultivation shall not be audible by humans from neighboring residences. The combined decibel level for all noise sources, including generators, at the property line shall be no more than 60 decibels. Where applicable, sound levels must also show that they will not result in the harassment of Marbled Murrelet or Spotted Owl species, when generator use is to occur in the vicinity of potential habitat. Conformance will be evaluated using current auditory disturbance guidance prepared by the United States Fish and Wildlife Service."*

Humboldt County Department of Planning and Building, Departmental Policy Statement 16-005 further clarifies the approach to analyzing and addressing impacts under the code, stating in part: "*The Department could interpret the code to allow the use of a simplified compliance method. Under the simplified method, a generator site located within 1-mile of mapped critical habitat (or potential habitat as such mapping data may subsequently become available from USF&WS or CDFW) with timberland present (or within an area subject to a less than 3-acre conversion exemption) is considered by default to contain habitat or potential habitat for Marbled Murrelet or Spotted Owl species. The optional simplified method would ensure that the maximum noise exposure from the combination of background and generator created noise measured at a distance of 100 feet or the edge of habitat, whichever is closer, is at or below 50 dB, a level considered by USF&WS not to constitute harassment of these species. This approach leaves in place the option for the operator to undertake a site-specific analysis using the USF&WS guidance protocols*."

The Adesa Organic, LLC project site is within 1.1 miles of a northern spotted owl activity center. Based on the applicable guidance, the cultivation site is not considered potential habitat for northern spotted owl. No suitable NSO nesting habitat is found within 0.25-mile of the project (PNWB 2018)Thus, the prevailing standard that the project must meet for combined noise from all sources, including generators, is 60dB at the property line and 50dB at 100 feet or the edge of habitat, which is defined as the treeline most proximate to the proposed generators and fans.

All generators are designed with both a custom sound enclosure and an additional sound barrier wall that provide noise attenuation. Air conditioning units for the proposed greenhouses will be installed appurtenant to the greenhouses and will result in elevated noise levels exterior to the greenhouse structure. An air conditioning unit is also connected to the proposed processing building. These would be the primary sources of noise generation.

Three acoustic studies have been prepared for the Adesa Organic, LLC site. These studies identified the primary noise sources to include the proposed diesel generators, and 14 packaged air conditioning units serving the mixed-light greenhouse.

The first study, completed in February 2018, focused on attaining a less-than-3dB increase over ambient noise standard at the property line; the study demonstrated that project-generated noise can achieve both the standard of the new ordinance and the 60 dB standard under the existing CMMLUO with the installation of sound-dampening mitigation for the proposed generators and for the air conditioning units along the side of the greenhouse (Hybrid Tech February 2018).

The second and third acoustic studiesy focused on attaining the more rigorous standard of 50dB at the edge of habitat, here defined as the treeline most proximate (approx. 95 feet) to the proposed generators (Hybrid Tech April 2018, Frank Hubach Associates 2020). The analysis found

that the project, if properly mitigated for noise reduction, would produce 47 dB at the acoustic receiver modeled at treeline (Hybrid Tech April 2018, Frank Hubach Associates March 2020). The recommended noise mitigation measures will be included as mitigation measure NOI-1 below. Specific actions of the mitigation measure include:

- 8-foot-tall block wall and supplemental 2-foot barrier of not less than two pounds per square foot surface weight surrounding the generators
- 8-foot-tall block wall and supplemental 4-foot barrier of not less than two pounds per square foot surface weight surrounding the array of RTUs
- The block walls shall be continuous with solid metal doors with neoprene door jams. The walls shall be a minimum of 8 inches thick and be constructed of solid block or be filled after construction with grout or sand.

Based on the application of this mitigation measure, the Adesa Organic, LLC site is not anticipated to have a significant impact.

A large portion of project-related noise will occur during daytime operations, generally Monday through Sunday from 9:30 a.m. to 5:00 p.m. Some equipment, including A/C units, fans and generators, has the potential to run 24 hours per day, but the bulk of the activity on site will be during peak operating hours of 9:30 a.m. to 5:00 p.m. daily. A mitigation measure has been added to require all sources of operational noise, including fans associated with the greenhouses, not to exceed 50 decibels at 100 feet or edge of forest habitat. This is a threshold developed in consultation with the California Department of Fish and Wildlife to ensure that noise impacts on wildlife species are less than significant. This mitigation measure is listed as Mitigation NIO-3

In addition to the noise sources of HVAC units, generators, and A/C condensers that the acoustic study identified and analyzed as primary sources of noise, other sources of noise include temporary construction, employee shuttle traffic, and delivery truck traffic. The limited duration and noise intensity of shuttle traffic and delivery truck traffic is not expected to contribute a significant impact to noise pollution impacts. Construction noise is discussed below.

During the construction phase of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. This noise increase would be of short duration, and would occur during daytime hours. It is anticipated that construction will take less than a year. Activities involved in construction would generate maximum noise levels, as indicated in Table 2, ranging from 85 to 87 dB at a distance of 50 feet.

Table 2: Construction Equipment Noise

Type of Equipment	Maximum Level, dB at 50 feet
Bulldozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85

Source: Cunniff 1977

A mitigation measure has been added to the project (NOI-2) that constrains the operation of tools or equipment used in construction, drilling, repair, alteration or demolition to between the hours of 7 A.M. and 6 P.M. daily, and further requires that stationary and construction equipment be maintained in good working order and fitted with factory approved muffler systems.

In combination with this mitigation measure, due to the size of the parcels (approximately 618 acres) containing the project and surrounding topography, temporary construction noise will be reduced beyond the boundaries of the site. Considering the surrounding rural agricultural uses and lack of nearby residences, temporary construction noise will not have a significant impact on neighboring residences. Mitigation measure BIO-1 addresses the potential impacts of construction noise to northern spotted owl by constraining the construction period for the use of heavy equipment to the period outside of northern spotted owl nesting and breeding season. There is no suitable NSO nesting habitat within 0.25 mile of the project site (Pacific NorthWestern Biological 2018).

Based on the application of the identified mitigation measures, the proposed project will not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standard of other agencies.

b) Finding: The project will not generate excessive groundborne vibration or groundborne noise levels. *No impact.*

Discussion: The closest land uses potentially impacted from groundborne vibration and noise (primarily from the use of heavy equipment during construction activities) are the single-family residential units located 0.9 miles west of the project site.

Neither the short-term construction activities nor the proposed cannabis facility would be expected to generate significant groundborne noise or vibration. Any uses proposed on adjacent parcels that could result in groundborne noise will be required to be mitigated so that noise levels do not exceed Humboldt County noise standards. Some short-term minor vibrations may occur during future construction phases of the project, but the distance to other uses and projects is too great for any potential minor vibration to be of concern.

Therefore, the proposed project will not expose persons to or generate excessive groundborne vibration or groundborne noise levels.

c) Finding: The project will not, for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels. *No impact.*

Discussion: The project site is not located in the vicinity of a private airstrip or within two miles of a public airport or public use airport. The closest airport to the project area is the Kneeland Airport approximately 6.4 aerial miles northwest of the project site. The closest public airport with commercial air service is the Arcata/Eureka Airport in McKinleyville, approximately 25 aerial miles northwest of the project area.

Therefore, the proposed project will not expose people residing or working in the project are to excessive noise levels.

Mitigation:

See BIO-2 for constraints on construction period to address potential noise impacts to northern spotted owl.

NOI-1. Implementation of Noise Pollution Mitigation Measures for Adesa Organic, LLC project site

The project shall implement all measures described in the Acoustic Study and Noise Pollution Prevention Plan prepared by Hybrid Tech in April 2018 as modified by the Frank Hubach Associates 2020 noise study, to include:

- 8 foot tall block wall and supplemental 2-foot barrier of not less than two pounds per square foot surface weight surrounding the generators
- 8 foot tall block wall and supplemental 4-foot barrier of not less than two pounds per square foot surface weight surrounding the array of RTUs
- The block walls shall be continuous with solid metal doors with neoprene door jams. The walls shall be a minimum of 8 inches thick and be constructed of solid block or be filled after construction with grout or sand.

NOI-2. Construction Related Noise

The following shall apply to construction noise from tools and equipment:

- The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 7 A.M. and 6 P.M. daily.
- All stationary and construction equipment shall be maintained in good working order and fitted with factory approved muffler systems.

NOI-3. Operations Related Noise

All noise generated from the project, including generators, ACU units and greenhouse fans, shall not exceed 50 decibels at 100 feet or edge of forest habitat, whichever is closer.

Findings:

a) The project will not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies: **Less than significant impact with mitigation incorporated.**

b) The project will generate excessive groundborne vibration or groundborne noise levels: **No impact.**

c) The project will not, for a project located within the vicinity of a private airstrip or within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels: **No impact.**

14. POPULATION AND HOUSING. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Setting:

Humboldt County is a rural county with a large land area and low population density. The 2010 Census reported the county's population to be 134,623, which represents an increase of 8,105 over the population reported in the 2000 Census. The California Department of Finance (DOF) prepares estimates of statewide, county and city populations for years between the decennial census that are used by state and local government to allocate funding and for planning purposes. The DOF estimates the 2015 population of Humboldt County to be 134,398, which is a decrease of 225 people since the 2010 Census.

The DOF also develops projections of State and county population 50 years beyond the decennial census. Between 2010 and 2020, the Humboldt County population is project to increase by approximately 2.2% from 136,056 to 139,033 (an increase of 2,977 people). Between 2020 and 2030, the population is projected to increase by approximately one percent, from 139,033 to 140,608 (an increase of 1,575 people).

Analysis:

a) Finding: The project would not induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure). *Less than significant.*

Discussion: The project proposes the cultivation and drying of cannabis products. For parcels identified as APN 314-145-002, 315-211-003 and 315-211-004 (Adesa Organic LLC), the proposed project would result in the construction of two 43,200-square-foot mixed-light greenhouses, an onsite ADA-compliant restroom facility and onsite wastewater treatment system, two rainwater catchment ponds totaling 4.3 million gallons, and a proposed parking area to accommodate 3 vehicles, 3 shuttle vehicles and one ADA-accessible parking space. The parcels identified as APN 315-146-003 and 315-222-003 would result in no additional construction. Operation of the Adesa Organic, LLC project would result in the hiring of 15 full-time and 5 part-time employees, a combined total of 20 employees. No employees will live onsite. The proposed project would not result in a substantial growth in the area, as none of the employees live onsite and will be commuting in from established communities.

Growth inducing impacts are generally caused by projects that have a direct or indirect effect on economic growth, population growth, or when the project taxes community service facilities that require upgrades beyond the existing remaining capacity. The project would result in the improvement of an access road (approximately 1.1 mile) that connects the project facilities to Maple Creek Road. The road upgrades would be designed to accommodate commercial traffic associated with the proposed project. The redevelopment of the former ranch road (access route) would be the financial responsibility of the applicant and designed to meet County safety standards. The proposed access route would be used solely by affiliates of the proposed project. Furthermore, the proposed access road would not be considered an extension of roads; instead, the project would result in improvements to an existing road that does not meet current safety standards.

The project would result in infrastructure improvements (water resources, wastewater, stormwater drainage as described in Mitigation Measure HWQ-1), but none that would require use of community service systems. The project would not be connected to community service facilities.

The proposed project is not anticipated to result in any substantial growth inducing impacts as 1) no employees live on site and 2) the proposed project would result in infrastructure improvements that support the size and scale of the proposed use without an impact to existing service facilities. Therefore, impacts associated with population growth would be less than significant and no mitigation would be necessary.

b) Finding: The project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere. *No impact.*

Discussion: The cumulative project area supports one existing residential dwelling, located on the adjacent parcel APN 315-146-018 and 315-222-003. No new dwellings are proposed. Employees will not live on site. The proposed project would not displace a substantial number of existing housing, necessitating the construction of replacement housing elsewhere.

Findings:

a) The project will not induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)**: Less than significant.**

b) The project will not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere: **No impact.**

15. PUBLIC SERVICES. Would the project:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

Setting:

The project site for Adesa Organic, LLC is one legal parcel of approximately 443 acres (APNs 315-145-002, 315-211-003, and 315-211-004), which is located in the Maple Creek area, approximately 8 miles south of the intersection of Butler Valley Road and Maple Creek Road, with access from Maple Creek Road via a private driveway of approximately 1.1 miles in length. A Road Evaluation Report has been completed for the approximately 8 miles of Maple Creek Road certifying equivalence to a Road Category 4 standard (Borusas January 2018). A Road Evaluation Report for the 1.1-mile private driveway has been completed by SHN Consulting Geologists and Engineers, proposing upgrades to this road to make it adequate for the proposed commercial uses (SHN December 2016a). Other proposed improvements to the Adesa Organic, LLC site include an emergency turnaround area near the proposed pond and a fire hydrant to be installed near the proposed greenhouses (SHN February 2018a). There are two rainwater catchment ponds proposed as part of the Adesa Organic, LLC project, totaling up to 4,298,000 gallons, to be used for irrigation and graywater needs of the proposed project; water would also be made available for fire suppression in emergency situations.

The distance from Eureka to the project site is 31 miles, requiring approximately one hour and 15 minutes to drive.

Fire protection in Humboldt County is provided by local districts, cities, and the California Department of Forestry and Fire Protection (CALFIRE). The project site is within the buffer zone response area of the Kneeland Fire Protection District. The Kneeland Fire Protection District was formed in 1990 and consists of a rural volunteer fire department that supports 10-12 volunteer fire fighters who respond to an average of 30 calls per year, including structure fires, vehicle accidents, wildland fires, medical aid, and hazardous situation calls. The Kneeland Fire Protection District's response area is approximately 38 square miles, but it also serves a nearly 90 square mile buffer zone response area that include parts of Maple Creek, where the proposed project is located (KFPD 2018, Humboldt County GIS 2018). In out of district areas, response times can exceed 30 minutes (KFPD 2018). The project site is also located within a State Responsibility Area (SRA) which means that fire protection services for wildland fires are provided by CALFIRE. CALFIRE has responsibility for enforcement of Fire Safe Standards as required by Public Resources Code (PRC) 4290 and 4291. Also, CALFIRE is the primary command and control dispatch for most local agency fire districts and departments.

The Humboldt County Sheriff's Office is responsible for law enforcement in the unincorporated areas of the County, including the community of Maple Creek and the rural areas beyond Maple Creek where the project is located. The Humboldt County Sheriff's Office provides a variety of public safety services countywide (court and corrections services) and law enforcement services for the unincorporated areas of the County. The California Highway Patrol is responsible for enforcing traffic laws on roadways within

the unincorporated areas and on state highways throughout the County. The Sheriff's Office Operations Bureau is made up of seven units under the command of the Undersheriff. The most visible of these units is the Patrol Unit. Sheriff's Deputies assigned to the Patrol Unit are responsible for responding to emergency calls for service, criminal investigations, and crime prevention through neighborhood and beat patrols. The Patrol Unit has one main station in Eureka, and substations in Garberville and McKinleyville. The Eureka main station serves the Maple Creek area.

The closest school to the project site is the Maple Creek School, which is located 6 miles by direct line (or 8 miles by road) from the proposed project. Maple Creek School is in the Maple Creek Elementary School District and serves grades K-8.

The nearest park or public land to the proposed project site is the Six Rivers National Forest, which is approximately 1.5 miles away at its nearest point (Humboldt County GIS 2018). There are intervening private parcels between the proposed project site and the Six Rivers National Forest, and there is no access to Six Rivers National Forest that traverses the proposed project site.

Analysis:

a) i) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection. *Less than significant impact.*

Discussion: The proposed project proposes to build and expand agricultural facilities for the cultivation and drying of cannabis, including mixed-light greenhouses, in a rural area approximately 8 miles south and east of the community of Maple Creek by road. During peak operations, the project will provide employment for approximately 20 persons, and will not significantly increase the population in the Maple Creek area, as the majority of employees are anticipated to come from the more populated areas of Humboldt Bay and travel by vanpool shuttles daily to the project site (Borusas April 2018).

As required by fire code, the proposed processing facility will be developed with a fire suppression system. A fire hydrants is proposed for installation at the project site, located near the proposed greenhouses. In addition, the applicant proposes to allow access to the stored rainwater for CALFIRE or local fire departments in the case of an emergency.

The project will be required to comply with the Humboldt County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of buildings, minimum water supply requirements, and setback distances for maintaining defensible space. The improvement plans for the proposed project will be reviewed to verify compliance with the County's Fire Safe Ordinance.

Due to the size and nature of the proposed operation and required compliance with fire code requirements, it is not anticipated that the project would result in a significant increase in the number of calls for service. As such, the project would not result in the need for new or physically altered fire protection facilities. Impacts to fire protection services from the proposed project would be less than significant, and no mitigation would be necessary.

a) ii) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for police protection. *Less than significant impact.*

Discussion:
The project proposes the cultivation and drying of cannabis products. Cannabis-related operations are commonly associated with greater security-related demands, which may result in an increase in law enforcement services provided by the County Sheriff's Department. The proposed Adesa Organic, LLC project is a new operation that each include a Security Plan, including a staff security guard for each cultivation area and for the drying facility (Adesa Organic 2018). The security plan contained in the Cultivation and Operations Plans for the proposed project would be implemented during cannabis cultivation and processing operations. The plan must be consistent with § 5044 of the Bureau of Cannabis Control Regulations. Implementation of the security plan measures would minimize impacts of the proposed project on local law enforcement; the proposed project would thereby not result in the need for new or physically altered law enforcement facilities. Potential impacts would be less than significant, and no mitigation would be necessary.

a) iii) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services schools. *Less than significant impact.*

Discussion: The proposed project, during peak operations, would provide employment for approximately 20 persons. The project is not anticipated to significantly increase the population in the Maple Creek area, as the majority of employees are likely to come from the more populated areas of Humboldt Bay and travel by vanpool shuttles daily to the project site (Borusas April 2018). The proposed project would not include any residential housing development and would not directly or indirectly induce population growth in the area.

In the referral response from Maple Creek School District, there was a request to consider the condition of Maple Creek Road, the potential increase in traffic volume from the proposed project, and the safety of students traveling on school buses via Maple Creek Road. A Road Evaluation Report has been completed for the approximately 8 miles of Maple Creek Road certifying equivalence to a Road Category 4 standard. An applicant-proposed operating restriction for the project will require all employees to travel to and from the project site in employer-provided vanpools, reducing the number of vehicle trips per day to and from the proposed facility from 78 to 10. This proposed operating restriction would reduce the potential for increase in traffic on Maple Creek Road and the accompanying potential impact to school bus traffic to a less than significant level.

Therefore, the project would not result in the need for new or expanded school facilities, and the impacts to local schools from the proposed project are considered less than significant.

a) iv) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for parks. *No impact.*

Discussion: The proposed project is located 1.5 miles from the nearest public land or park (Six Rivers National Forest), is not visible from that public land site, and does not provide access to that public land site. As previously mentioned, the proposed project would not directly or indirectly induce local population growth and would not result in the need for new or expanded park facilities. No impact to park facilities would occur.

a) v) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for other public facilities. *No impact.*

Discussion: Since the project does not propose residential development and will not significantly increase the population in the Maple Creek area, the project would not significantly increase the demand for other public facilities, including but not limited to public health services and library services. Therefore, no impacts to other public facilities would occur as a result of the proposed project.

Applicant Proposed Operating Restrictions:

PUB-1. The project will implement the Security Plan developed as part of its Cultivation and Operations Plan for the project.

PUB-2. All employees of the proposed project will be required to vanpool in employer-provided shuttles, reducing the number of vehicle trips on a daily basis from 78 to 10 at peak shift and full build-out, reducing the number of trips on Maple Creek Road and the potential impact to school bus operation and safety on Maple Creek Road.

Findings:

a) i) The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for fire protection: **Less than significant impact**.

a) ii) The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for police protection: **Less than significant impact**.

a) iii) The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services schools: **Less than significant impact**.

a) iv) The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for parks: **No impact**.

a) v) The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for other public facilities: **No impact**.

16. RECREATION.

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Setting:

As a rural area, Humboldt County has a wealth of outdoor recreational opportunities. More than 20% of the County's 2.3 million acres are protected open space, forests, and recreation areas. Within the County boundaries, there are federal and state parks, 16 County parks and beaches operated by the Humboldt County Parks Division, recreational areas and reserves, city parks, and parks operated by special districts and non-profit organizations. However, most parks in Humboldt County are regional in scope. Outside the seven Humboldt County cities, there are few local community or neighborhood parks (Humboldt County 2017a).

There are no existing recreational resources in or near the project site. The nearest public land is Six Rivers National Forest, which is located approximately 1.5 miles east of the project area. Additional public lands are located 1.5 miles to the south and 3.0 miles to the west. There are no existing or planned bicycle trails in or near the project site (HCAOG 2012).

Analysis:

a) Finding: The project will not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. *No impact.*

Discussion: There are no recreational facilities located within the vicinity of the project area. While the proposed project would provide employment for up to 15 full-time and 5 part-time persons, the project would not directly induce population growth or otherwise result in an increased demand on existing recreational facilities. All employees live off site and commute in daily. There are no existing recreational facilities and the project would not increase the use of recreational facilities in the region. No impacts are anticipated, and no mitigation would be necessary.

b) Finding: The project will not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. *No impact.*

Discussion: The proposed project does not include construction of recreational facilities. The project would provide employment for approximately 15 full-time and 5 part-time persons. Employees will not live on site. Employees will be shuttled in from Eureka and Arcata. As such, the proposed project would not induce population growth or otherwise result in an increased demand on existing recreational facilities that would require the construction or expansion of recreational facilities. No impacts requiring the construction or expansion of recreational facilities would occur.

Findings:

a) The project will not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated: **No impact.**

b) The project will not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment: **No impact**.

17. TRANSPORTATION. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Setting:

The project site for Adesa Organic, LLC is one legal parcel of 433 acres (APNs 315-145-002, 315-211-003, and 315-211-004), which is located in the Maple Creek area, approximately 8 miles south of the intersection of Butler Valley Road and Maple Creek Road, with access from Maple Creek Road via a private driveway of approximately 1.1 miles in length. A Road Evaluation Report has been completed for the approximately 8 miles of Maple Creek Road certifying equivalence to a Road Category 4 standard. A Road Evaluation Report for the 1.1-mile private driveway has been completed by SHN Consulting Geologists and Engineers, proposing upgrades to this road to make it adequate for the proposed commercial uses (SHN December 2016a). The County Department of Public Works will require improvements to the junction of the private road and Maple Creek Road in order to meet County visibility and encroachment standards.

The project site is located approximately 31 miles from Eureka, traveling the most direct route via Kneeland Road, Butler Valley Road, and Maple Creek Road. All of these roads are County maintained. Of these, Kneeland Road and Maple Creek Road have been identified as Regionally Significant Roads by the Humboldt County Association of Governments (HCAOG 2017a). In determining Regionally Significant Roads, HCAOG generally follows the federal definition which describes a regionally significant facility as one that serves regional transportation needs: "At a minimum, this includes all principal arterial highways and all fixed guideway transit facilities that offer a significant alternative to regional highway travel" (23 CFR 450.140). Regional transportation needs include access to and from the area outside the region, major activity centers in the region, major planned developments (commercial, recreation, and employment), and transportation terminals (HCAOG 2017a).

Maple Creek Road is not identified in the Humboldt County Regional Bike Plan as an area supporting an existing or proposed bikeway (HCAOG 2012) or identified in the Humboldt County Trails Master Plan as an area of existing or proposed pedestrian trails (HCAOG 2010). Maple Creek Road is not serviced by a public transportation system, and is not identified as an area for potential development of a public transportation system in the Humboldt County Transit Development Plan for 2017-2022 (HCAOG 2017b).

The Kneeland Airport is the closest airport to the project site, and is just over 6 miles away by direct-line measurement (Humboldt County GIS 2018). The project site is not located within an Airport Compatibility Zone or any other airport land use plan.

Analysis:

a) Finding: The project will not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? *. Less than significant impact.*

Discussion: The proposed project is located approximately 8 miles south of the intersection of Butler Valley Road and Maple Creek Road, with access from Maple Creek Road via a private driveway of approximately 1.1 miles in length. A Road Evaluation Report has been completed for the approximately 8 miles of Maple Creek Road certifying equivalence to a Road Category 4 standard. A Road Evaluation Report for the 1.1-mile private driveway has been completed by SHN Consulting Geologists and Engineers, proposing upgrades to this road to make it adequate for the proposed commercial uses (SHN December 2016a). The County Department of Public Works will require improvements to the junction of the private road and Maple Creek Road in order to meet County visibility and encroachment standards; all improvements to the 1.1-mile private driveway, including conformance with County standards, are included as Mitigation Measure HWQ-2 under Hydrology and Water Quality.

Construction traffic for the project would result in a short-term increase in construction-related vehicle trips on Maple Creek Road, and potentially on Butler Valley Road and Kneeland Road, depending on the route of the construction-related traffic. Construction would result in vehicle trips by construction workers and haul-truck trips for delivery and disposal of construction materials to construction areas. Due to their short-term nature, construction activities would not result in substantial adverse effects or conflicts with the local roadway system.

As mentioned previously in the operating restrictions for Air Quality, Greenhouse Gas Emissions, and Public Services, all employees of the proposed project would be required to vanpool in employer-provided shuttles, reducing the number of vehicle trips on a daily basis from 78 to 10 at peak shift and full build-out. This operating restriction would reduce the number of trips on Maple Creek Road and other associated County roads to a level of less than significant impact.

There are no bicycle, pedestrian, or transit systems on Maple Creek Road, or planned for Maple Creek Road (HCAOG 2010, HCAOG 2012, HCAOG 2017b).

Therefore, the proposed project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. The expected impacts of the project are less than significant, and no mitigation is necessary.

b) Finding: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). *Less than significant impact.*

Discussion: CEQA Guidelines section 15064.3 dictate criteria for analyzing transportation impacts for land use and transportation projects. Projects that reduce or do not have any impact on vehicle miles traveled are considered to have a less than significant transportation impact. However, this does not necessarily mean that projects that increase total vehicle miles traveled are assumed to have a significant impact.

The Humboldt County Association of Governments (HCAOG) is the regional transportation planning agency for Humboldt County. Under its authority as the Regional Transportation Planning Agency for Humboldt County, HCAOG adopts and submits an updated Regional Transportation Plan to the California Transportation Commission and the California Department of Transportation every five years. The Regional Transportation Plan is a long-range (20-year) transportation planning document for Humboldt County. The most recent five-year update, adopted in December 2017, does not currently establish vehicular level of service criteria for County roadways in the Maple Creek area. HCAOG has also not adopted any significance standards applying vehicle miles traveled ("VMT") pursuant to CEQA Guidelines section 15064.3,

subdivision (b)(1.) Thus, there is no threshold of significance from an applicable transportation plan that can be applied to the project.

The proposed project would result in a short-term increase in construction traffic and an ongoing increase in vehicle trips for project employees. Without and understanding of the construction equipment required, it is difficult to quantify the increase in vehicle miles. However, this is not required. (See CEQA Guidelines, § 15064.3, subd. (b)(3)("For many projects, a qualitative analysis of construction traffic may be appropriate").) The increase in VMT resulting from construction would be short-term and any additional traffic would cease after each phase of construction for the project.

There would be a permanent increase in vehicle miles due to cultivation staff traveling to the project site. The applicant estimates that there will be an average of 10 one-way trips between the project site and the communities of Eureka and/or Arcata for employee shuttle vans and material delivery and haul. Using a one-way trip distance of 31 miles, this is an estimated increase of 310 vehicle miles per day.

HCAOG has not adopted any recommended significance standards applying VMT, and so a qualitative analysis is appropriate under CEQA Guidelines section 15064.3, subdivision (b)(3). Here, the VMT increase is far less than it would have been had the applicant not committed to using employer-provided shuttle vans for employee transportation, an operating restriction discussed in previous sections. Without the use of vans, there would be approximately 78 daily one-way trips, which equates to 2,418 daily vehicle miles travelled. According to the California Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA, published December 2018, absent substantial evidence of a project related significant level of VMT, projects that generate less than 110 trips per day may generally be assumed to cause a less than significant transportation impact. The 78 daily one way trips is below the guidance threshold in OPR's Technical Advisory.

Given the rural project location and resulting absence of any transit service or potential development such transit service in the future, the lack of a numerical vehicle trip threshold of significance, the use of company shuttle vans for employee transportation, and the relatively low increase in daily trips and daily vehicle miles, the proposed project is not found to be inconsistent with the transportation impact criteria in the CEQA Guidelines.

Therefore, the proposed project will not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

c) Finding: The project will not substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). *Less than significant impact.*

Discussion: A Road Evaluation Report has been completed for the approximately 8 miles of Maple Creek Road used to access the proposed project site certifying equivalence to a Road Category 4 standard, and the County Department of Public Works has reviewed and approved the evaluation.

A Road Evaluation Report for the 1.1-mile private driveway has been completed by SHN Consulting Geologists and Engineers, proposing upgrades to this road to make it adequate for the proposed commercial uses (SHN December 2016a). Some of these improvements include stream crossing upgrades, creating turnouts on blind turns to improve safety, reducing grades, and rocking the road surface to make the road more durable in year-round conditions. The County Department of Public Works has reviewed the project, and will require improvements to the junction of the private road and Maple Creek Road in order to meet County visibility and encroachment standards. All improvements to the 1.1-mile private driveway, including

conformance with County standards, will be completed as Mitigation Measure HWQ-2 as described under Hydrology and Water Quality. Impacts to associated resources would already be reduced to levels of less than significant, and as such, additional mitigation would not be required.

All activities associated with the proposed agricultural project would occur entirely within the project site and would not involve driving or operating farm equipment on public roadways.

Therefore, the proposed project would not substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersection) or incompatible uses (e.g. farm equipment). Potential impacts would be less than significant, and no mitigation would be necessary.

d) Finding: The project will not result in inadequate emergency access*. Less than significant impact.*

Discussion: As part of the proposed project, an emergency turnaround area is proposed for development near the proposed pond. Additionally, a fire hydrant is proposed for installation near the greenhouse. In addition, the applicant proposes to allow access to the stored rainwater for CALFIRE or local fire departments in the case of an emergency.

The project will also be required to comply with the Humboldt County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and setback distances for maintaining defensible space (CALFIRE 2017). The improvement plans for the proposed project will be reviewed to verify compliance with the County's Fire Safe Ordinance which will ensure that adequate access for emergency vehicles is provided.

Therefore, the proposed project will not result in inadequate emergency access. Potential impacts would be less than significant, and no mitigation would be necessary.

Applicant Proposed Operating Restrictions:

TT-1. The project will complete the road upgrades on the 1.1-mile private driveway outlined in the Road Evaluation Report that has been completed for the project, as well as the improvements required by the Humboldt County Department of Public Works in order to meet County visibility and encroachment standards, per Mitigation Measure HWQ-2.

TT-2. All employees of the proposed project will be required to vanpool in employer-provided shuttles, reducing the number of vehicle trips on a daily basis from 78 to 10 at peak shift and full build-out, reducing the number of trips on Maple Creek Road.

Findings:

a) The project will not conflict with a, program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities: **Less than significant impact**.

b) The project will not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b): **Less than significant impact**.

c) The project will not substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment): **Less than significant impact**.

d) The project will not result in inadequate emergency access: **Less than significant impact**.

18. TRIBAL CULTURAL RESOURCES. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code §5020.1(k)?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1?	☐	☒	☐	☐

Setting:

A cultural resources study for the project site was prepared prior to approval of the CMMLUO Permits for the cannabis cultivation operations proposed on the site. The study included a records search, Native American Heritage Commission (NAHC) inquiry, coordination with local tribes, and pedestrian survey of the site (Roscoe and Associates 2017). In addition, a Phase II Subsurface Investigation of the *Cowan Creek 433 Site A* was conducted (Roscoe and Salisbury 2017).

The project area is within the ethnographic territory of the Mad River Whilkut tribe. As part of preparation for a cultural resources survey, representatives of the Whilkut Tribe, Bear River Band of the Rohnerville Rancheria THPO were contacted. Erika Cooper, Rohnerville Rancheria THPO, was present during archaeological field investigation as a Native American representative on December 14, 2016 and helped formulate recommendations regarding protection of cultural resources during the proposed project (Roscoe and Associates 2017).

A search of records at the Northwest Information Center (NWIC) revealed that a portion of the project area has been subject to previous cultural resources investigation, and that a total of four cultural resources surveys have been conducted within ¼ mile of the proposed project (Roscoe and Associates 2017). These investigations collectively resulted in the identification of three Native American archaeological sites within ¼ mile study area. Site P-12-1969 is located outside of the direct project area, approximately 40 meters east of the project road forming the private driveway at 23333 Maple Creek Road (Roscoe and Associates 2017). The other two archaeological sites are more than 180 meters from the current project area. These sites will be avoided during the project.

At the time of the pedestrian survey, the project site was mostly undeveloped and used for grazing and hay production. Two new surface resources were identified: Cowen Creek 433 Site A and Cowen Creek 433 Site B (Roscoe and Associates 2017). Cowen Creek 433 Site A was subjected to a Phase II subsurface investigation which resulted in a recommendation for eligibility for the California Register of Historic Resources under Criterion 4 as well as possibly under Criterion 1 (Roscoe and Salisbury 2017).

Analysis:

a) Finding: The project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in §5020.1 (k). *Less than significant with mitigation incorporated.*

Discussion: A Cultural Resources Investigation of the project site conducted by Roscoe and Associates in April 2017 found two archaeological resources as defined in Public Resources Code §5020.1 (k). Two pre-contact resources have been recorded within the project site, and upon notification of the results of the cultural resources survey, the THPO of Bear River expressed concerns. A Phase II subsurface investigation of Cowen Creek 433 Site A, resulted in a recommendation for eligibility for the California Register of Historic Resources under Criterion 4 as

well as possibly under Criterion 1. Subsequent to the excavation in June 2017, a meeting was held on July 13, 2017 with Bear River Tribal Council member Edwin Smith, THPO Erika Cooper, and Mr. Roscoe. At that meeting, the Bear River agreed that the proposed cannabis cultivation greenhouses and other proposed project elements be constructed within the identified archaeological site, provided that certain mitigation measures are followed as well as implementation of standard cultural resource construction mitigation (included as Mitigation Measure CUL-2) regarding inadvertent discoveries, which would reduce potential impacts to a level of less than significant (Roscoe and Salisbury 2017).

b) Finding: The project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in §5024.1. *Less than significant with mitigation incorporated.*

Discussion: A Cultural Resources Investigation of the project site conducted by Roscoe and Associates in April 2017 found two archaeological resources as defined in subdivision (c) of Public Resources Code §5024.1. Two pre-contact resources have been recorded within the project site, and upon notification of the results of the cultural resources survey, the THPO of Bear River expressed concerns. A Phase II subsurface investigation of Cowen Creek 433 Site A, resulted in a recommendation for eligibility for the California Register of Historic Resources under Criterion 4 as well as possibly under Criterion 1. Subsequent to the excavation in June 2017, a meeting was held on July 13, 2017 with Bear River Tribal Council member Edwin Smith, THPO Erika Cooper, and Mr. Roscoe. At that meeting, the Bear River agreed that the proposed cannabis cultivation greenhouses and other proposed project elements be constructed within the identified archaeological site, provided that certain mitigation measures are followed (Mitigation Measure CUL-1), as well as implementation of standard cultural resource construction mitigation (Mitigation Measure CUL-2) regarding inadvertent discoveries, which would reduce potential impacts to a level of less than significant (Roscoe and Salisbury 2017).

Mitigation:

See Mitigation Measures CUL-1 and CUL-2, Cultural Resources**.**

Findings:

a) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code §5020.1(k): **Less than significant impact with mitigation incorporated.**

b) Cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1: **Less than significant impact with mitigation incorporated.**

19. UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Setting:

The project is located in a rural area of the county, approximately 8 miles by road south of the town of Maple Creek. The project site does not receive municipal water or wastewater utility services. The property is off the grid and proposes to use generators and solar PV installations to provide power.

Solid waste from Humboldt County is largely transported to one of three out-of-area landfills for disposal: the Anderson Landfill in Shasta County; Dry Creek Landfill in Medford/ Oregon; and Potrero Hills Landfill in Suisun City. In rural areas of the county/ residents and businesses not served by commercial waste haulers or other solid waste transport arranged by the Humboldt County Public Works Department may haul solid waste to permitted transfer station and container sites located in several areas of Humboldt County where it is transported to an out-of-area landfill. In a Commercial Medical Marijuana Permit application with the County Department of Environmental Health, the applicant indicated the preferred solid waste facility is Humboldt Waste Management Authority in Eureka. The applicant will self-haul waste to the facility. Solid waste is then transported for disposal to the Anderson Landfill for disposal. This landfill is not expected to close until 2036.

Sources of water that will be used by the proposed project include rainwater which will be captured by greenhouse rooftop collection and two rainwater catchment ponds. The total water that will be collected by rainfall catchment is approximately 6,201,000 gallons annually. There is also an existing, permitted well on the project area which would also provide irrigation water. A new well is proposed as part of the project for irrigation purposes.

There are no existing wastewater generating structures associated with the project area. An ADA-restroom facility with an onsite septic system and accompanying leach filed is proposed for parcel APN 315-211-003 (Adesa Organic, LLC site).

Analysis:

a) Finding: The project will not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electrical power, natural gas, or

telecommunications facilities, the construction or relocation of which could cause significant environmental effects. *Less than significant impact*.

Discussion: There are no public water or wastewater treatment systems, stormwater drainage systems, electrical power systems, natural gas systems, or telecommunications systems serving the project site.

Irrigation water used for both projects is primarily sourced from rainwater, collected from precipitation onto greenhouse roofs and ponds. The greenhouses would have pervious floors; however, their roofs would be effectively turned into impervious surfaces. All runoff associated with mixed-light greenhouses would be collected as the primary water source for irrigation. All excess irrigation runoff would be captured and recycled through an Everfilt mixed-media filtration system. No excess irrigation water is anticipated to run off site. The two projects will be able to collect approximately 2,888,000 gallons of rainfall each year from water falling directly onto two proposed ponds. The project will also collect approximately 3,312,000 gallons annually off of the greenhouse roofs. The total water that will be collected by rainfall catchment is approximately 6,201,000 gallons annually. The water harvest calculations are based on rainfall data from Bridgeville, California which is similar in elevation and distance inland as the project area. The project proposes to store rainwater in two lined, open ponds. Pond A, located near the processing facility, will have a total storage capacity of 3,221,000 gallons. Pond B, located to the west of the cultivation area and away from other infrastructure a total storage capacity of up to 1,077,000 gallons. The total available water storage among the two proposed ponds and all hard tanks is 4,330,000 gallons. All elements of the water source and storage facilities will effectively be shared between the two projects. There is an existing, permitted well, which would provide a potential source of irrigation water for the cultivation and processing operation. There is also a proposed well, which would also provide a potential source of irrigation water for the cultivation and processing operation. The well water would serve as a backup to rainwater catchment, and would be stored in the ponds as needed to meet any forbearance requirements and irrigation or operational needs.

The project would employ 15 full-time and 5 part-time persons. Drinking water for employees will be imported to the project site and provided in water coolers placed in all work and break areas throughout the project area. The project would result in the installation of a new onsite wastewater treatment system to accommodate the staff, which would be constructed in accordance with the Humboldt County Department of Environmental Health sewage disposal system requirements. No construction of new public wastewater systems would be required.

The installation of the rainwater catchment ponds, the proposed well, and the onsite wastewater treatment system, as proposed by the project, would result in physical impacts to the surface and subsurface of the project area. However, the impacts are part of the project's construction phase and are evaluated throughout this document. In instances where significant impacts have been identified as a result of project construction and/or operation, mitigation measures have been included to reduce those impacts to levels of less than significant. As such, additional mitigation would not be required.

The project would require the construction of a new on-site electrical system including the development of rooftop solar and a photovoltaic array. The construction of these facilities would not result in significant environmental effects, primarily due to their placement on existing structures (in the case of the rooftop arrays) and the relatively small footprint (in regard to the PV array). The PV array would not result in any additional net impervious surface, nor would it pose a significant environmental risk. No new natural gas nor telecommunications facilities are proposed.

Therefore, the proposed project will not result in significant environmental effects due to the relocation or construction of new water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities.

b) Finding: The project will not have insufficient water supplies available to serve the project and reasonable foreseeable future development during normal, dry, and multiple dry years. *Less than significant impact.*

Discussion: The project site is not served by a municipal water system. Anticipated annual water usage is estimated to be 1,864,000 gallons for Adesa Organic, LLC. Water is sourced from rainwater, collected from precipitation onto greenhouse roofs and catchment ponds. The project will be able to collect approximately 2,888,000 gallons of rainfall each year from water falling directly onto two proposed ponds. The project will also collect approximately 3,312,000 gallons annually off the greenhouse roofs. The total water that will be collected by rainfall catchment is approximately 6,201,000 gallons annually. The water harvest calculations are based on rainfall data from Bridgeville, California which is similar in elevation and distance inland as the project area.

The project proposes to store rainwater in two lined, open ponds. Pond A, located near the drying and storage facilities, will have a total storage capacity of 3,221,000 gallons. Pond B, located to the west of the cultivation site and away from other infrastructure a total storage capacity of up to 1,077,000 gallons. This pond would only be constructed on an as-needed basis. Pond A alone will likely be sufficient to provide for the needs of the project. The total available water storage among the two proposed ponds and all hard tanks is 4,330,000 gallons. All elements of the water source and storage facilities will effectively be shared between the two projects. Installation of the rainwater catchment ponds would result in physical impacts to the project area.

There is an existing, permitted well which would provide a potential source of irrigation water for the cultivation and processing operation. There is also a proposed well which would also provide a potential source of irrigation water for the cultivation and drying operation. The applicant has submitted a Lake and Streambed Alteration Agreement to the California Department of Fish and Wildlife, and if the wells are found to be hydrologically connected to jurisdictional waters of the State, these sources will be subject to any applicable forbearance requirements. The applicant shall coordinate with the County Department of Environmental Health regarding the proposed well and required permits. The well water would serve as a backup to rainwater catchment, and would be stored in the ponds as needed to meet any forbearance requirements and irrigation or operational needs.

The Adesa Organic, LLC project proposes to install three 10,000-gallon water storage tanks for a total of 30,000 gallons of hard tank storage.

Project cultivation needs demand is approximately 1,864,000 gallons per year. The project will be able to weather both dry and multiple dry years, given the total proposed storage.

Drinking water for employees will be imported to the project site and provided in water coolers placed in all work and break areas throughout the project area.

Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. No mitigation would be necessary.

c) Finding: The project will not result in a determination by the wastewater treatment provider which services or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. *No impact.*

Discussion: There are no public wastewater treatment providers serving the project area.

The proposed project would install a new, on-site wastewater treatment system that will be designed to adequately treat the estimated wastewater discharge volume and strength from the proposed cultivation facility and will be reviewed for compliance with the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) and Humboldt County Division of Enviro-mental Health (DEH).

The proposed project will not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

d) Finding: The project will not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. *Less than significant impact.*

Discussion: Solid waste generated by the project would include the following: 1) plant material, nutrient supplement and soil containers generated from cultivation and 2) typical office and domestic solid waste generated by employees.

The applicant proposes to self-haul solid waste to the Humboldt Waste Management Authority transfer station in Eureka. The applicant would haul waste once per week and recycling once per month. The transported waste would be part of the larger existing operation on the project site. The Humboldt Waste Management Authority generally transports waste to the Anderson Landfill, which is not expected to close until 2036. The amount of waste generated does not constitute an appreciable increase that would be beyond what can reasonably be handled by local infrastructure. Therefore, the proposed project will be served by landfills with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Therefore, the proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

e) Finding: The project will not violate any federal, state, and local management and reduction statutes and regulations related to solid waste. *Less than significant impact.*

Discussion: The California Integrated Waste Management Act of 1989 (Public Resources Code Division 30), enacted through Assembly Bill 939 and modified by subsequent legislation, required all California cities and counties to implement programs to divert waste from landfills (Public Resources Code Section 41780). Compliance with AB 939 is determined by the Department of Resources, Recycling, and Recovery (Cal Recycle), formerly known as the California Integrated Waste Management Board (CIWMB). Each county is required to prepare and submit an Integrated Waste Management Plan for expected solid waste generation within the county to the CIWMB. In 2012, the unincorporated area of Humboldt County met or exceeded the waste diversion mandate of 50 percent set by the Integrated Waste Management Act of 1989 (Humboldt County 2017a).

The proposed project would comply with all federal, state, and local statutes related to solid waste, including AB 939. This would include compliance with the Humboldt Waste Management Authority's recycling, hazardous waste, and composting programs in the county to comply with AB 939. The proposed project will use a soil fertility management plan from a crop management company to continuously test soil nutrient levels and recommend organic amendments to rebalance the soil. This process will allow the applicant to recycle soil, therefore minimizing the quantity of soil waste that will go to the landfill. The project will also use all 'vegan' certified organic ingredients in a soilless potting media.

Therefore, the proposed project will not violate any federal, state, and local statutes and regulations related to solid waste. Impacts would be less than significant, and no mitigation would be necessary.

Findings:

a) The project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects: **Less than significant impact.**

b) The project will not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years: **Less than significant impact.**

c) The project will not result in a determination by the wastewater treatment provide which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments: **No impact.**

d) The project will not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals: **Less than significant impact.**

e) The project will not violate any federal, state, and local management and reduction statutes and regulations related to solid waste: **Less than significant impact.**

20. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Setting:

The Adesa Organic, LLC project site is predominantly undeveloped with some existing structures that have been used to support the agricultural use of the 433-acre property. The adjacent parcel contains a rural residence which occupies approximately 1 acre and is not part of the proposed cannabis cultivation project. Grazing has historically and continues at present to be the primary agricultural use of both properties.

Portions of the project site are within a Wildland Fire Rating Zone of "High," and portions of the project site are within a Wildland Fire Rating Zone of "Moderate," indicating that the area is at moderate to high risk of wildland fire (Humboldt County GIS 2018). The fire hazard severity zone for the project is classified as "Very High." The subject properties are located in the Kneeland Volunteer Fire Response Area, but are in State Responsibility Area (SRA) lands, which means the site is an area of legal responsibility for fire protection by CALFIRE.

Analysis:

a) Finding: The project will not substantially impair an adopted emergency response plan or emergency evacuation plan. *Less than significant impact.*

Discussion: The project would develop cannabis cultivation and drying facilities on rural property approximately 6 miles south and east of the community of Maple Creek on a direct line. From Butler Valley Road, the project site is accessed via approximately 8 miles of Maple Creek Road, which is a County-maintained road that provides access to rural residential, agricultural and public facilities. The applicant provided documentation of evidence that the entire section of Maple Creek Road from Butler Valley Road to the intersection of the private driveway leading to the project site is equivalent to a Road Category 4 Standard. The applicant retained SHN Consulting Engineers and Geologists to prepare a road evaluation report for the 1.1-mile section of private road between Maple Creek Road and the barn complex. The road is an average of 15 feet wide and with a grade that varies between 0-15%. The report identified the road as being very low traffic with less than 10 average daily trips.

Recommended improvements included installing additional turnouts and rocking the surface (SHN December 2016a). The Department of Public Works referral response indicates that the

intersection of Maple Creek Road and the Adesa Organic, LLC access road will need to be upgraded to meet the County visibility ordinance and encroachment ordinance standards (Humboldt County 2017a). The project also proposes to improve existing access roads within the project site and construct emergency turnaround and parking areas on the Adesa Organic property to serve the proposed cannabis uses. All of the proposed access improvements will improve emergency access and circulation within the project site.

The project will be required to comply with the Humboldt County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and setback distances for maintaining defensible space (CALFIRE 2017). The improvement plans for the proposed project will be reviewed to verify compliance with the County's Fire Safe Ordinance which will ensure that adequate access for emergency response and evacuation is provided. The project proposes to impound irrigation water that will be more than sufficient for on-site firefighting. Given these measures, the project will comply with fire safe regulations and will not impair any emergency response or evacuation plan.

Therefore, the proposed project will not substantially impair an adopted emergency response plan or emergency evacuation plan.

b) Finding: The project will not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors, or otherwise exacerbate wildfire risks. *Less than significant impact*.

Discussion: The proposed Adesa Organic, LLC cannabis developments are located on a rural agricultural parcel primarily in open clearings. New and existing infrastructure will be developed on approximately 10.75 acres across the combined 618 acres between the two legal parcels. There is little surrounding the parcel that can be considered sources of pollutants in the event of a wildfire beyond the typical pollutants (carbon dioxide, carbon, and ozone precursors) resulting from wildfire. The project area is characterized by forest and open, grassy clearings on a general uphill slope.

The primary on-site fire hazards include two 5,000-gallon diesel tanks, multiple generators, and batteries for the photovoltaic system. The diesel tanks will have required secondary containment that will prevent fuel from migrating away from the site and/or contaminating the site and increasing fire risk in the event of a leak. Leaks will be able to be spotted when tanks are routinely filled. The generator and battery units will be enclosed, greatly reducing their risk of starting a wildfire.

Given the project site, features, and the surrounding area, the proposed project is unlikely to expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors, or otherwise exacerbate wildfire risks.

c) Finding: The project will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Less than significant impact.

Discussion: The Adesa Organic, LLC project require the installation of infrastructure related to the project, including infrastructure related to on-site utilities and emergency response. The 1.1-mile private drive to the project location will be upgraded based on the recommendations of the road evaluation report, including rocking the surface and installing additional turnouts (SHN

December 2016a). The construction of the road does not represent a change that will exacerbate wildfire risk.

The project will require the installation of a cultivation water source, an emergency fire hydrant, and emergency turnaround. These are required by the County Fire Safe Ordinance standards. The installation and maintenance of this infrastructure will not exacerbate fire risk nor result in temporary or ongoing impacts to the environment in regard to wildfire. On the contrary, these are required for fire safety. The proposed pond will impound water that can be used during fire emergency on- or off-site.

The project will require the installation of rooftop solar, a PV array, and a battery bank. These facilities operate at a far lower voltage than typical utility service, which will not be installed or located on site for the project. Photovoltaic systems and their associated infrastructure have a degree of fire risk. While photovoltaic fires are relatively rare, they can occur, and are most often the result of cell mismatch or DC-arcing due to improper installation (SFPE 2015). Due to improvements in materials, installation, and fire resistance requirements, the wildfire risk from a properly-installed photovoltaic system, both standalone panels and rooftop, is considered less than significant.

Therefore, the project will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment

d) Finding: The project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Less than significant impact.

Discussion: Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material, either triggered by static (i.e., gravity) or dynamic (i.e., earthquake) forces. The lack of vegetative cover after wildfire can exacerbate landslide and flooding risks due to increased runoff and less infiltration of water into the ground.

Slopes within the proposed development areas range from near-level to 15%, with all proposed development located on slopes of less than 15%. Areas adjacent to proposed development have slopes ranging up to approximately 30%. No evidence of slope failure was observed during site reconnaissance for the Geotechnical Report, and the slope stability hazard was characterized as low (SHN November 2016). Humboldt County Web GIS data does not identify any areas of historic landslides on the subject property (Humboldt County GIS 2018).

The project area is well outside the flood zone and the risk of flooding due to increased runoff following a wildfire is low. The project also will not alter any slopes in such a way that they would pose an increased risk of instability or downslope landslides. Based on these analyses, the potential risk to people or structures from landslide, even following a wildfire, is determined to be low, and there will be a less than significant impact.

Therefore, the proposed project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Findings:

a) The project will not substantially impair an adopted emergency response plan or emergency evacuation plan: **Less than significant impact**.

b) The project will not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors, or otherwise exacerbate wildfire risks: **Less than significant impact**.

c) The project will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. **Less than significant impact.**

d) The project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. **Less than significant impact.**

21. MANDATORY FINDINGS OF SIGNIFICANCE.

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Setting:

The project information provided for each of the topics above has been reviewed for all actions associated with it; during both temporary construction and long-term operation. Based on the project description and its location, the proposed project will not result in any significant impacts with the incorporated operating restrictions, mitigation measures, as well as those standards and requirements of other regulating resource agencies.

Analysis:

a) Finding: The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. *Less than significant impact with mitigation incorporated.*

Discussion: All impacts to the environment, including impacts to habitat for fish and wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plants and animal species, and historical and prehistorical resources were evaluated as part of the analysis in this document. Where impacts were determined to be potentially significant, mitigation measures have been imposed to reduce those impacts to less than significant levels. Accordingly, with incorporation of the mitigation measures imposed throughout this document, the proposed project would not substantially degrade the quality of the environment and impacts would be less than significant.

Mitigation:

All Mitigation Measures discussed in this document shall apply (See Section 20 – Discussion of Mitigation Measures, Monitoring, and Reporting Program). Proposed Mitigation Measures include AES-1, AFR-1, AFR-2, BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8, CUL-1, CUL-2, ENE-1, GEO-1, GEO-2, HWQ-1, HWQ-2, HWQ-3, NOI-1, NOI-2, NOI-3 shall apply.

b) Finding: The project will not have impacts that are individually limited, but cumulatively considerable. ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects). *Less than significant impact with mitigation incorporated.*

Discussion: Adesa Organic, LLC has proposed 86,400 square feet of mixed-light cannabis cultivation, on-site drying and storage facilities, bathrooms and wastewater disposal systems, use of existing agricultural building/building sites, diesel generators, fuel tanks, air conditioning units, photovoltaic systems and battery sheds, clone sheds, rainwater catchment ponds, wells, water storage tanks, road improvements, and parking areas on an approximately 443-acre parcel.

Impacts have been described and assessed based on their cumulative implementation of the proposed project has the potential to result in impacts to the environment that are individually limited, but cumulatively considerable, including impacts to Aesthetics, Agriculture and Forestry Resources, Biological Resources, Cultural Resources, Geological Resources and Soils, Hydrology and Water Quality, Noise, and Tribal Cultural Resources.

There are a number of other cannabis developments in the general vicinity of the Adesa Organic, LLC project. These include two applications in the immediate vicinity of the Adesa project, and four more further afield, only one of which is approved. There are a number of other permit applications in the vicinity of the proposed projects that were either withdrawn, denied, or canceled. Within a three-mile radius of the project site, there are a total of 5 applications under review and one cannabis application that is approved. There are no non-cannabis discretionary permit applications within the vicinity of the project site.

An applicant has applied for two conditional use permits and a special permit for 56,235 square feet of commercial cannabis cultivation on a parcel to the south of the Adesa Organic LLC project. This project consists of both outdoor and mixed-light cultivation, an associated nursery, and a commercial processing facility. Project water is sourced from two existing ponds and a permitted well. Power will be sourced from a 100kW diesel generator and propane generators with appropriate noise attenuation. This project is not yet approved.

There is a second proposed cannabis cultivation on a 417-acre parcel directly to the southwest of the Adesa project. This project permit application consists of four conditional use permits for a new mixed-light cultivation operation with the development of 37 greenhouses totaling four cultivated acres. Irrigation water will be sourced from rainwater catchment with 2.5-million-gallon pond and additional storage tanks. The project would employ approximately 24 full-time and up to 2 part-time employees. Power would initially be supplied by generators, with PG&E service being installed in the future. Up to six acres onsite will be reserved for RRR cultivation that would consist of outdoor cultivation and require separate land use approvals.

These two projects all require the use of Maple Creek Road for project access and are all located between 0.5 mile and 1.5 miles of the project sites.

There are three additional projects further afield from the Adesa Organic, LLC project. These include an application for an existing 9,600-square-foot mixed-light operation located approximately 3 miles to the northwest, an application for 17,780 square feet of existing outdoor medical cannabis cultivation located approximately 2.2 miles to the southwest, an application for 10,000 square feet of existing outdoor cannabis cultivation located approximately 2.1 miles to the southwest, an application for 22,000 square feet of existing mixed-light cultivation located approximately 2.3 miles to the southwest, and an application for a zoning clearance certificate

for 10,000 square feet of new mixed-light cultivation approximately 3.2 miles to the southeast. None of these projects are yet approved.

There is only one approved project in the general vicinity, consisting of 17,500 square feet of outdoor and mixed-light cultivation located 2.5 miles southwest of the Adesa project. Power for this project is provided by solar panels. Project access uses Mountain View Road and does not require use of Maple Creek Road.

The project sites closest to the Adesa Organic, LLC project have the theoretical potential to be cumulatively considerable, given the relatively small distance between them. Nearly all of the proposed activities and development associated with these projects will take place on the opposite side of Maple Creek Road at a lower elevation than the project site. There is no public viewing point where all of these project sites are viewable.

The other proposed cannabis projects in the vicinity of Adesa Organic, LLC all have the potential to create individual aesthetic impacts. Specifically, each is a mixed-light operation with lights running through some nighttime hours, which could add unwanted light and visually alter public views. However, each project is required by the CMMLUO to adhere to the International Dark Sky Association standards. The blackout curtains that will be implemented as part of the Adesa Organic, LLC project will ensure that these two projects do not result in any light pollution that will be cumulatively considerable with other projects.

The project's impact on the golden eagle species, population or range is not cumulatively considerable. While two golden eagle individuals have been observed in the general area, a protocol-level study confirms that the Project site is located with an adequate buffer distance away (i.e. greater than one mile) from the nearest golden eagle nest as well as observed flight paths of the observed golden eagle individuals. Further, multiple studies have confirmed that the Project site provides lower quality habitat in comparison to much higher habitat that is abundantly available closer to the nest site for this pair of golden eagles. Thus, the Project's contribution to any impact is insubstantial, and less than cumulatively considerable. (*Save the Plastic Bag Coalition v. City of Manhattan Beach* (2011) 52 Cal.4th 155.) While other proposed cannabis operations are located much closer to these golden eagle individuals and may, therefore, have a greater impact, "[t]he mere existence of significant cumulative impacts cause by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." (CEQA Guidelines, § 15064, subd. (h)(4)); see also *Sierra Club v. West Side Irrigation Dist*. (2005) 128 Cal.App.4th 690, 702 ("Merely listing . . . other projects occurring in the area that may cause significant cumulative impacts is not evidence that the assignments will have impacts or that their impacts are cumulatively considerable"); *Leonoff v. Monterey County Board of Supervisors* (1990) 222 Cal.App.3d 1337, 1358 [impacts of project not cumulatively considerable when no substantial evidence that any incremental impacts of the project are potentially significant]).

The noise impacts of the projects are not cumulatively considerable. Each individual project is required to adhere to the same 60 dBA standard at the property line, and it is highly unlikely the noise impacts will not add to each other, given the distance between projects and forested land separating each development. Additionally, all projects are likely subject to the 50 dBA standard at tree line, and at least one is required to implement noise attenuation measures. Given this stricter standard, each will have a localized noise impact specific to its individual project.

With respect to cumulative transportation impact, each of these four projects uses Maple Creek Road as its primary County road access. The two other projects are anticipated to require an estimated 30 full time employees and 28 part-time employees. All of these employees would use Maple Ridge Road to access their cultivation jobs. The Road Evaluation Report for the Adesa Organic, LLC project has determined that Maple Creek Road is consistent with a Road Category 4 standard. Although it has a number of narrow points, it generally meets the required width.

Construction traffic for each of the projects will result in a short-term increase. It is unlikely that construction for all projects occurs simultaneously, and the staggered, short-term nature of the construction traffic is anticipated to have a less than significant impact on Maple Creek Road. Worker trips for all area projects will result in an increased number of trips along Maple Creek Road. Even a cumulative increase of 160 trips would not be a cumulatively significant impact given the rural project location and resulting absence of any transit service or potential development such transit service in the future. Further, however, the operating restrictions for Air Quality, Greenhouse Gas Emissions, and Public Services, require all employees of the Adesa project to vanpool in employer-provided shuttles, thereby reducing the number of vehicle trips on a daily basis from 78 to a less than cumulatively-considerable10 at peak shift and full build-out. If the other projects are required to do likewise through either applicant-committed measures or required mitigation, the number of daily trips along the road would be reduced from an estimated 160 to approximately 30. This would further reducecumulative VMT to well below significant levels.

The six projects that are further from the Adesa Organic, LLC projects have effects that will not be cumulatively considerable, given their distance. The traffic impacts from these projects are not cumulative, as the access routes are different. Noise impacts that are mitigated to the required standard at property line are not cumulatively significant, since each are localized. The mixed-light operations are all required to meet International Dark Sky Association Standards, which will not lead to cumulative glare or light pollution during nighttime hours. The cumulative impacts from the projects over two miles from the projects are considered less than significant.

In all instances where the project has the potential to contribute to cumulatively considerable impacts to the environment (including the resources listed above) mitigation measures have been imposed to reduce the potential effects to less than significant levels. As such, with incorporation of the mitigation measures imposed throughout this document, the proposed project would not contribute to environmental effects that are individually limited, but cumulatively considerable, and impacts would be less than significant.

Mitigation:

Mitigation Measures
AES-1, AFR-1, AFR-2, , BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8, CUL-1, CUL-2, ENE-1, GEO-1, GEO-2, HWQ-1, HWQ-2, HWQ-3, NOI-1, NOI-2, NOI-3 shall apply.

c) Finding: The project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly. *Less than significant impact with mitigation incorporated.*

Discussion: The proposed project's potential to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this document. In instances where the proposed project has the potential to result in direct or indirect adverse effects to human beings, including impacts to Aesthetics, Agriculture and Forestry Resources, Biological Resources, Cultural Resources, Geological Resources and Soils, Hydrology and Water Quality, Noise, and Tribal Cultural Resources, mitigation measures have been applied to reduce the impact to below a level of significance. With required implementation of mitigation measures identified in this document, construction and operation of the proposed project would not involve any activities that would result in environmental effects which would cause substantial adverse effects on human beings.

Mitigation:

Mitigation Measures
AES-1, AFR-1, AFR-2, , BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8, CUL-1, CUL-2, ENE-1, GEO-1, GEO-2, HWQ-1, HWQ-2, HWQ-3, NOI-1, NOI-2, NOI-3 shall apply.

22. DISCUSSION OF MITIGATION MEASURES, MONITORING, AND REPORTING PROGRAM

The Department found that the project could result in potentially significant adverse impacts unless mitigation measures are required. A list of Mitigation that addresses and mitigates potentially significant adverse impacts to a level of non-significance follows. A Mitigation and Monitoring Report checklist is attached.

Mitigation:

AES-1 Light Pollution Prevention Plan

Prior to issuance of any permits or clearances the applicant shall provide to the County Planning Division a lighting plan demonstrating that all outdoor lighting for the proposed project would not deliver or have the potential to deliver light pollution, from sunset to sunrise. The lighting plan shall meet the International Dark Sky Association standards and be approved by the County Planning Division prior to the issuance of building permits.

AFR-1 Less Than 3 Acre Conversion Exemption

The applicant shall secure a Less Than 3 Acre Conversion Exemption from CALFIRE for any tree removal associated with the project, including tree removal required for the road improvements (turn-outs) identified in the Road Evaluation Report for the project.

AFR-2 Timberland Mitigation

Timber species over 12 inches in diameter at breast height shall not be removed as part of the proposed project. Prior to the initiation of cultivation activities, native timber species shall be replanted on the property at a 2:1 ratio for every commercial timber species that is removed for proposed road improvements.

BIO-1 Limits of Construction Period for Northern Spotted Owl and other raptors

No construction work shall occur during the northern spotted owl nesting season (February 1st- July 31st) unless a wildlife biologist with experience in northern spotted owl protocol surveys completes a biological assessment of the property to determine whether the area has northern spotted owl presence and whether site specific avoidance measures are necessary to avoid any impact to the species. Any measures developed by the biologist must be adhered to during the nesting season. Regardless of northern spotted owl or other raptor presence on the property, no proposed activity generating noise levels 25 or more decibels above ambient noise levels or with maximum noise levels above 90 decibels shall occur at 100 feet from the project site or edge of habitat, whichever is closer, during the northern spotted owl nesting season.

BIO-2 Pond Maintenance to Prevent Bullfrog Infestation

All constructed ponds shall be kept free of American bullfrog infestations to prevent this non-native species from impacting special status aquatic species, such as the northern red-legged frog. To prevent significant bullfrog populations from developing due to the aquatic environment provided by the rainwater catchment ponds, the following measures shall be implemented as part of the project:

d) Controlling the bullfrog population following colonization will be achieved by draining the rainwater catchment ponds throughout the summer until no water remains at the end of the principal cultivation and irrigation period. This shall be repeated for 2 years to disrupt bull frog life cycles.
e) Direct removal methods shall be used, should de-watering be ineffective for the removal of bullfrog populations.
f) Monitoring for bullfrog populations shall occur on an annual basis in order to prevent subsequent establishment.

BIO-3 Screening of Water Pumps

To prevent impacts to wildlife species including amphibians and reptiles during the term of the project, water pumps used for the operation shall contain screens meeting the CDFW fish screening criteria (http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp).

BIO-4 Replacement of Riparian Vegetation and Special Status Vegetation Alliances
Any riparian vegetation and special status vegetation alliances (identified in section 6.3.2 of the Natural Resources Assessment prepared by SHN) that are impacted by project activities, including but not limited to road improvement and maintenance, shall be replaced at a 3:1 ratio. The replacement of riparian vegetation will occur on the project site and could include enhancement of existing wetland and riparian areas. A mitigation plan will be prepared and submitted to regulatory agencies for review and concurrence prior to any construction that encroaches on SMAs, wetlands, or riparian areas.

BIO-5 Fencing During Construction to Protect Wetlands and Streamside Management Areas
To protect the riparian habitat at the project site during construction activities, temporary fencing shall be installed and maintained on the edge of SMAs and delineated wetlands. The fencing shall be installed prior to the beginning of construction activities and shall be removed after the final inspection is completed by the Building Department.

BIO-6 Demarcation of Special Status Biological Resources
To protect special status biological resources, all resource populations, including the two northern meadow sedge populations, northern red-legged frog habitat, Oregon white oak woodlands, California bay forests, and California oat grass prairies, must be demarcated by high visibility construction fencing during the project construction period in a manner sufficient to avoid unintentional impacts when project construction activities (aside from transportation along roads) will occur within 100 feet of these resources.

BIO-7 Minimize Northern red-legged frog impacts
To protect northern red-legged frogs during restoration activities in CDFW project PO-1, conduct excavation activities August-October.

BIO-8 Nesting Bird Surveys to Protect Migratory Birds including Grasshopper Sparrow
Project-related vegetation clearing should occur outside the bird nesting season, which is generally considered to be March 15 through August 1. If project-related brush clearing or structural work on buildings within the vicinity of nesting bird habitat must occur during the breeding season, nesting bird surveys should be performed in those locations by a qualified biologist to ensure that active nests are not destroyed or disturbed.

CUL-1 Protocols for Construction Specific to Cowen Creek Documented Site

4. A qualified, trained archaeological monitor must be present during the mechanical excavation of soils and sediments from the pond area.
5. All project-related activities involving heavy equipment (excavators, bulldozers, pickup-trucks, etc.) adjacent to the archaeological site boundaries; which includes the location of the greenhouse, leach fields, photovoltaic installation, sheds, etc., must be conducted with an archaeological monitor present.
6. It is also recommended that all project-related ground disturbance activities in the vicinity of both archaeological sites identified be monitored by qualified cultural resources monitors.

CUL-2 Inadvertent Discoveries of Cultural and Paleontological Resources, and Human Remains
The following provides means of responding to the circumstances of a significant discovery during the cultural monitoring of the final implementation of the proposed agricultural development

within the project parcel. If cultural materials for example: 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 recommendation for further action.

In the event that paleontological resources are discovered, work shall be stopped within 20 meters (66 feet) of the discovery and a qualified paleontologist shall be notified. The paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. If fossilized materials are discovered during construction, excavations within 66 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agency to determine procedures that would be followed before construction is allowed to resume at the location of the find.

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.

ENE-1 Renewable Energy Generation Standards

The applicant shall ensure a minimum of 80% of project electrical energy is generated by renewable sources. This shall be accomplished through the use of solar arrays on-site with generator for backup. Alternatively, the project could interconnect into the local grid and obtain electrical energy from a local utility providing power generated from up to 80% renewable sources.

GEO-1 Geotechnical Report Compliance

The applicant shall comply with all recommendations from the SHN Geotechnical Report (SHN November 2016), which makes site-specific development recommendations to reduce risks and impacts in the areas of (1) Site Preparation and Grading, (2)Foundations for Structures, (3) Engineered Fill, (4)Water and Diesel Tanks, (5)Solar Array, (6) Greenhouse Structures, (7) ADA Parking Area, and (8) Other Considerations.

GEO-2 Geologist Review of Plans

The grading, foundation design, drainage plans, and plan specifications shall be reviewed by a registered geologist prior to approval by the County.

HWQ-1 Low Impact Design Improvements to Detain Stormwater

To address the increase in stormwater runoff that will occur due to the increase in impervious surface from the proposed project, the applicant shall design, construct, and maintain stormwater facilities to detain stormwater on the project site through low impact design (LID)

improvements such as a pre-treatment pond, bioswales, infiltration basins, and detention basins, as applicable. The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project infiltrates into the ground on-site or is pre-treated prior to discharge without violating any water quality standards or waste discharge requirements. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through a culvert pipe outfall that is armored with rock to provide energy dissipation.

HWQ-2 Implementation of Road Improvements

The applicant will implement all recommendations included in the Road Evaluation Report prepared for the access road off of Maple Creek Road to the Adesa Organic, LLC project (SHN December 2016a). These measures include ditch enhancement and construction, placement of rock energy dissipation material, construction of rolling dips, and rocking the entire length of road, among others.

HWQ-3 Spill Prevention, Control and Countermeasures

A plan for Spill Prevention, Control and Countermeasures (SPCC) shall be developed by a California Registered Engineer for each of the diesel tanks proposed for on-site fuel storage, subject to requirements of the U.S. Environmental Protection Agency and the California Environmental Protection Agency. All SPCC measures shall be implemented during project operations.

NOI-1. Implementation of Noise Pollution Mitigation Measures

The project shall implement all measures described in the Acoustic Study and Noise Pollution Prevention Plan prepared by Hybrid Tech in April 2018 as modified by the Frank Hubach Associates 2020 noise study, to include:

- 8 foot tall block wall and supplemental 2-foot barrier of not less than two pounds per square foot surface weight surrounding the generators
- 8 foot tall block wall and supplemental 4-foot barrier of not less than two pounds per square foot surface weight surrounding the array of RTUs
- The block walls shall be continuous with solid metal doors with neoprene door jams. The walls shall be a minimum of 8 inches thick and be constructed of solid block or be filled after construction with grout or sand.

NOI-2. Construction Related Noise

The following shall apply to construction noise from tools and equipment:

- The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 7 A.M. and 6 P.M. daily.
- All stationary and construction equipment shall be maintained in good working order and fitted with factory approved muffler systems.

NOI-3. Operations Related Noise

All noise generated from the project, including generators, ACU units and greenhouse fans, shall not exceed 50 decibels at 100 feet or edge of forest habitat, whichever is closer.

MITIGATION MONITORING AND REPORTING PROGRAM CHECKLIST:

AES-1 Light Pollution Prevention Plan

The applicant shall provide to the County Planning Division a lighting plan demonstrating that all indoor and outdoor lighting for the proposed project would not deliver or have the potential to deliver light pollution, from sunset to sunrise. The lighting plan shall be approved by the County Planning Division prior to the issuance of building permits.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to issuance of the building permit, and during project operations.	Continuous		HCP&BD**		

AFR-1 Less Than 3 Acre Conversion Exemption

The applicant shall secure a Less Than 3 Acre Conversion Exemption from CALFIRE for any tree removal associated with the project, including tree removal required for the road improvements (turn-outs) identified in the Road Evaluation Report for the project.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to any tree removal associated with road improvements.	Once		HCP&BD*** and CALFIRE*		

AFR-2 Timberland Mitigation

Timber species over 12 inches in diameter at breast height shall not be removed as part of the proposed project. Prior to the initiation of cultivation activities, native timber species shall be replanted on the property at a 2:1 ratio for every commercial timber species that is removed for proposed road improvements.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to initiation of cultivation activities.	Once		HCP&BD***		

BIO-1 Limits of Construction Period for Northern Spotted Owl

No construction work shall occur during the northern spotted owl nesting season (February 1st- July 31st) unless a wildlife biologist with experience in northern spotted owl protocol surveys completes a biological assessment of the property to determine whether the area has northern spotted owl

presence and whether site specific avoidance measures are necessary to avoid any impact to the species. Any measures developed by the biologist must be adhered to during the nesting season. Regardless of northern spotted owl presence on the property, no proposed activity generating noise levels 20 or more decibels above ambient noise levels or with maximum noise levels above 90 decibels may occur during the northern spotted owl nesting season.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During construction activity.	Continuous for the period of construction		HCP&BD*** and CDFW**		

BIO-2 Pond Maintenance to Prevent Bullfrog Infestation

All constructed ponds shall be kept free of American bullfrog infestations to prevent this non-native species from impacting special status aquatic species, such as the northern red-legged frog. To prevent significant bullfrog populations from developing due to the aquatic environment provided by the rainwater catchment ponds, the following measures shall be implemented as part of the project:

a) Controlling the bullfrog population following colonization will be achieved by draining the rainwater catchment ponds throughout the summer until no water remains at the end of the principal cultivation and irrigation period. This shall be repeated for 2 years to disrupt bull frog life cycles.
b) Direct removal methods shall be used should de-watering be ineffective for the removal of bullfrog populations.
c) Monitoring for bullfrog populations shall occur on an annual basis in order to prevent subsequent establishment.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During project operations.	Continuous		HCP&BD*** and CDFW**		

BIO-3 Screening of Water Pumps

To prevent impacts to wildlife species including amphibians and reptiles during the term of the project, water pumps used for the operation shall contain screens meeting the CDFW fish screening criteria (http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp).

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to the building permit final inspection.	Once		HCP&BD*** and CDFW**		

BIO-4 Replacement of Riparian Vegetation

Any riparian vegetation that is impacted by project activities, including but not limited to road improvement and maintenance, shall be replaced at a 3:1 ratio. The replacement of riparian vegetation will occur at appropriate locations on the project site and could include the enhancement of existing wetland and riparian areas at the site. If applicable, a mitigation plan will be prepared and submitted to regulatory agencies for review and concurrence prior to any construction that encroaches on SMAs, wetlands, or riparian areas.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to issuance of the building permit, during construction activity, and during project operations.	Once		HCP&BD*** and CDFW**		

BIO-5 Fencing During Construction to Protect Wetlands and Streamside Management Areas

To protect the riparian habitat at the project site during construction activities, temporary fencing shall be installed and maintained on the edge of SMAs and delineated wetlands. The fencing shall be installed prior to the beginning of construction activities and shall be removed after the final inspection is completed by the Building Department.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to issuance of the building permit and during construction activity.	Once		HCP&BD*** and CDFW**		

BIO-6 Demarcation of Special Status Biological Resources

To protect special status biological resources, all resource populations, including the two northern meadow sedge populations, northern red-legged frog habitat, Oregon white oak woodlands, California bay forests, and California oat grass prairies, must be demarcated by high visibility construction fencing during the project construction period in a manner sufficient to avoid unintentional impacts when project construction activities (aside from transportation along roads) will occur within 100 feet of these resources.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During construction activities.	Once		HCP&BD***		

BIO-7 Minimize Northern red-legged frog impacts

To protect northern red-legged frogs during restoration activities in CDFW project PO-1, conduct excavation activities August-October.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During construction activities.	Once		HCP&BD***		

BIO-8 Nesting Bird Surveys to Protect Migratory Birds including Grasshopper Sparrow

Project-related vegetation clearing should occur outside the bird nesting season, which is generally considered to be March 15 through August 1. If project-related brush clearing or structural work on buildings within the vicinity of nesting bird habitat must occur during the breeding season, nesting bird surveys should be performed in those locations by a qualified biologist to ensure that active nests are not destroyed or disturbed.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During construction activities.	Once		HCP&BD***		

CUL-1 Protocols for Construction Specific to Cowen Creek Documented Site

1. A qualified, trained archaeological monitor must be present during the mechanical excavation of soils and sediments from the pond area.
2. All project-related activities involving heavy equipment (excavators, bulldozers, pickup-trucks, etc.) within the archaeological site boundaries; which includes the location of the greenhouse, leach fields, photovoltaic installation, sheds, etc., must be conducted with an archaeological monitor present.
3. It is also recommended that all project-related ground disturbance activities in the vicinity of both archaeological sites identified be monitored by qualified cultural resources monitors.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to and during construction activity.	Once		HCP&BD***		

CUL-2 Inadvertent Discoveries of Cultural and Paleontological Resources, and Human Remains

The following provides means of responding to the circumstances of a significant discovery during the cultural monitoring of the final implementation of the proposed agricultural development

within the project parcel. If cultural materials for example: 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 recommendation for further action.

In the event that paleontological resources are discovered, work shall be stopped within 20 meters (66 feet) of the discovery and a qualified paleontologist shall be notified. The paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. If fossilized materials are discovered during construction, excavations within 66 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agency to determine procedures that would be followed before construction is allowed to resume at the location of the find.

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 Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During construction activity and project operations.	Continuous		HCP&BD***		

ENE-1 Renewable Energy Generation Standards

The applicant shall ensure a minimum of 80% of project electrical energy is generated by renewable sources. This shall be accomplished through the use of solar arrays on-site with generator for backup. Alternatively, the project could interconnect into the local grid and obtain electrical energy from a local utility providing power generated from up to 80% renewable sources.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to cultivation and during project operations.	Annually		HCP&BD***		

GEO-1 Geotechnical Report Compliance

The applicant shall comply with all recommendations from the SHN Geotechnical Report (SHN, November 2016), which makes site-specific development recommendations to reduce risks and impacts in the areas of (1) Site Preparation and Grading, (2)Foundations for Structures, (3) Engineered Fill, (4)Water and Diesel Tanks, (5)Solar Array, (6) Greenhouse Structures, (7) ADA Parking Area, and (8) Other Considerations.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to the issuance of building and/or grading permits for the project.	Once		HCP&BD***		

GEO-2 Geologist Review of Plans

The grading, foundation design, drainage plans, and plan specifications shall be reviewed by a registered geologist prior to approval by the County.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to the issuance of building and/or grading permits for the project.	Once		HCP&BD***		

HWQ-1 Low Impact Design Improvements to Detain Stormwater

To address the increase in stormwater runoff that will occur due to the increase in impervious surface from the proposed project, the applicant shall design, construct, and maintain stormwater facilities to detain stormwater on the project site through low impact design (LID) improvements such as a pre-treatment pond, bioswales, infiltration basins, and detention basins, as applicable. The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project infiltrates into the ground on-site or is pre-treated prior to discharge without violating any water quality standards or waste discharge requirements. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through a culvert pipe outfall that is armored with rock to provide energy dissipation.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to the building permit final inspection.	Once		HCP&BD***		

HWQ-2 Implementation of Road Improvements

The applicant will implement all recommendations included in the Road Evaluation Report prepared for the access road off of Maple Creek Road to the Adesa Organic, LLC (SHN December 2016a). These measures include ditch enhancement and construction, placement of rock energy dissipation material, construction of rolling dips, and rocking the entire length of road, among others.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to the building permit final inspection.	Once		HCP&BD***		

HWQ-3 Spill Prevention, Control and Countermeasures

A plan for Spill Prevention, Control and Countermeasures (SPCC) shall be developed by a California Registered Engineer for each of the diesel tanks proposed for on-site fuel storage, subject to requirements of the U.S. Environmental Protection Agency and the California Environmental Protection Agency. All SPCC measures shall be implemented during project operations.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to the issuance of building and/or grading permits for the project.	Once		HCP&BD***		

NOI-1. Implementation of Noise Pollution Prevention Mitigation for Adesa Organic, LLC project site 433A

The project shall implement all measures described in the Acoustic Study and Noise Pollution Prevention Plan prepared by Hybrid Tech in April 2018 as modified by the Frank Hubach Associates 2020 noise study, to include:

-
- 8 foot tall block wall and supplemental 2-foot barrier of not less than two pounds per square foot surface weight surrounding the generators
- 8 foot tall block wall and supplemental 4-foot barrier of not less than two pounds per square foot surface weight surrounding the array of RTUs
- The block walls shall be continuous with solid metal doors with neoprene door jams. The walls shall be a minimum of 8 inches thick and be constructed of solid block or be filled after construction with grout or sand.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
Prior to the building permit final inspection.	Once		HCP&BD***		

NOI-2. Construction Related Noise

The following shall apply to construction noise from tools and equipment:

- The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 7 A.M. and 6 P.M. daily.
- All stationary and construction equipment shall be maintained in good working order and fitted with factory approved muffler systems.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During construction activity.	Continuous during period of construction.		HCP&BD***		

NOI-3. Operations Related Noise

All noise generated from the project, including generators, ACU units and greenhouse fans, shall not exceed 50 decibels at 100 feet or edge of forest habitat, whichever is closer.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During project operations.	Continuous		HCP&BD***		

* CALFIRE = California Department of Fire and Forestry
** CDFW = California Department of Fish & Wildlife
*** HCP&BD = Humboldt County Planning and Building Department
NCUAQMD = North Coast Unified Air Quality Management District

23. EARLIER ANALYSES.

Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 16063(c)(3)(D). In this case a discussion should identify the following on attached sheets:

a) Earlier analyses used. Identify earlier analyses and state where they are available for review.

1. Humboldt County General Plan & EIR
2. Humboldt County Zoning Ordinance

Items 1 and 2 are available for review at Humboldt County Planning Division.

The following documents in Section 22, available at the Planning and Building Department, have adequately analyzed one or more effects of the project. Earlier analysis has been used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (CEQA Guidelines Section 15063 (c)(3)(D)).

b) Impacts Adequately Addressed. Some of the effects from the above checklist were within the scope of and adequately analyzed in the document(s) listed in Section 22, pursuant to applicable legal standards.

c) Mitigation Measures. It was not necessary to include mitigation measures, which were incorporated or refined from the document(s) described above (21. a) to reduce effects that are "Less than Significant with Mitigation Incorporated."

24. SOURCE/REFERENCE LIST

The following documents were used in the preparation of this Initial Study. The documents are available for review at the Humboldt County Planning Department during regular business hours.

Adesa Organic, LLC. 2018. *Cultivation and Operations Plan, Four Mixed Light Cultivation Projects at 23550 Maple Creek Road (APNs 315-145-002, 315-211-003, and 315-211-004).* February 2018.

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