DATE: MAY 28, 2015

CASE #: CDP_2012-0031
DATED FILED: July 2, 2003
OWNER/APPLICANT: Jughandle Creek Farm and Nature Center/Arkin Tilt Architects
REQUEST: Coastal Development Permit for new construction and remodeling of existing structures, and improvements and additions to infrastructure associated with the existing hostel and campground located on the property. New building construction and remodeling projects include the following: (1) Construct a kitchen/lounge/laundry/mud room facility (at "Top of Hill" structure) to replace existing structure; (2) Construct several new accessory structures including a lath house, two counselor cabins, bunkhouse with attached cooking area, and bathhouse; and (3) Remodel and improve existing cabins and manager's residence. The project would also include improvements to the existing site access road, parking and drainage, nature trails and boardwalks, expansion of the existing septic system and utilities, and addition of a new composting toilet.
LOCATION: In the Coastal Zone, just north of the community of Caspar, on the east side of Highway 1, approximately 100 feet north of its intersection with Caspar Road (CR 569). Located at: 15501 North Highway 1 (APN: 017-250-32).
PROJECT COORDINATOR: BILL KINSER
PROJECT DESCRIPTION: Jug Handle Creek Farm and Nature Center (JCFNC) is a nonprofit organization that provides environmental education programs for youth from Mendocino County and other areas, affordable lodging and camping for tourists and environmental groups, and a greenhouse and nursery where students, youth groups and others can learn about and participate in native plant restoration projects. JCFNC provides environmental education programs for 800 to 1,000 Mendocino County students each year, including a summer day camp for 100 students sponsored by the Mendocino Coast Recreation and Park District. In addition, approximately 2,000 people stay overnight at JCFNC's farmhouse and campground each year. These overnight visitors range from tourists seeking affordable accommodations along the Mendocino coast to volunteers engaged in ecological restoration projects in the area. JCFNC's grounds are located adjacent to the town of Caspar, just east of Highway One, four miles north of the Town of Mendocino, California (Figure 1). The parcel is on the east side of Highway One just south of Jug Handle Creek and ranges in elevation from about 40 to 120 feet above sea level. The site is just south of and adjacent to Jughandle State Reserve, and contains publicly accessible trails connecting to trails in the State Reserve. The site totals approximately 35 acres, and includes forests and meadows, nature trails, a century-old Victorian farmhouse, a campground area, and a nursery and greenhouse used by school and youth groups to grow native plants for restoration projects (Figure 2). Jughandle Creek and an unnamed creek are located adjacent to the site. The proposed project includes improvements to trails, utilities, driveways and parking areas, landscaped areas, stormwater management, lodging area buildings, and campground area buildings at JCFNC. These improvements would be staged, possibly in the following manner:

- Stage 1: Lodging area improvements including replacement of "Top of Hill" structure and "Eucalyptus Cabin" Site improvements including road, trails, utilities, and septic work; cabin upgrade; site work between the existing "Farmhouse" Lodge and the existing greenhouse and native plant nursery area.
- Stage 2: campground improvements, including bathhouse, bunkhouse, and counselors cabins; new lath house; and, new wood storage shed.
- Stage 3: New equipment storage building.

Improvements are summarized below.

Trail Improvements. The trail improvements and enhancements would provide better access and education potential. The trail improvements include maintenance and restoration, accessibility upgrades, way finding signage, interpretive signage, and trail mapping. Some of the trails will provide raised boardwalks. The trails will be used for educational interpretive walks that discuss impacts of invasive non-native plants and the benefits of habitat and wildlife protection. Specific trail improvements would include:

- Removal of hazardous limbs and trees along existing trails,
- Trail restoration and boardwalk construction to replace the existing dilapidated boardwalk along the existing "Grand Fir" trail connecting the Farmhouse to the campground, and
- New accessible trail access between the Farmhouse lodge and Native Plant Nursery, including a rebuilt boardwalk.

Utilities Improvements. The utility improvements would be to:

- Upgrade the existing electrical service onsite,
- Upgrade the existing water service onsite,
- Add a new water tank for fire suppression and potable water storage, and
- Upgrade and expand the existing septic system, including an Orenco Systems "Advantex" treatment system, resulting in high quality, pre-treated effluent at the septic drain field.

New development for the water service upgrade includes a 20,000 to 30,000 gallon water storage tank, a new 6 inch fire water main running along the access road, a new 2 inch domestic water line running to the Replacement Cooking Area, the Bunkhouse and the Bath House, and new gate valves and fire hydrants.
The septic system upgrade includes new sewer lines to be extended to the Top of Hill Building, Replacement Cooking Area, the Bunkhouse and the Bath House. A new treatment system and primary and reserve dispersal fields would be located west of the "Creamery" office and Managers Residence.

Driveway and Parking Improvements. The project includes repairs and upgrades to the existing driveway and parking areas to provide clearly designated parking areas to better serve guests, prevent informal parking, and reduce site impacts. The following improvements would be completed:

- Repair and upgrade of driveway entry to improve safety and ingress/egress from the site;
- Repair, regrade, and upgrade existing driveway to reduce erosion, improve site access, and meet current fire access requirements; and
- Repair and upgrade existing parking areas.

The number of parking spaces at the site would increase from 46 spaces to 48 spaces (44 standard and 4 handicapped spaces). Much of the existing parking is "informal parking." At the campground, "informal parking" areas would be replaced by eight dispersed gravel parking spaces with 2 pervious concrete handicapped parking spaces. The remainder of the parking would be developed near the Farmhouse Lodge and Top of Hill Building and Creamery Office and Manager's Residence. The number and exact location of the new gravel parking spaces is to be verified in the field. None of the parking or roadway improvements would occur within the 50 foot Environmentally Sensitive Habitat Area (ESHA) Wetland or Grand Fir buffer. A corner of one of the handicapped spaces next to the Top of Hill building would be within the 100 foot wetland buffer as would a segment of the proposed driveway access apron. One handicapped parking space at the campground is within the 100 foot Grand Fir Forest buffer.

Landscape Improvements. Exotic and invasive plant species removal from the site would continue. The Center's educational programs would be augmented to teach about the protection and restoration of wetland and riparian habitat both of which are found onsite and both traversed by existing and proposed trails. The Native Plant Nursery would continue propagating wetland plants as well as native trees, shrubs and wildflowers of the coastal area, including many riparian species. As mitigation for the proposed improvements to the trail from the Farmhouse Lodge to the Nursery and Garden area within the ESHA, native plants would be installed onsite when invasive plant species are removed. Native plants propagated onsite are proposed to be planted throughout the property.

Stormwater Management Improvements. The project will model low impact development techniques intended to maximize on-site stormwater retention and infiltration, with the ultimate goal of aquifer recharge. Proposed storm water related improvements include the following:

- Source Control: Utilizing permeable paving for parking areas;
- Treatment: Rain gardens, bioswales, and berms to control and direct surface water flow;
- Expanded roof water catchment to conserve water and reduce storm water run-off; and
- Construction of an educational rain water garden display, encouraging guests to trace the path of water through berms, swales and other water features.

The proposed stormwater improvements include new stormwater swales near the entrance, pervious concrete handicapped parking spaces, and multiple rain gardens.

Lodging and Building Improvements. The existing buildings are the Farmhouse Lodge, the Top of Hill facility, Orchard sleeping cabin, Eucalyptus sleeping cabin, Grand Fir sleeping cabin, Creamery office and manager's

residence, woodshop and native plant nursery small structures. Many of the improvements to the lodging area buildings are part of a new Top of Hill facility where a number of guest services and staff needs would be consolidated. Improvements would be for:

- Upgrades for ADA accessibility at the Farmhouse Lodge;
- Replace the Top of Hill facility with a new facility that would have a kitchen/lounge space, bathroom/showering rooms, a mudroom, a laundry/storage room, a private office, and a rebuilt Eucalyptus sleeping cabin;
- Upgrades to the Orchard sleeping cabin and Grand Fir sleeping cabin for structural and ADA accessibility upgrades;
- Construct a new Lath House structure north of the access road near the Center's main gate; and
- Construct a new equipment storage barn.

Campground Building Improvements. The eight acre campground area would be divided into two areas; a one acre area containing the Bunkhouse building and a seven acre area providing outdoor tent camping, a Bath House, a Covered Pavilion and Campground Cooking Area. Proposed improvements in the campground buildings are:

- Two new Bunkhouse cabins connected by a communal deck and covered porch;
- A new Bathhouse providing restroom and shower facilities;
- Two new Counselor cabins providing sleeping space and bathroom facilities;
- A new covered teaching pavilion, open on all sides; and
- An upgraded Campground Cooking Area.

Environmental Checklist.

"Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change, may be considered in determining whether the physical change is significant (CEQA Guidelines, Section 15382).

Accompanying this form is a list of discussion statements for all questions, or categories of questions, on the Environmental Checklist (See Section III). This includes explanations of "no" responses.

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

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND):

I. AESTHETICS. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**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 the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

I. Aesthetics

a) Have a substantial adverse effect on a scenic vista?

Threshold of Significance: Long-term intrusion or alteration of a scenic vista that is visible to the public.

Assessment: The Project will have a short-term impact that is **less than significant** on scenic resources visible to the public.

- A portion of the Project area is visible from Highway 1. Existing vegetative screening between the buildings in the Project Area and Highway 1 will be maintained. During construction, there will be a minor, short term adverse impact, as driveway improvements and other improvements on the west side of the property are conducted. However, over the long term these improvements will result in a minor benefit to views on the eastern side of Highway 1.
- Project activities, plantings, and structures will not obstruct the public's view of any scenic vista from Highway 1.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Threshold of Significance for this initial study: Permanent adverse change within a State scenic highway to scenic resources' physical, vegetative, or aesthetic elements visible to the public.

Assessment: The Project will have **no impact** it is not located in a state scenic highway protection corridor.

- Caltrans' online California Scenic Highway Mapping System http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm was consulted.
- Highway 1 in Mendocino County is eligible for designation as a State Scenic Highway, but Mendocino County has not applied to Caltrans for scenic highway approval.
- A small portion of Project's construction activities will be visible to the public from Highway 1. These aesthetic impacts will be short term and minor.
- Project activities, plantings, and structures will not obstruct the public's view of any scenic vista.
- In the long term, the Project Area will present an equally attractive vista to the current vista.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Threshold of Significance for this initial study: Long-term alteration or degradation of the existing visible character and quality of a site and its surroundings, which is visible to the public.

Assessment: The Project's short-term effects will have a **less than significant** adverse impact on the visible character and quality of the Project site and its surroundings, which are visible to the public.

- Refer to assessments in 1 a) and b) above.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Threshold of Significance for this initial study: Long-term or permanent development that would create a new source of substantial light or glare.

Assessment: The Project will have **no impact**, as it will not create a new source of lighting or glare.

The proposed Project does not involve the construction of any structures that would create a new source of substantial light or glare. Many of the proposed structures are replacements for existing structures with existing associated lighting. Exterior lighting installed as part of proposed construction is designed to shield and direct illumination, minimizing glare and light pollution.

II. AGRICULTURE AND FORESTRY RESOURCES. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
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?	☐	☐	☐	☒

II. Agricultural Resources

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?

Threshold of Significance for this initial study: Physical changes that prevent the use of prime farmland, unique farmland, or farmland of statewide importance.

Assessment: The project will have **no impact**. There is no prime farmland, unique farmland, or farmland of statewide importance on or adjacent to the Project area, and the Project does not result in any physical changes that would prevent agricultural use of the property in the future.

The Project Area is currently managed for lodging, camping, passive recreation, and environmental education. Historically, portions of the Project Area have been used at various times for hay production, apple production, sheep grazing, and tree farming. These agricultural uses ended in the 1980s. With the exception of the native plant garden and vegetable garden adjacent to the Farmhouse, none of the Project Area has been used for agricultural production for the last 25 years. The proposed improvements will have a relatively small footprint and would not preclude agricultural use of portions of the Project Area in the future.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Threshold of Significance for this initial study: Implement land uses that are not allowed in agricultural zone districts, or on lands under Williamson Act contract.

Assessment: The project will have **no impact** as it is located on land zoned RMR-20 with a *1-inn and *3-campground designation, meaning that the land is zoned for remote residential including the operation of an inn and campground for visitor-serving lodging. The project does not conflict with existing zoning for agricultural use. The project is not located on land under a Williamson Act contract.

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use?

Threshold of Significance for this initial study: Physical changes to a significant acreage of existing farmland that preclude the continued use of that property for agriculture uses and threaten agricultural viability of the parcel.

Assessment: The Project will have **no impact** on the continued use of property for agricultural uses and will not convert farmland to non-agricultural uses.

With the exception of the native plant garden and vegetable garden adjacent to the Farmhouse, none of the Project Area is in use for agricultural production. The native plant garden and vegetable garden uses will continue after project implementation.

III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

III. Air Quality

a) Conflict with or obstruct implementation of the applicable air quality plan?

Threshold of Significance for this initial study: Project generates pollutants that would prevent attainment of the North Coast Unified Air Quality Management District's (NCUAQMD) long-term air quality objectives.

Assessment: The Project will have **no impact** on the implementation of the NCUAQMD air quality plan.

- The Project's construction activities are of limited scope and duration and do not involve any stationary sources of pollutants.
- During construction the operation of vehicles and equipment as well as excavation and grading activities will generate pollutants in the short-term such as fugitive dust (particulate matter less than 10 microns [PM10]).
- While the short-term operation of vehicles and diesel powered construction equipment does release PM 10 and nitrogen oxides (NOx) pollutants, these releases are not expected to result in a substantial adverse effect as all equipment will be equipped with state approved exhaust systems, maintained in good working order.
- Fugitive dust, less than PM 10, will be generated for a limited time but will only affect a localized area during Project activities. Areas of ground disturbance will be mulched and seeded with grass to minimize the generation of dust.
- Clearing of vegetation for construction will generate debris. As much of the debris as possible will be disposed of by composting onsite or offsite, or utilized for firewood onsite.
- While the NCUAQMD does not require a permit for excavation and grading activities, JCFNC will coordinate with the NCUAQMD before conducting any prescriptive burning of vegetative debris.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Threshold of Significance for this initial study: Release of pollutants that violate an air quality standard, or substantially contribute to an existing air quality violation.

Assessment: The Project will have **no impact** on any air quality standard.

- While the short-term operation of vehicles and diesel powered construction equipment does release PM 10 and NO_x pollutants, these releases are not expected to result in a substantial adverse effect as all equipment will be equipped with state approved exhaust systems, maintained in good working order.
- Fugitive dust, less than PM 10, will be generated for a limited time but will only affect a localized rural area during Project activities. This impact will be minimized by mulching and vegetation disturbed areas.
- There are no existing air quality violations in the Project area.

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Threshold of Significance for this initial study: Production of pollutants by the Project that would result in a cumulatively considerable net increase in pollutants for which the North Coast Air Basin's is in non-attainment.

Assessment: The Project will have **no impact**, and will not result in a cumulative increase in any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard.

d) Expose sensitive receptors to substantial pollutant concentrations?

Threshold of Significance for this initial study: The Project would result in a substantial increase of pollutants that are capable of reaching sensitive receptors.

Assessment: The Project will have **no impact** on sensitive receptors.

- There are no sensitive receptors such as populated areas, health care facilities, convalescent centers, retirement homes, residences, schools, child care centers, recreational facilities in the immediate vicinity of the Project. The closest sensitive residences to the project area are the residences in the community of Caspar, located between 500 feet and 1,000 feet from the Project Area. Dust and emissions from construction activities associated with the project will be short term.

e) Create objectionable odors affecting a substantial number of people?

Threshold of Significance for this initial study: The Project would result in a substantial increase of objectionable odors that are capable of reaching substantial number of people.

Assessment: The Project will have no impact on a substantial number of people as a result of increasing objectionable odors.

The project will not generate objectionable odors.

IV. BIOLOGICAL RESOURCES: Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**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 Game 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 Game or US Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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?	☐	☐	☐	☒

IV. Biological Resources

Existing Conditions

Vegetation
The Project Area supports several types of habitat that dominate locally and integrate at their edges. Dominant habitats include planted Monterey pine forest, grand fir/Sitka spruce forest, non-native grassland, an apple orchard, red alder riparian and freshwater hydrophytic vegetation around man-made drainage. The biological resources analysis is based on four reports prepared by Spade Natural Resources Consulting for the property. These reports are: Biological Scoping Survey, Preliminary Botanical Survey, ESHA and Wetland Delineation Report and Reduced Buffer Analysis (April 2, 2012); Reduced Buffer Analysis Grand Fir Forest (October 23, 2014); Addendum to Botanical Report and Sonoma Tree Vole Scoping (July 19, 2012); and Sonoma Tree Vole Survey Report (November 14, 2014)

Wetland and Riparian
A perennial but un-named stream runs from east to west at the southern boundary of the western half of the parcel. Jughandle Creek lies to the north of the parcel but none of its associated riparian habitat is within 100 feet of any proposed project component. A portion of the apple orchard and the grassland to the south of the farmhouse was determined to be freshwater wetland habitat based on the presence of hydrophytic vegetation, hydric soils and/or hydrology. The relatively flat apple orchard is adjacent to the un-named creek. A US Forest Service analysis of the creek and orchard area concluded that the creek would not flood the orchard even in a 100 year flood event. According to Stuart Tregoning, the previous owner of the property, the northern edge of the orchard has always been wetter than the majority of the orchard and around 1947 a ditch was dug in order to drain the area so that vehicles could access the orchard during the harvest. The ditch extended along the northern edge of the orchard for the length of the orchard, and then south at the western end of orchard for the length of the orchard. In more recent times ditch maintenance has not been conducted and the area has regained its wetland character as the ditch channel has filled. The wetland extends down to the field to the south of the farmhouse and there are patches of wetland extending to Highway 1.

Rare Plants
Field surveys for botanical and wetland resources were conducted on the Project Site on January 10, 12, 16, and 18, February 8, 9, 13, 14, and 16, April 20 and 26, June 11, and July 13, 2012. One special status plant species, Mendocino cypress (*Hesperocyparis pygmaea*) was documented. The survey protocol was based on *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* developed by California Department of Fish and Game (CDFG 2009). The rare plants and plant communities considered in the survey are the native plants of limited abundance in California with known occurrence or distribution in Mendocino County, and were derived from the following lists:

- species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act;
- species that are candidates for possible future listing as threatened or endangered under the federal Endangered Species Act;
- species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act;
- plants listed by the California Native Plant Society (CNPS) as “presumed extinct” in California (List 1A);
- plants considered by CNPS to be “rare, threatened, or endangered in California” (Lists 1B and 2);
- plants listed by CNPS as plants about which more information is needed to determine their status and plants of limited distribution (Lists 3 and 4), which may be included as special-status species on the basis of local significance or recent biological information;
- plant communities listed in the California Natural Diversity Database;
- plants of regional or specific interest not on any list above.

These special-status plants were further segregated regionally based on known occurrence on the project area USGS 7.5’ quadrangle Mendocino, and the adjacent quadrangles (Albion, Noyo Hill, Mathison Peak, Elk, and Fort Bragg). The regional assessment utilized the California Native Plant Society’s (CNPS)

electronic inventory (CNPS 2007) and the California Department of Fish and Wildlife's (CDFW) Natural Diversity Data Base Rare Find (CDFG 2006). These special-status species and all other species derived from the aforementioned lists, their associated habitats, and their potential for occurrence in the project area are listed in Table 1. Vegetation descriptions are based on Sawyer and Keeler-Wolf (1995), Holland (1986), and California Department of Fish and Wildlife (2003). California Rare Plant Rank (CRPR) Lists 1A, 1B and 2 are often considered to meet the definition of "rare or endangered" under the California Environmental Quality Act (CEQA) Guideline 15380(d). Therefore they should be considered during project review. CRPR Lists 3 and 4 are not normally considered during CEQA review.

Table 1. Special-Status Plants, Animals, or Plant Communities with Potential to Occur in the Project Area. Abbreviations for status designations: - =None; FT: Federally Threatened; FE=Federally Endangered; 1B: California Rare Plant Rank (CRPR) Rare, Threatened, or Endangered in CA and Elsewhere, 2B: CRPR Plants Rare, Threatened, or Endangered in CA, But More Common Elsewhere, 4: CRPR Plants of Limited Distribution (Watch List). CRPR List Modifiers/Threat Rankings: 0.1-Seriously threatened in CA (>80% of occurrences threatened / high degree and immediacy of threat); 0.2-Moderately threatened in CA (20-80% occurrences threatened / moderate degree and immediacy of threat); 0.3-Not very threatened in CA (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known), SOC- California Department of Fish and Wildlife Species of Concern.

***Scientific Namel* Common Name**	**Designation**	**Documented in Project Area?**	**Probability of Occurrence (per Spade 2012)**
Plants Detected in Special Status Species Surveys			
Hesperocyparis pygmaea Mendocino cypress	1B.2	Y	Present.
Plants Not Detected in Special Status Species Surveys			
Agrostis blasdalei Blasdale's bent grass	1B.2	N	Very low. No detect in surveys.
Campanula californica Swamp harebell	1B.2	N	Very low. No detect in surveys.
Carex californica California sedge	2.3	N	Very low. No detect in surveys.
Carex lyngbyei Lyngbye's sedge	2.2	N	Very low. No detect in surveys.
Carex saliniformis Deceiving sedge	1B.2	N	Very low. No detect in surveys.
Castilleja mendocinensis Mendocino paintbrush	1B.2	N	Very low. No detect in surveys.
Coptis lanciniata Oregon goldenthread	2.2	N	Very low. No detect in surveys.
Erigeron supplex Supple daisy	1B.2	N	Very low. No detect in surveys.
Horkelia marinensis Point Reyes horkelia	1B.2	N	Very low. No detect in surveys.
Juncus supiniformis	2.2	N	Very low.

***Scientific Namel* Common Name**	**Designation**	**Documented in Project Area?**	**Probability of Occurrence (per Spade 2012)**
Hair-leaved rush			No detect in surveys.
Lasthenia californica ssp. *bakeri* Baker's goldfields	1B.2	N	Very low. No detect in surveys.
Lilium maritimum Coast lily	1B.1	N	Very low. No detect in surveys.
Lotus formosissimus Coastal lotus	4.2	N	Very low. No detect in surveys.
Packera bolanderi var. *bolanderi* Seacoast ragwort	2.2	N	Very low. No detect in surveys.
Sidalcea calycosa ssp. *rhizomata* Point Reyes checkerbloom	1B.2	N	Very low. No detect in surveys.
Sidalcea malviflora ssp. *patula* Siskiyou checkerbloom	1B.2	N	Very low. No detect in surveys.
Sidalcea malviflora ssp. *purpurea* Purple-stemmed checkerbloom	1B.2	N	Very low. No detect in surveys.
Viola adunca Western dog violet	-	N	Very low. No detect in surveys.
Viola palustris Alpine marsh violet	2.2	N	Very low. No detect in surveys.
Animals			
Lavinia symmetricus parvipinnis Navarro roach	-	N	Moderate
Rana aurora Northern red-legged frog	SOC	N	Moderate
Accipiter gentilis Northern goshawk	-	N	Moderate
Accipiter spp. Cooper's & sharp-shinned hawks	-	N	Moderate
Brachyramphus marmoratus Marbled murrelet	FE	N	Moderate
Chaetura vauxi Vaux's swift	-	N	Moderate
Pandion haliaetus Osprey	-	N	Present (not nesting)
Progne subis Purple martin	-	N	Moderate
Strix occidentalis caurina Northern spotted owl	FT	N	Moderate
Antrozous pallidus Pallid bat	-	N	Moderate
Corynorhinus townsendii pallescens	SOC	N	Moderate

Scientific Name **Common Name**	**Designation**	**Documented in Project Area?**	**Probability of Occurrence (per Spade 2012)**
Pale big-eared bat			
Martes americana humboldtensis Humboldt marten	SOC	N	Low
Myotis evotis Long-eared myotis	SOC	N	Moderate
Myotis yumanensis Yuma myotis	SOC	N	Moderate
Natural Communities			
Abies grandis forest alliance Grand fir forest	-	Y	Present
Picea sitchensis forest alliance Sitka spruce forest	-	N	None

Documented Occurrences

Grand fir forest alliance
A stand of grand fir and Sitka spruce approximately 3.5 acres in size was found to occur near the center of the parcel. The stand is isolated from the nearest occurrence of Sitka spruce forest 0.1 miles to the north on State Parks property by a stand of planted Monterey pine trees. Grand fir *(Abies grandis)* (60%) is dominant in the tree canopy with Sitka spruce (*Picea sitchensis)* (30%) co-dominant and with Douglas fir (*Pseudotsuga menziesii)*, tan oak (*Lithocarpus densiflorus),* and Bishop pine (*Pinus muricata)* present. Canopy is nearly continuous. Shrub layer is sparse to intermittent with California coffeeberry (*Frangula californica)*, Tan oak*,* California huckleberry (*Vaccinium ovatuma)* and California wax-myrtle (*Morella californica)*. Herbaceous layer is sparse with Western sword fern (*Polystichum munitum)*, California blackberry (*Rubus ursinus),* Modesty (*Whipplea modesta),* Redwood sorrel (*Oxalis oregano),* false lily-of-the-valley (*Maianthemum dilatatum),* Fairybells (*Prosartes smithii),* rattlesnake plantain (*Goodyera oblongifolia),* Milk maids (*Cardamine californica),* rigid hedge-nettle (*Stachys ajugoides),* Bedstraw *(Galium muricatum)*, California sweet-grass (*Anthoxanthum occidentale),* Douglas iris (*Iris douglasiana),* and English ivy (*Hedera helix)*. Some very large Sitka spruce trees are present within the stand. In contrast, surrounding grand fir trees averaged much smaller, though a few large fir trees were present. In a couple areas grand firs grow in Krummholz formation. Invasive exotic species present include English ivy within the stand and some occurrences of Gorse (*Ulex europaeus),* Cotoneaster *(Cotoneaster sp.)* and Darwin's berberis (*Berberis darwinii*) at the edges. The relatively smaller size of the majority of grand fir present and the ease of access of the site suggests that the area has been logged, which is corroborated by Tregoning (pers.comm). Current development within and adjacent to the stand includes: a cabin built at the southwestern edge of the stand, a road running for a distance of ~120 meters along the northwestern edge, a water tank and shed within the stand near the northern corner, and an apple orchard along the southern edge of the stand. *Abies grandis* Forest Alliance is a rare plant community and is considered an ESHA for the purpose of this analysis, although the Grand Fir forest present on the site is considered of low quality due to the presence of invasive plants, the small size of grand fir trees present, and the history of logging (Spade 2012).

Monterey pine semi-natural stand
An area approximately 11.5 acres in size was dominated by an overstory of planted Monterey pine (*Pinus radiata*) trees. According to Stuart Tregoning these trees were planted between 1958 and 1967 on advice from the tax assessor and farm advisor. They were planted in what were hay production fields in order to provide a park-like environment that could be cut up into 1 acre parcels for home sites. Only 50% of the trees were expected to take, leaving openings for residences. Instead, nearly all the trees planted survived and the parcel was not subdivided. Monterey pine is not native to Mendocino County. Monterey pine *(Pinus radiata)* (85%) is dominant in the tree canopy with Douglas fir, tan-oak*,* and Grand fir present at edges and openings. Canopy is nearly continuous. Shrub layer is sparse to intermittent with California

coffeeberry, California wax-myrtle and young Douglas fir, tan-oak and grand fir. Herbaceous layer is sparse with 95% needle cover. Monterey pine does not appear to be reproducing as no seedlings were found. Many of the 45-54 year old trees have reached their full height. This species of tree lives from 80-100 years. A strong component of natural vegetation is taking over in some areas of the Monterey pine stand and as these pines senesce it is likely that they will be replaced with a mixed coniferous forest.

Mixed coniferous forest
Wooded areas in the northwestern portion of the parcel were not dominated by any particular species, instead having a diverse mix of many evergreen species such as Monterey pine (*Pinus radiata*), Bishop pine (*Pinus muricata*), grand fir (*Abies grandis*), Douglas fir (*Pseudotsuga menziesii*), redwood (*Sequoia sempervirens*), shore pine (*Pinus contorta* ssp*. contorta*), Sitka spruce (*Picea sitchensis*), and tan oak (*Lithocarpus densiflorus* var. *densiflorus*). Understory plants included cascara buckthorn (*Frangula purshiana*), California coffeeberry (*Frangula californica*), California wax myrtle (*Morella californica*), evergreen huckleberry (*Vaccinium ovatum*), California blackberry (*Rubus ursinus),* coast tarweed (*Madia sativa*), hairy honeysuckle (*Lonicera hispidula* var. *vacillans*), sword fern (*Polystichum munitum*), sweet vernal grass (*Anthoxanthum odoratum*), common velvet grass (*Holcus lanatus*), hedge nettle (*Stachys ajugoides* var. *rigida*), redwood sorrel (*Oxalis oregana*), toothed coast fireweed (*Erechtites minima*), and coast man-root (*Marah oreganus*).

Non-native grassland
From the turn of the century, 1900, through about 1948 the parcel was part of a 600-acre ranch that produced hay. Various non-native grasses were seeded during this time to facilitate the production of commercial hay. Although hay is no longer produced on a commercial basis, much of the subject parcel remains in mowed grassland to this day. Approximately 6 acres of the area examined was vegetated with non-native grassland habitat. Characteristic species include: sweet vernal grass (*Anthoxanthum odoratum*), common velvet grass (*Holcus lanatus*), wild oat and common oat (*Avena barbata*, A. *fatua*), wild radish (*Raphanus sativus*), Italian and perennial ryegrass *(Lolium multiflorum*, L *perenne*), bent grass (*Agrostis pallens*), soft chess (*Bromus hordeaceus*), English daisy (*Bellis perennis*), English plantain (*Plantago lanceolata*), fescue (*Vulpia bromoides*, *V myuros*), sheep sorrel (*Rumex acetosella*), wild rye (*Elymus glaucus*), hairy cat's-ear and smooth cat's-ear (*Hypochaeris radicata*, *H. glabra*), ox-eye daisy (*Leucanthemum vulgare*), California blackberry (*Rubus ursinus*), California brome (*Bromus carinatus*), common vetch (*Vicia sativa* ssp*. sativa*), western bracken fern (*Pteridium aquilinum* var*. pubescens*), field bindweed (*Convolvulus arvensis*), and tall fescue (*Festuca arundinacea*). Areas of wild radish and western bracken fern are locally dominant in portions of the grasslands.

Red alder riparian
The habitat along to the unnamed creek along the southern border of the subject parcel has an overstory of red alder (*Alnus rubra*). Understory vegetation consists of Himalaya and California blackberry (*Rubus armeniacus, R. ursinus*), slough sedge (*Carex obnupta*), Western sword fern (*Polystichum minutum*), and deer fern (*Blechnum spicant*).

Freshwater wetland
Freshwater wetland habitat occurs along the northern portion of the apple orchard, along the western edge of the orchard extending south past the garden and into the field to the south of the farm house (Figure 2). Approximately 2.3 acres of wetland are present on the subject parcel. Additional wetland resources may occur between the subject parcel and Highway One but were not surveyed due to the scope of the proposed project. Species composition differed slightly from location to location and included buttercup (*Ranunculus* spp.), common velvet grass (*Holcus lanatus*), common bog rush (*Juncus effusus*), Pacific oenanthe (*Oenanthe sarmentosa*), abrupt beaked sedge (*Carex abrupta*), common rush (*Juncus patens*), Bolander's rush (*Juncus bolanderi*), tall flatsedge (*Cyperus eragrostis*), keeled sedge (*Isolepis carinata*) and creeping bentgrass (*Agrostis stolonifera*). Overall quality of the wetland is low. Surface water was found to persist for only a couple of weeks after a major rain event during the wettest portion of the year. The area could provide refuge for amphibians and aquatic insects but is unlikely to support breeding sites. All areas of wetland mapped, save those covered with invasive blackberry briars, have been mowed annually for the past 100+ years. Existing developments within the wetland include the old drainage ditch along the northern and western edges of the apple orchard, a footpath and footbridge, and

an unsurfaced access road used historically for apple harvest and currently for plant nursery materials drop-off and plant deliveries occasionally during the dry season.

Mendocino cypress
Two Mendocino cypress (*Hesperocyparis pygmaea*) trees were found growing near the middle of the grand fir/Sitka spruce stand. They are more than 100 feet from any component of the proposed development. Two other Mendocino cypress trees were located on the parcel, one near the cooking area and another by the pit toilet. These trees are relatively young and were likely planted at the edge of their respective clearings during the time the property was a tree nursery in the 1970's and 1980's.

Potential Occurrences
Seventeen special-status plant species identified as having potential occurrence or habitat were further examined to determine if surveys are needed. Blasdale's bent grass (*Agrostis blasdalei*), swamp harebell (*Campanula californica*), California sedge (*Carex californica*), Lyngbye's sedge (*Carex lyngbyei*), deceiving sedge (*Carex saliniformis*), Oregon goldenthread (*Coptis lanciniata*), supple daisy (*Erigeron supplex*), Point Reyes horkelia (*Horkelia marinensis*), hair-leaved rush (*Juncus supiniformis*), Baker's goldfields (*Lasthenia californica* ssp. *bakeri*), coast lily (*Lilium maritimum*), seacoast ragwort (*Packera bolanderi* var. *bolanderi*), Point Reyes checkerbloom (*Sidalcea calycosa* ssp*. rhizomata*), Siskiyou checkerbloom (*Sidalcea malvaeflora* ssp.*patula*), purple-stemmed checkerbloom (*Sidalcea malvaeflora* ssp. *purpurea*), and alpine marsh violet (*Viola palustris)* can occur in the habitat present on this parcel. Field surveys were conducted on thirteen days from January to July 2012 (Spade 2012). Four individuals of one special status plant species, Mendocino Cypress, were observed (see above).

Species profiles for select animal species with potential to occur in the Project Area
Navarro roach: These fish are habitat generalists that can be found in warm intermittent streams as well as cold, well-aerated streams. They may be present within the unnamed creek to the south of the project site.

Northern red-legged frog: The project site occurs within the historical range of the Northern red-legged frog. Aquatic and riparian habitat that could be used for breeding is present on the parcel adjacent to the site. Red-legged frogs disperse into upland habitat during the non-breeding season and could be present on portions of the parcel at that time.

Northern goshawk, Cooper's hawk, and sharp-shinned hawk: These birds of prey hunt and nest in habitat types that are present in the subject parcel.

Osprey: These birds of prey nest in the tops of large trees up to 15 miles from good fish producing waters. Osprey nests are usually highly visible; they were searched for and none were found.

Marbled murrelet: These birds nest on large branches of old growth trees. Some of the Sitka spruce trees within the grand fir/Sitka spruce stand may have usable nesting sites.

Vaux's swift, purple martin, pallid bat, pale big-eared bat, long-eared myotis and Yuma myotis: These birds and flying mammals roost in hollow trees, snags and beneath the bark of trees. Many potential roosting sites were available in the grand fir/Sitka spruce stand.

Northern spotted owl: These birds nest and hunt within coniferous forests with nearly complete canopy cover and open forest floors. Areas within the grand fir/ Sitka spruce stand may be suitable habitat.

Humboldt marten: These mammals den in hollow trees and snags like those found within the grand fir/Sitka spruce stand. Humboldt marten prefer large areas of unfragmented coniferous forest.

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 DFW, NOAA, or USFWS?

Threshold of Significance for this initial study: Direct impacts on individuals of any protected species or species of concern or substantial indirect impacts that adversely affect habitat functions (physical, chemical and biological processes that characterize that habitat) or values.

Assessment: This Project will have a **less than significant impact with the successful implementation of proposed mitigation measures on protected species, species of special concern, or the habitats that support these species**.

Potential Project Effects on Species

Amphibians and Reptiles

- If metamorphosing red-legged frog tadpoles are present in the Project Area in July or August, or adult frogs from July through October they could be affected by the renovation of the boardwalk and construction of the ADA pathway in the wetland area. Survey and relocation will minimize these effects. Construction of these facilities will not impact a significant area of habitat.

Birds

- No protected or SSC birds' nests or roosts have been observed in the Project area (Spade 2012), therefore direct impacts are not likely from the proposed actions. During construction, if protected or SSC birds are present they would likely be displaced from the Project area for the short-term if they were utilizing the area to forage or roost.

Plants

- The four Mendocino cypresses detected in the special status plant surveys will not be impacted by proposed construction.

Potential Adverse Effects to Species Habitats

Fish and Amphibians

- Indirect short-term impact on water quality in the unnamed creek could occur as a consequence of construction if disturbed or exposed soils are left unprotected from rainfall and stormwater runoff and increased turbidity occurs before these surfaces are vegetated or mulched. Impacts will be minimal because construction will occur between April 15 and October 15, and because there will be a >50-foot buffer between ground disturbance and any open water areas or channels

General

- Refer also to Section 8, Hydrology and Water Quality, for an assessment of Project impacts on hydrology and water quality and discussion of proposed mitigation measures and Best Management Practices (BMP).

4 (a) Mitigation Measures:

1. Construction in the wetland will only occur between April 15th and October 15th to reduce the chance of stormwater runoff occurring during construction.
2. Construction activities in the wetland will occur only when the area is dry and when adult red-legged frogs are not expected to be present. Surveys for frogs by a qualified biologist will be conducted in the wetland area prior to construction, and any frogs will be relocated outside of the construction area.
3. Disturbance of wetlands shall not exceed the minimum necessary to complete construction activities.
4. Vegetative disturbance will be contained within the limits of construction and kept to a minimum area.

Monitoring Method:

- A qualified biologist will identify, record, and report to DFW as appropriate red-legged frogs captured and relocated, or the occurrence of any mortality.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

Threshold of Significance for this initial study: A net reduction of functions or values in riparian habitat or other sensitive natural communities.

Assessment: The Project **with the successful implementation of mitigation measures will have less than significant impact on riparian habitat**. Impacts will be minimal because construction will occur between April 15 and October 15, and because there will be a >50-foot buffer between ground disturbance and riparian areas.

4 (b) Mitigation Measures:

- Construction will only occur between April 15th and October 15th when the ground surface is dry and to reduce the chance of stormwater runoff occurring during construction.
- To mitigate for impacts to the wetland area, ~1900 ft^2 of Himalayan blackberry to the southwest and downslope of the native plant nursery shall be removed and the area re-vegetated with native wetland species.

c) Have a substantial adverse effect on state or federal protected wetlands or waters through direct removal, filling, hydrological interruption, or other means?

Threshold of Significance for this initial study: Adversely affect protected wetlands or waters, resulting in a net reduction of functions, values, or area.

Assessment: The Project **will have a less than significant effect as construction within the freshwater wetland will be limited to the renovation of an existing boardwalk (Figure 2).** The renovated boardwalk will cover ~610 ft^2, of which 550 ft^2 are will be within the wetland area. An associated handicapped access ramp will cover ~3,050 ft^2, of which 440 ft^2 will be within the wetland. Educational programs facilitated by Project implementation will increase awareness of the importance of wetlands.

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?

Threshold of Significance for this initial study: Long-term disruption 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. Physical alterations to topography, hydrology or vegetation that fragment contiguous habitat areas.

Assessment: The Project will have **no long-term impact** on the movement of fish or wildlife, nor impede the use of wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Threshold of Significance for this initial study: Failure to comply with local policies or ordinances with jurisdiction over the Project that protects biological resources.

Assessment: The Project will not violate any local policies or ordinances protecting biological resources. Protected habitats with the Project Area include freshwater wetlands, riparian areas, and Grand Fir Forest

Alliance, as described above. Impacts to these areas will be limited to the renovation of an existing boardwalk and associated handicapped access ramp in the wetland area, and the renovation of an existing trail covering 1,650 square feet in the Grand Fir Forest Alliance area. **The impact would be less than significant.**

Construction in the wetland area is consistent with the Mendocino County Local Coastal Program Policy 3.1-4, which stipulates that development within wetland areas is allowable for nature study purposes when there is no feasible less environmentally damaging alternative. Renovation of the existing boardwalk and construction of the handicapped access ramp in the wetland area are required to reduce safety hazards associated with the potential failure of the existing boardwalk, prevent impact to the wetland from disturbance associated with school groups walking directly through it, and allow for educational programs that include direct observation of the wetland area, providing access for those with disabilities as is required by the Americans with Disabilities Act.

Renovation of the existing trail in the Grand Fir Forest Alliance area is consistent with the Mendocino County Local Coastal Program policy 3.1-7. The trail will be located in previously disturbed areas, thus preventing further impacts to the Grand Fir community. Because the trail is a renovation of an existing trail that is required to allow educational programs regarding the Grand Fir forest, any other site would be more disruptive.

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?

Threshold of Significance for this initial study: Obstruct or prevent the recovery of any listed species covered in an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

Assessment: The Project will have **no impact** to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

- According to the USFWS' habitat conservation plan web site, http://ecos.fws.gov/conserv_plans/PlanReport , there are no Habitat Conservation Plans covering the project area.
- According to DFW's natural community conservation planning web site, http://www.wildlife.ca.gov/habcon/nccp/status/index.html , there are no Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans covering the project area.

V. CULTURAL RESOURCES. **Would the project:**	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	X	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	X
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	X

V. Cultural Resources

The following analysis is based on an archaeological and historical resources survey of the Project Area conducted by a professional archaeologist (Van Bueren 2012). Van Bueren (2012) found that none of the buildings in the Project Area qualify as historical resources, and that no known archaeological resources are present. However, archaeological deposits associated with the farmhouse and associated historic outbuildings have the potential to be significant resources.

a. Cause a substantial adverse change in the significance of a historical resource.

Threshold of Significance for this initial study: Result in physical changes in the significance of a historical or cultural resource as defined in CEQA Guidelines Section 15064.5.

Assessment: The Project will have **no impact** on any historic or cultural resource

- The farmhouse and associated outbuildings have been significantly altered from their original condition, and no longer qualify as historical resources (Van Bueren 2012). Due to the loss of former farm buildings and the alteration of the farmhouse, the Project Area does not retain sufficient integrity to convey its historical significance as an important farm and butchering business in the late 1800s.

b. Cause a substantial adverse change in the significance of an archaeological resource.

Threshold of Significance for this initial study: Result in physical changes in the significance of an archaeological resource defined in CEQA Guidelines Section 15064.5.

Assessment: The Project has the **potential to have a significant adverse impact on archaeological resources, but the implementation of mitigation measures will reduce any impact to a less than significant level**.

Ground disturbing activities in the vicinity of the farmhouse, such as replacement of the Top of Hill Building and Eucalyptus Cabin, and improvements to the parking area and septic system, have the potential to disturb the ground that has as yet unevaluated archaeological deposits and buried features. This impact will be reduced to a less than significant level by implementation of the following mitigation measure.

5(b) Mitigation Measure:

An archaeological monitor shall be present during ground disturbing activities in the vicinity of the farmhouse to ensure that archaeological artifacts, cultural deposits, and human remains are not disturbed. In the event that as of yet undiscovered archaeological artifacts, cultural deposits, or human remains are encountered during installation, all work shall stop in the immediate vicinity of the find and an archaeologist shall be notified at the earliest opportunity. As appropriate, additional cultural resources surveys shall be conducted to inventory the cultural resources within disturbed areas. Construction activities shall not resume until the Archaeologist deems the cultural resource has been appropriately documented and protected. Measures to document and/or protect cultural resources may include, but not be limited to, standard test pits, testing for depth and extent of an archaeological deposit, or data recovery.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic features.

Threshold of Significance for this initial study: Result in physical changes or destruction of a unique paleontological resource or site or unique geologic feature.

Assessment: The Project will have **no impact** on a unique paleontological resource or sites or unique geologic feature as there are none in the Project area (Van Bueren 2012).

d. Disturb any human remains, including those interred outside of formal cemeteries.

Threshold of Significance for this initial study: Disturbance of human remains.

Assessment: The Project is expected to have no impact on human remains as there is no indication that interment occurred in the Project Area. On the remote chance that human burial or remains are uncovered, all work will cease and the County Coroner will be contacted to address the disposition of such remains.

VI. GEOLOGY AND SOILS. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Expose people or structures to 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.	☐	☐	X	☐
ii) Strong seismic ground shaking?	☐	☐	X	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	X	☐
iv) Landslides?	☐	☐	☐	X
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	X	☐
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?	☐	☐	☐	X
d) 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?	☐	☐	☐	X
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?	☐	☐	☐	X

VI. Geology and Soils

The geology in the Project Area is classified as undivided Cretaceous marine deposits (Franciscan formation), dominated by greywacke, sandstone, and shale. The following descriptions of the main soil types mapped in the Project Area are taken from the Soil Survey of Mendocino County, Western Part (NRCS 2002):

Cabrillo-Heeser Complex, 0-5% slopes: This unit is about 50 percent Cabrillo sandy loam and 30 percent Heeser sandy loam. Cabrillo soils consist of very deep, somewhat poorly drained soils formed in marine sediments and located on marine terraces with gentle slopes. The Heeser series consists of very deep, somewhat excessively drained soils formed in eolian sands.

Tregoning-Cleone Complex, 0-5% slopes: This unit is about 60 percent Tregoning sandy loam and 20 percent Cleone loamy sand. The Tregoning soil is moderately deep to a hardpan and is poorly drained. It formed in eolian sands. The Cleone soil is very deep and is somewhat poorly drained.

Tropaquepts, 0-15% slopes: These very deep, very poorly drained soils are on marine terraces at the heads of drainageways, along drainageways, or in shallow depressions. They formed in marine sediments.

a. Expose people or structures to potential substantial adverse effects from earthquakes, strong seismic ground shaking, seismic-related ground failure liquefaction, or landslides.

Threshold of Significance for this initial study: Project located in a known active earthquake fault zone.

Assessment: The project will have no impact. The project will not result in significantly increased exposures of people or structures to effects from earthquakes, strong seismic ground shaking, seismic-related ground failure liquefaction or landslides.

- The Project Area is located outside the tsunami hazard zone mapped by the California Department of Conservation (2009).
- The coastal zone in the Project Vicinity is seismically active and vulnerable to earthquake hazards, which include surface rupture, ground shaking, liquefaction and differential settlement. The San Andreas fault parallels the coast offshore from the Humboldt County line to Manchester where it heads inland continuing southeasterly from the coastal zone. Further to the east are the Hayward, Rodgers Creek and Mayacama faults. Both the San Andreas and Mayacama faults are capable of producing strong earthquakes in the coastal zone.
- The proposed project would include limited topographic alteration. The only fill would be a small amount in the stretch of the driveway closest to Highway One, to reduce the gradient. No cut slopes will be constructed for this project. No structures with high occupancy rates are proposed as part of the project. Due to the type and limited scale of the improvements proposed and the flat topographic conditions, geologic and seismic hazards can be avoided or minimized by employing sound engineering practice in design and construction. The risks associated with seismic activity, including regional subsidence, tsunami potential and sea level rise in the Project area are beyond the influence of the Project. If a major seismic event occurs in the area, any effect resulting from the Project will be insignificant in comparison to the effect on other infrastructure and human activities. Project implementation will substantially improve the seismic safety of several of the cabins and the Top of the Hill Building.

b. Result in substantial soil erosion or loss of topsoil.

Threshold of Significance for this initial study: Substantial acceleration of the rate of soil erosion at the Project site or the loss of top soil.

Assessment: The Project will have a less than significant impact regarding soil erosion or loss of topsoil.

- Temporary equipment access and construction will disturb <1 acre. Approximate square footage of new construction and significant renovation totals ~0.55 acres.
- Areas of ground disturbance will be mulched and revegetated with native plants.

c. Cause soil or geologic unit to become unstable as a result of the Project by causing instability, on or off-site landslides, lateral spreading, subsidence, liquefaction or collapse.

Threshold of Significance for this initial study: Substantially de-stabilize an otherwise stable soil or geologic unit.

Assessment: The project will have no impact on stability of the underlying soil, nor have any potential to initiate landslides, lateral spreading, subsidence, liquefaction or collapse.

- Project Area soils are relatively stable (see descriptions above). The proposed project would include limited topographic alteration. The only fill would be a small amount in the stretch of the driveway closest to Highway One, to reduce the gradient. No cut slopes will be constructed for this project. Due to the type and limited scale of the improvements proposed and the flat topographic conditions, geologic and seismic hazards can be avoided or minimized by employing sound engineering practice in design and construction.

d. 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?

Threshold of Significance for this initial study: Located on expansive soils.

Assessment: The Project will have no impact, as proposed construction is not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994).

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?

Threshold of Significance for this initial study: Located on underlying soils that are not capable of adequately filtering wastewater or alternative waste water disposal systems.

Assessment: The Project will have no impact, as the underlying soils in the proposed septic field location are capable of supporting a septic system, as documented by soil testing conducted by Lescure Engineers in 2009 and approved by Mendocino County. Construction of an additional septic system is included as part of the Project.

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

VII. Greenhouse Gas Emissions

a. Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?

Threshold of Significance for this initial study: Substantial generation of GHG emissions due to project implementation.

Assessment: The Project will have a less than significant impact in terms of generating GHG emissions.

Use of construction equipment necessary to implement the Project will contribute to GHG emissions in the short term. The project would contribute to GHG primarily through the use of diesel-powered construction equipment. The project would not necessarily generate new trips, but would instead divert trips that would have otherwise been made to another recreational or open space location in the County; therefore long-term operational emissions resulting from auto trips are not considered significant and are not discussed further. There would be no net long-term emissions (permanent sources) of GHG from the project. The combustion of diesel fuel in off-road construction equipment and on-road vehicles (trucks, etc.) would emit GHGs consisting mainly of carbon dioxide (CO_2), along with small amounts of methane (CH_4) and nitrous oxide (N_2O). Because the construction-related emissions will be temporary and minor,

the long-term impact of project GHG emissions is considered less than significant and no mitigation is required.

b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Threshold of Significance for this initial study: Project results in a cumulatively considerable net increase in GHG emissions for which California pursuant to Assembly Bill (AB) 32 desires to reduce California's GHG emissions to 1990 levels by 2020.

Assessment: The Project will have a less than significant impact with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Mendocino County has not prepared a Climate Action Plan, but its 2009 General Plan seeks to reduce greenhouse gas emissions by directing new growth into incorporated cities and established communities and increasing bike, pedestrian and transit systems, while improving building energy efficiency standards and promoting renewable energy (Mendocino County General Plan, Pg 1-7).

As discussed above, Project implementation is expected to result in a short term increase in GHG emissions during construction. Short-term construction related emissions for project implementation will not interfere with the County's plan to achieve reductions in GHG emissions. Therefore, the Project would not conflict with any plans, policies or regulations aimed at reducing GHG emissions.

VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**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?	☐	X	☐	☐
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?	☐	☐	X	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	X
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?	☐	☐	☐	X
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?	☐	☐	☐	X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	X
h) Expose people or structures to a significant risk	☐	X	☐	☐

of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

VIII. Hazards and Hazardous Materials

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Threshold of Significance for this initial study: Storage or use of large quantities of hazardous materials that could be released into the environment.

Assessment: The Project will have a less than significant impact with mitigation.

- The Project does not involve storage or use of large quantities of hazardous materials. .
- The Project's use of heavy equipment and vehicles contains a potential risk of an accidental release of small quantities of fuel, oil and coolant.

8 (a) Mitigation Measures:

1. Heavy equipment that will be used in the Project will be in good condition and will be inspected for leakage of coolant and petroleum products and repaired, if necessary, before work is started.
2. Equipment operators will be trained in the procedures to be taken should an accident occur.
3. Prior to the onset of work the contractor will prepare a plan for the prompt and effective response to any accidental spills.
4. Absorbent materials designed for spill containment and cleanup will be kept at that Project site for use in case of an accidental spill.
5. Refueling of equipment will occur off-site.
6. If equipment must be washed, washing will occur off-site.
7. Stationary equipment will be positioned over drip pans.

Monitoring Method:

- The equipment operator will inspect the work site and equipment before, during and after completion of the Project to ensure that all mitigation measures to avoid impacts are properly implemented.

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?

Threshold of Significance for this initial study: Project involves the use of large quantities of hazardous materials.

Assessment: While the potential exists through reasonably foreseeable upset and accident conditions to release hazardous materials into the environment, implementation of mitigation measures would reduce this impact to a less than significant level. Refer to previous assessment, mitigation measures, monitoring methods discussed in 7(a).

- The Project's use of heavy equipment and vehicles contains a risk of an accidental release of fuel, oil, or coolant.
- Discharge of potential pollutants from construction sites shall be prevented using source controls to the maximum extent practicable. Potential pollutants include but are not limited to: sediment, trash, nutrients, pathogens, petroleum hydrocarbons, metals, concrete, asphalt, lime, paint, stains, glues,

wood products, pesticides, herbicides, chemicals, hazardous waste, sanitary waste, vehicle or equipment wash water and chlorinated water.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Threshold of Significance for this initial study: Project is located within one-quarter of mile of a school and involves the use of large quantities of hazardous materials.

Assessment: The Project will have no impact to the public or the environment as the Project does not involve the use of large quantities of hazardous materials and is not located within one-quarter mile of a school.

- The Project will not emit hazardous emissions or handle large quantities of hazardous or acutely hazardous materials, substances, or waste.

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?

Threshold of Significance for this initial study: Project is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Assessment: The Project will have no impact.

- Within the Project area there are no sites that are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; therefore the proposed Project would not create a significant risk to the public or the environment.
- If hazardous materials or what appear to be hazardous materials are encountered, work will stop in the affected area immediately and the operator or Refuge will contact 911 or the appropriate agency for further instructions.

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?

Threshold of Significance for this initial study: Project is 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.

Assessment: The Project will have no impact.

- The Project work site is not located within two miles of a public airport.

f) For a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?

Threshold of Significance for this initial study: Project is located within the vicinity of a private airstrip.

Assessment: The Project will have no impact.

- The Project work site is not located within the vicinity of a private airstrip.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Threshold of Significance for this initial study: Project would prevent alerting and warning citizens, conducting evacuations, short-term feeding and sheltering, conducting search and rescue operations or using emergency evacuation routes.

Assessment: The Project will have no impact.

- The proposed Project will not prevent alerting and warning citizens, conducting evacuations, short-term feeding and sheltering, conducting search and rescue operations or using emergency evacuation routes

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Threshold of Significance for this initial study: Project is located in an area shown on a map used to identify wildland fire hazard areas. Potential exists for a significant risk of loss, injury or death involving wildland fires.

Assessment: The Project will have less than significant impact with the successful implementation of mitigation measures.

The Project is located in a mapped area of very high fire hazard severity rating (California Department of Forestry and Fire Protection 2007). Fire hazard designations are based on topography, vegetation, and weather, amongst other factors that indicate the likelihood of wildfire occurrence. The fire potential in the project area is reduced by the relatively wet climate and lower-than average frequency of severe fire weather resulting from coastal influence.

- There is a low probability that accidental sparks from equipment or a vehicle could ignite a fire.
- The installation of an additional water tank and new fire hydrants as part of the Project would facilitate fire suppression, reducing potential fire hazards from existing conditions.

8(h) Mitigation Measures:

1. Refueling of equipment will occur off-site.
2. Stationary equipment will be positioned over drip pans.
3. All internal combustion engines shall be fitted with spark arrestors.
4. The contractor shall have an appropriate fire extinguishers and fire fighting tools present at all times when there is a risk of fire.
5. Vehicles shall not be parked in tall grass or any other location where heat from the exhaust system could ignite a fire.

IX. HYDROLOGY AND WATER QUALITY. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?	☐	X	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner	☐	☐	☐	X

which would result in substantial erosion or siltation on- or off-site?				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	X
e) 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?	☐	☐	☐	X
f) Otherwise substantially degrade water quality?	☐	☐	☐	X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	X
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	X

IX. Hydrology and Water Quality

a) Violate any water quality standards or waste discharge requirements?

Threshold of Significance for this initial study: Exceed any state water quality standards or waste discharge requirements.

Assessment: The Project will have a **less than significant impact if mitigation measures are successfully implemented and will not violate any water quality standards**, which will ensure that any potentially significant impacts are avoided or mitigated to below a level of significance.

- Jughandle Creek and the unnamed creek in the Project Area are not listed as Section 303(d) Sediment Impaired Waterbodies.
- The Project will not violate any state water quality standards or waste discharge requirements, because only a small amount of ground disturbance will occur, and measures will be implemented to avoid and minimize erosion and to prevent the release of hazardous materials associated with construction equipment. Furthermore, ground disturbance will not occur in close proximity to either of the creeks in the Project vicinity.
- Erosion and sediment control shall comply with the California Storm Water Quality Association Storm Water Best Management Practice (BMP) Handbook for Construction, 2003.

IX(a) Mitigation Measures:

1. Construction in the wetland area will only occur between April 15th and October 31st when the ground surface is dry and to reduce the chance of stormwater runoff occurring during construction.
2. No construction materials, debris, or waste, shall be placed or stored where it may be allowed to enter into or be placed where it may be washed by rainfall into waters of the U.S./State.
3. Disturbed areas will be mulched with at least 2 to 4 inches of certified weed-free straw mulch with wheat or other straw for riparian and wetland areas and rice straw for uplands and use of a seed mix

with coverage equivalent to 100 lbs/acre of barley seed and appropriate riparian vegetation for immediate erosion control. No annual (Italian) ryegrass (*Lolium multiflorum*) shall be used.

4. All temporary fill, synthetic mats and silt fences will be removed from wetlands and waters of the U.S./State immediately on cessation of construction. Biodegradable geotextile fabrics will be used, where possible.
5. Material stockpiles shall be properly protected to minimize sediment and pollutant transport from the construction site.
6. The following BMPs shall be implemented to prevent entry of storm water runoff into the excavation site, the entrainment of excavated contaminated materials leaving the site, and to prevent the entry of polluted storm water runoff into coastal waters during the transportation and storage of excavated contaminated materials:
    - EC-2 Preservation of Existing Vegetation
    - EC-6 Straw Mulch
    - EC-7 Geotextile and Mats
    - WM-9 Sanitary/Septic Waste Management

Monitoring Method:

- The equipment operator will inspect the work site and equipment before, during and after completion of the Project to ensure that all mitigation measures to avoid impacts are properly implemented.
- Before construction work commences the equipment operator will inspect the site and document that all that erosion control measures and appropriate BMPs are in place.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a substantial lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Threshold of Significance for this initial study: Substantially deplete groundwater supplies or interfere with recharge standards or waste discharge requirements.

Assessment: The Project will have **no impact** on groundwater supplies, recharge or the local groundwater table level.

- Well testing was conducted and determined that groundwater supplies are more than adequate to sustainably supply the number of visitors that could be accommodated in the Project Area after implementation.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Threshold of Significance for this initial study: Substantially alter existing drainage, increasing surface runoff and/or resulting in substantial erosion or siltation on or off site.

Assessment: The Project will have **no impact** on surface runoff from the site which would result in erosion or siltation on or off site.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Threshold of Significance for this initial study: Increase the volume of surface runoff that potentially could cause localized flooding.

Assessment: The Project will have **no impact**, as it will not increase storm water runoff that could cause localized flooding. The project will model low impact development techniques intended to maximize on-site stormwater retention and infiltration, with the ultimate goal of aquifer recharge. Proposed storm water related improvements include the following:

- Source Control: Utilizing permeable paving for parking areas;
- Treatment: Rain gardens, bioswales, and berms to control and direct surface water flow;
- Expanded roof water catchment to conserve water and reduce storm water run-off; and
- Construction of an educational water garden display, encouraging guests to trace the path of storm water through berms, swales and other water features.

e) 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?

Threshold of Significance for this initial study: Runoff exceeds the capacity of existing or planned stormwater drainage systems or provides substantial additional sources of polluted runoff.

Assessment: The Project will have **no adverse impact** on existing or planned stormwater drainage systems and will not provide substantial additional sources of polluted runoff.

- As discussed above, the project includes significant improvements that will maximize on-site stormwater retention and infiltration, with the ultimate goal of aquifer recharge.

f) Otherwise substantially degrade water quality?

Threshold of Significance for this initial study: Exceed any state water quality standards not previously assessed in 8 (a).

Assessment: The Project will not substantially degrade water quality not previously assessed in 8 (a) or exceed water any state water quality standards.

- The Project will not violate any state water quality standards or waste discharge requirements. As noted above, septic improvements for the project have been approved by the Mendocino County Department of Public Health, and the Project includes significant improvements to stormwater retention and treatment.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Assessment: The Project will have **no impact**, as the lodging facilities and other facilities to be renovated and constructed are not within the FEMA mapped 100-year or 500-year flood hazard areas.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Threshold of Significance for this initial study: Construction of structures in the 100-year flood hazard area which would impede or redirect flood flows.

Assessment: The Project will have **no impact** because structures and other facilities to be constructed or renovated are not within the FEMA mapped 100-year or 500-year flood hazard areas.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Threshold of Significance for this initial study: Project is located in a flood hazard area exposing people or structures to risk of loss, injury or death involving flooding.

Assessment: The Project is not located within a flood hazard area.

j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?

Assessment: The Project will have **no impact**. While there is a small tsunami inundation area located adjacent to Jughandle Creek in the Project Vicinity, it is not located within the Project Area. None of the facilities to be constructed or renovated are located within a mapped tsunami inundation zone.

X. LAND USE AND PLANNING. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?	☐	☐	☐	X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	X

X. Land Use and Planning

a. Physically divide an established community?

Threshold of Significance for this initial study: Physically divide an established community.

Assessment: The Project will have **no impact** on an established community as none exist at the site.

- The Project will not create a physical barrier that would limit access to an area that was previously accessible.

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating and environmental effect?

Threshold of Significance for this initial study: Failure to comply with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project.

Assessment: The Project will have **no impact**.

- JCFNC will secure all necessary federal, state, and local authorizations prior to implementing this Project.
- JCFNC will obtain a Coastal Development Permit from Mendocino County prior to construction.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan.

Threshold of Significance for this initial study: If the Projected is located in an area with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan, is it inconsistent with the applicable Plan?

Assessment: The Project will have **no impact**.

- There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans covering the Project site.

XI. MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	☐	☐	☐	X
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?	☐	☐	☐	X

XI. Mineral Resources

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?

Threshold of Significance for this initial study: Development of land overlying a mineral resource that would physically preclude future access to that resource.

Assessment: The Project will have **no impact** on future availability of a mineral resource that would be of value to the region and the residents of the state.

- There is no known mineral resource found within the Project Area.

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?

Assessment: **Not applicable** to the Project as no such delineation exists for the Project area.

XII. NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	X	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	X	☐
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 expose people residing or working in the project area to excessive noise	☐	☐	☐	X

levels?				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	X

XII. Noise

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Threshold of Significance for this initial study: Generating noise and exposing people to noise in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Assessment: The Project **with mitigation measures will have a less than significant adverse effect** on people exposed to noise levels in excess of established standards.

- The Project may temporarily generate noise at the work site that exceeds 85 db at 50 ft for a short-term when using heavy equipment.
- Workers in close proximity to operating equipment and equipment operators will be exposed to noise levels in excess of 85 db.
- There are two residences in the immediate vicinity, within 1,000 feet, of the Project. These residences are located approximately 800 ft from the Project Area. After attenuation by distance, noise from Project construction at these residences will be approximately 61 db. .
- The Mendocino County General Plan Chapter VI Noise Element (2009) sets forth goals and policies related to noise and land use compatibility. Policy DE-100 proposes exterior noise limits for different land uses. In the single-family residential category, the maximum sustained noise level would be 60 dBA daytime (7:00 AM to 10:00 PM), and 50 dBA nighttime (10:00 PM to 7:00 AM). Ldn is the average sound level in decibels, excluding frequencies beyond the range of the human ear, during a 24-hour period with a 10dB weighting applied to nighttime sound levels. The Framework Plan indicates that Ldn of up to 75 dB are normally acceptable in a livestock farming area, and up to 70 Ldn in a golf course.
- Existing noise sources in the project area are associated with traffic on area roads and on Highway 1. The 2009 Mendocino County General Plan found that noise from Highway 1 in the vicinity of Highway 20, located ~3 miles north of the Project Area, a Community Noise Equivalent Level (CNEL) ranging from 60 dBA at a measurement distance of 469 feet from the road, and 70 dBA at a measurement distance of 101 feet (Charles Salter Associates 2002). CNEL is the average sound level over a 24 hour period, with a penalty of 5 dB added between 7 pm and 10 pm. and a penalty of 10 dB added for the nighttime hours of 10 pm to 7 am, since most citizens living in a given area are very sensitive to noise in the early morning hours and somewhat sensitive to noise during evening hours. When Project construction noise is added to the sound levels generated by traffic on Highway 1, the result would be an increase of ~3 dB, which is at the threshold of perception.

12 (a) Mitigation Measures:

1. Workers will be required to wear hearing protection when in the vicinity of or while operating equipment producing noise levels equal to or greater than 85 db.
2. Restrict noise from earthmoving and hauling of soils.
    - Hours of construction for outdoor activities exceeding 50 dBA shall be limited to Monday through Friday 7:00 a.m. to 7:00 p.m. and weekends and holidays from 9:00 a.m. to 6:00 p.m. Movement and hauling of material, and associated activities such as re-fueling or maintenance, shall be limited to normal working hours for the area, as specified above. More restrictive operation hours may be specified in the construction documents and may be property-specific.

- All equipment shall operate with factory-equipped mufflers, and staging areas shall be located as far from residential uses as is practical. These conditions shall be incorporated into project contract specifications.
- Construction personnel shall conduct all work activities in a manner that minimizes noise generation. A variety of contractor actions are available that will reduce construction noise, including: i) turning off engines on all construction equipment not in active use, ii) shielding noisy equipment with less noisy equipment, and iii) avoiding high RPM engine operation whenever possible.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Assessment: The Project will have a **less than significant impact** on people from excessive groundborne vibration or groundborne noise levels; any groundborne vibration or noise will be short-term and will be mitigated to a less than significant level by mitigation measures specified in 11a.

c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Assessment: The Project will have no permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project, because Project construction activities will be of short-term duration.

d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Assessment: The Project will have a **less than significant adverse effect** on ambient noise levels in the Project vicinity.

- The Project will involve only one or two pieces of vehicular equipment operating simultaneously and only for short-term duration.
- Back-up beepers on heavy equipment vehicles will cause temporary noise in excess of ambient levels during daylight hours, but the Project is of short duration and this noise increase is not considered substantial.
- Construction activities are scheduled during the period when nesting and breeding sites species of concern are vacant.
- Increases in ambient noise levels will be kept to a less than significant level by implementation of mitigation measures in Section 11a.

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 expose people residing or working in the Project area to excessive noise levels?

Assessment: **Not applicable** to this Project as the work site is not located within two miles of a public airport.

f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

Assessment: **Not applicable** the Project work site is not located within two miles of a public airport.

XIII. POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial 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)?	☐	☐	☐	X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	X

XIII. Population and Housing

a) Induce substantial 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)?

Threshold of Significance: Result in substantial population growth in the area.

Assessment: **No impact and not applicable**. The Project is limited to renovating and constructing campground, lodging and educational facilities. It will not induce substantial population growth in the area, nor does it involve construction of housing or growth inducing infrastructure.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Threshold of Significance: Displace significant housing units in the area.

Assessment: **No impact**. There is no housing in the areas where construction will take place in the Project Area. The Project will not displace any existing housing.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Threshold of Significance: Displace a significant number of people.

Assessment: **No impact**. The Project is limited to renovating and constructing campground, lodging and educational facilities. There is no housing where construction will take place in the Project Area. The Project will not displace any people.

XIV. PUBLIC SERVICES.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project 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	☐	☐	☐	X

maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	X
Police protection?	☐	☐	☐	X
Schools?	☐	☐	☐	X
Parks?	☐	☐	☐	X
Other public facilities?	☐	☐	☐	X

XIV. Public Services

a) Would the Project 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:

Threshold of Significance: Result in increased need for public services such as fire and police protection, schools, and parks.

Assessment: **No impact**. The Project is limited to renovating and constructing campground, lodging and educational facilities. The proposed Project would have no impact by creating a need for new or physically altered facilities for fire protection, police protection, schools, parks, nor other public facilities. The Project will improve firefighting ability in the Project Area by installing a new water tank and fire hydrants. The new facilities will serve schoolchildren in the Project Vicinity, as well as students visiting the area. The additional capacity at the campground will result in a small increase in visitation to the vicinity, especially in the off season, but this increase will not be sufficient to create a need for new police protection or other public services or facilities.

XV. RECREATION.	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**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?	☐	☐	☐	X
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?	☐	X	☐	☐

XV. Recreation

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?

Threshold of Significance: Increased use of parks or other recreational facilities in the area.

Assessment: The Project would have a **less than significant effect** on use of parks or other recreational facilities in the area. The Project may result in a small increase in visitors lodging in the immediate vicinity. Students utilizing the new and enhanced facilities in the Project Area will largely restrict their use to the Project Area itself. However, students and other visitors are likely to visit Jughandle State Reserve,

and may also visit Caspar Headlands State Beach. These parks do not suffer from overuse resulting in degradation of park facilities, and any increases in user fees would contribute to maintenance of the facilities at these parks.

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?

Threshold of Significance: Requires the construction or expansion of recreational facilities in the area.

Assessment: The Project will have a **less than significant effect** on the environment due to construction or expansion of recreational facilities. The Project's construction of recreational facilities is limited to the following trail improvements:

- Removal of hazardous limbs and trees along existing trails,
- Trail restoration and boardwalk construction along the existing "Grand Fir" trail connecting the Farmhouse to the campground, and
- New accessible trail access between the Farmhouse lodge and Native Plant Nursery, including a rebuilt boardwalk.

Trail restoration along the existing Grand Fir Trail will not impact new areas of the forest, and will reduce visitor impacts by constructing a boardwalk that will assist in restricting impacts to the defined trail corridor. The construction of new trail access between the lodge and the Plant Nursery will impact a small area of wetlands (~550 ft^2), but this impact will be less than significant after implementation of Mitigation Measures 4a and 4b.

XVI. TRANSPORTATION/TRAFFIC. **Would the project:**
a) 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?
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
e) Result in inadequate emergency access?
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

XVI. Transportation

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Threshold of Significance: Substantial increase in the number of vehicle trips, the volume to capacity ration on roads, or congestion at intersections.

Assessment: The Project **will not substantially increase traffic** over the long term. The increase in lodging capacity provided by the project is limited to the construction of a bunkhouse and two counselor cabins. These facilities are intended to be used by small groups which are likely to travel in a van or other shared vehicle. During project implementation, there will be a small increase in traffic associated with

construction vehicles. Existing traffic on Highway 1 in the Project Vicinity is generally light (see below), and a minor increase will not have a significant effect on capacity or congestion.

Existing Traffic Conditions
Existing traffic volumes for Highway 1 in the Project Vicinity (intersection of Highway 1 and Gibney Lane) were obtained from the Caltrans Traffic Data Branch website at http://traffic-counts.dot.ca.gov/. Peak Hour Traffic at this location is 1,300 vehicles. Daily traffic during the peak travel month is 13,600, and average annual daily traffic (AADT) is 10,700. Traffic levels to the north, in and near Fort Bragg, are significantly higher.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Assessment: The Project will not result in a substantial increase in the number of vehicles utilizing area roadways, and therefore will not exceed a level of service standard established by the County Department of Transportation, as Highway 1 in the Project Vicinity retains excess capacity. The nearest intersection on Highway 1 (Highway 1 at Simpson Lane) for which data were available retains a Level of Service of A during peak weekday and weekend hours (GHD 2014).

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

Assessment: **Not applicable**, the Project will not have an effect on air traffic patterns.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Assessment: The Project will not substantially increase hazards due to design features or incompatible uses. The Project includes the repair and upgrade of JCFNC's driveway entry from Highway 1 to improve safety and ingress/egress from the site. There will be **no impact**.

e) Result in inadequate emergency access?

Assessment: The Project will improve emergency access by repairing and upgrading JCFNC's driveway, and adding a new fire turnout and a new fire turnaround. There will be **no impact**.

f) Result in inadequate parking capacity?

Assessment: The Project will increase the number of parking spaces at the site from 46 spaces to 48 spaces (44 standard and 4 handicapped spaces). Much of the existing parking (32 spaces) is called "informal parking" and is located in two areas in the campground area. These two "informal parking" areas would be replaced by eight dispersed gravel parking spaces with 2 pervious concrete handicapped parking spaces. The remainder of the parking would be developed near the Creamery Office and Manager's Residence, Farmhouse Lodge and Top of Hill Building. There would be **no impact**.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Assessment: The Project would **not conflict with adopted policies**, plans or programs supporting alternative transportation. There is adequate room at JCFNC for safe storage of bicycles, and JCFNC is served by Mendocino Transit Bus #60, which stops four times a day on the west side of Highway One in Caspar. The distance from the Caspar bus stop to JCFNC is approximately 0.3 miles.

XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	X	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	X	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	X
e) 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?	☐	☐	☐	X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	X
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	X

XVII. Utilities and Service Systems

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Assessment: The Project will upgrade and expand the existing septic system, including an Orenco Systems "Advantex" treatment system, resulting in high quality, pre-treated effluent at the septic drain field. The septic system upgrade includes new sewer lines to be extended to the Top of Hill Building, Replacement Cooking Area, the Bunkhouse and the Bath House. A new treatment system and primary and reserve dispersal fields would be located west of the "Creamery" office and Managers Residence. The upgrade has been approved by the County and will ensure that the Regional Water Quality Control Board's requirements are met. There will be **no impact**.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Assessment: In addition to the wastewater treatment upgrade described above, the Project will upgrade the existing water service onsite. The upgrade includes the addition of a 20,000 to 30,000 gallon water storage tank, a new 6" fire water main running along the access road, a new 2" domestic water line running to the Replacement Cooking Area, the Bunkhouse and the Bath House, and new gate valves and fire hydrants. The wastewater treatment and water service upgrades will not cause significant environmental effects. The improvements will require minimal ground disturbance, and erosion will be minimized by the implementation of Mitigation Measures 8a.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Assessment: The project will model low impact development techniques intended to maximize on-site stormwater retention and infiltration, with the ultimate goal of aquifer recharge. Proposed storm water related improvements include the following:

- Source Control: Utilizing permeable paving for parking areas;
- Treatment: Rain gardens, bioswales, and berms to control and direct surface water flow;
- Expanded roof water catchment to conserve water and reduce storm water run-off; and
- Construction of an educational water garden display, encouraging guests to trace the path of storm water through berms, swales and other water features.

The proposed stormwater improvements include new stormwater swales near the entrance, pervious concrete handicapped parking spaces, and multiple rain gardens. Ground disturbance associated with these improvements will be minimal and they will not be located in sensitive habitat areas. **Impacts from construction of stormwater improvements will be less than significant.**

d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?

Assessment: Well testing was conducted and determined that groundwater supplies are more than adequate to sustainably supply the number of visitors that could be accommodated in the Project Area after implementation. There would be **no impact**.

e) 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?

Assessment: **No impact**. The Project Area's wastewater is treated by a septic system, not by a wastewater treatment provider. Improvements to the system to ensure that adequate capacity will be available have been approved by the County.

f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

Assessment: **No impact**. The Project will not result in a substantial increase in regional solid waste disposal needs, as camping and lodging capacity at JCFNC would increase by less than five visitors per night.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Assessment: **No impact**. The Project will comply with federal, state, and local statutes and regulations related to solid waste. Solid waste and recycling is picked up in containers weekly by Fort Bragg Disposal. There will be no increase in solid waste.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project 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?				
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 projects, 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?	☐	☒	☐	☐

XVIII. Mandatory Findings of Significance

a) Does the Project 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, "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?

Threshold of Significance for this initial study: The Project has impacts associated with any of the environmental topics identified in the Appendix G of the CEQA Guidelines that cannot be mitigated to less than significant levels.

Assessment: The Project **will have less than a significant impact on the environment with the successful implementation of mitigation measures**.

- The Project will not degrade the quality of the environment. Refer to previous discussions of less than significant impact with mitigation measure assessments and/or mitigation measures in this initial study: Section IV(a) state and federal protected species, (b) riparian or sensitive natural community; V(b) cultural and archaeological resources; VII(a) hazardous materials, (h) fire hazard, VIII (a) water quality; and XI (a) noise levels.

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 projects, and the effects of probable future projects)?

Threshold of Significance for this initial study: The incremental effects of a Project are cumulatively considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Assessment: The Project will have **a less than significant cumulative impact**.

- The Project does not have adverse impacts that are individually limited, but cumulatively considerable. It is the goal of the Project that the beneficial effects of environmental education conducted at JCFNC will result in a long-term beneficial effect on the environment.

c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Threshold of Significance for this initial study: The Project will have a significant environmental impact on human beings, either directly or indirectly that cannot be mitigated to less than significant.

Assessment: The Project **will have a less than significant impact, with the successful**

implementation of mitigation measures on human beings, either directly or indirectly.

- Refer to earlier assessments in initial study: Sections VII(a) hazardous materials, VII(h) fire hazard, VIII (a) water quality and XI (a) noise levels.

- The availability of low-cost coastal lodging facilities and the wider availability of environmental education programs resulting from this Project will be beneficial to human beings.

Mitigation Measures

4 (a) Mitigation Measures:

1. Construction in the wetland will only occur between April 15th and October 15th to reduce the chance of stormwater runoff occurring during construction.

2. Construction activities in the wetland will occur only when the area is dry and when adult red-legged frogs are not expected to be present. Surveys for frogs by a qualified biologist will be conducted in the wetland area prior to construction, and any frogs will be relocated outside of the construction area.

3. Disturbance of wetlands shall not exceed the minimum necessary to complete construction activities.

4. Vegetative disturbance will be contained within the limits of construction and kept to a minimum area.

4 (b) Mitigation Measures:

- Construction will only occur between April 15th and October 15th when the ground surface is dry and to reduce the chance of stormwater runoff occurring during construction.

- To mitigate for impacts to the wetland area, ~1900 ft^2 of Himalayan blackberry to the southwest and downslope of the native plant nursery shall be removed and the area re-vegetated with native wetland species.

5 (b) Mitigation Measure
An archaeological monitor shall be on call during ground disturbing activities in the vicinity of the farmhouse to ensure that archaeological artifacts, cultural deposits, and human remains are not disturbed. In the event that as of yet undiscovered archaeological artifacts, cultural deposits, or human remains are encountered during installation, all work shall stop in the immediate vicinity of the find and an archaeologist shall be notified at the earliest opportunity. As appropriate, additional cultural resources surveys shall be conducted to inventory the cultural resources within disturbed areas. Construction activities shall not resume until the Archaeologist deems the cultural resource has been appropriately documented and protected. Measures to document and/or protect cultural resources may include, but not be limited to, standard test pits, testing for depth and extent of an archaeological deposit, or data recovery.

8 (a) Mitigation Measures:

1. Heavy equipment that will be used in the Project will be in good condition and will be inspected for leakage of coolant and petroleum products and repaired, if necessary, before work is started.

2. Equipment operators will be trained in the procedures to be taken should an accident occur.

3. Prior to the onset of work the contractor will prepare a plan for the prompt and effective response to any accidental spills.

4. Absorbent materials designed for spill containment and cleanup will be kept at that Project site for use in case of an accidental spill.

5. Refueling of equipment will occur off-site.

6. If equipment must be washed, washing will occur off-site.

7. Stationary equipment will be positioned over drip pans.

Monitoring Method:

- The equipment operator will inspect the work site and equipment before, during and after completion of the Project to ensure that all mitigation measures to avoid impacts are properly implemented.

8 (h) Mitigation Measures:

1. Refueling of equipment will occur off-site.

2. Stationary equipment will be positioned over drip pans.

3. All internal combustion engines shall be fitted with spark arrestors.

4. The contractor shall have an appropriate fire extinguishers and fire fighting tools present at all times when there is a risk of fire.

5. Vehicles shall not be parked in tall grass or any other location where heat from the exhaust system could ignite a fire.

9 (a) Mitigation Measures:

1. Construction in the wetland area will only occur between April 15th and October 31st when the ground surface is dry and to reduce the chance of stormwater runoff occurring during construction.

2. No construction materials, debris, or waste, shall be placed or stored where it may be allowed to enter into or be placed where it may be washed by rainfall into waters of the U.S./State.

3. Disturbed areas will be mulched with at least 2 to 4 inches of certified weed-free straw mulch with wheat or other straw for riparian and wetland areas and rice straw for uplands and use of a seed mix with coverage equivalent to 100 lbs/acre of barley seed and appropriate riparian vegetation for immediate erosion control. No annual (Italian) ryegrass (*Lolium multiflorum*) shall be used.

4. All temporary fill, synthetic mats and silt fences will be removed from wetlands and waters of the U.S./State immediately on cessation of construction. Biodegradable geotextile fabrics will be used, where possible.

5. Material stockpiles shall be properly protected to minimize sediment and pollutant transport from the construction site.

6. The following BMPs shall be implemented to prevent entry of storm water runoff into the excavation site, the entrainment of excavated contaminated materials leaving the site, and to prevent the entry of polluted storm water runoff into coastal waters during the transportation and storage of excavated contaminated materials:
   - EC-2 Preservation of Existing Vegetation
   - EC-6 Straw Mulch
   - EC-7 Geotextile and Mats
   - SE-1 Silt Fence
   - WM-9 Sanitary/Septic Waste Management

Monitoring Method:

- The equipment operator will inspect the work site and equipment before, during and after completion of the Project to ensure that all mitigation measures to avoid impacts are properly implemented.

- Before construction work commences the equipment operator will inspect the site and document that all that erosion control measures and appropriate BMPs are in place.

12 (a) Mitigation Measures:

1. Workers will be required to wear hearing protection when in the vicinity of or while operating equipment producing noise levels equal to or greater than 85 db.

2. Restrict noise from earthmoving and hauling of soils.

    - Hours of construction for outdoor activities exceeding 50 dBA shall be limited to Monday through Friday 7:00 a.m. to 7:00 p.m. and weekends and holidays from 9:00 a.m. to 6:00 p.m. Movement and hauling of material, and associated activities such as re-fueling or maintenance, shall be limited to normal working hours for the area, as specified above. More restrictive operation hours may be specified in the construction documents and may be property-specific.
    - All equipment shall operate with factory-equipped mufflers, and staging areas shall be located as far from residential uses as is practical. These conditions shall be incorporated into project contract specifications.
    - Construction personnel shall conduct all work activities in a manner that minimizes noise generation. A variety of contractor actions are available that will reduce construction noise, including: i) turning off engines on all construction equipment not in active use, ii) shielding noisy equipment with less noisy equipment, and iii) avoiding high RPM engine operation whenever possible.

DETERMINATION:

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.

_____ _____

DATE

BILL KINSER
SENIOR PLANNER

References

Thad M. Van Bueren, November 17, 2012. Archaeological and Historical Resources Survey of the Jughandle Farm and Nature Center Property in Mendocino County, California. Prepared for Helene Chalfin, Executive Director Jughandle Farm & Nature Center, Caspar, CA 95420

Questa Engineering Corporation. Hydrological Study for Community Water Supply Well Jughandle Creek Farm and Nature Center. November 13, 2009. Prepared for Jughandle Creek Farm and Nature Center c/o Helene Chalfin, Caspar, CA.

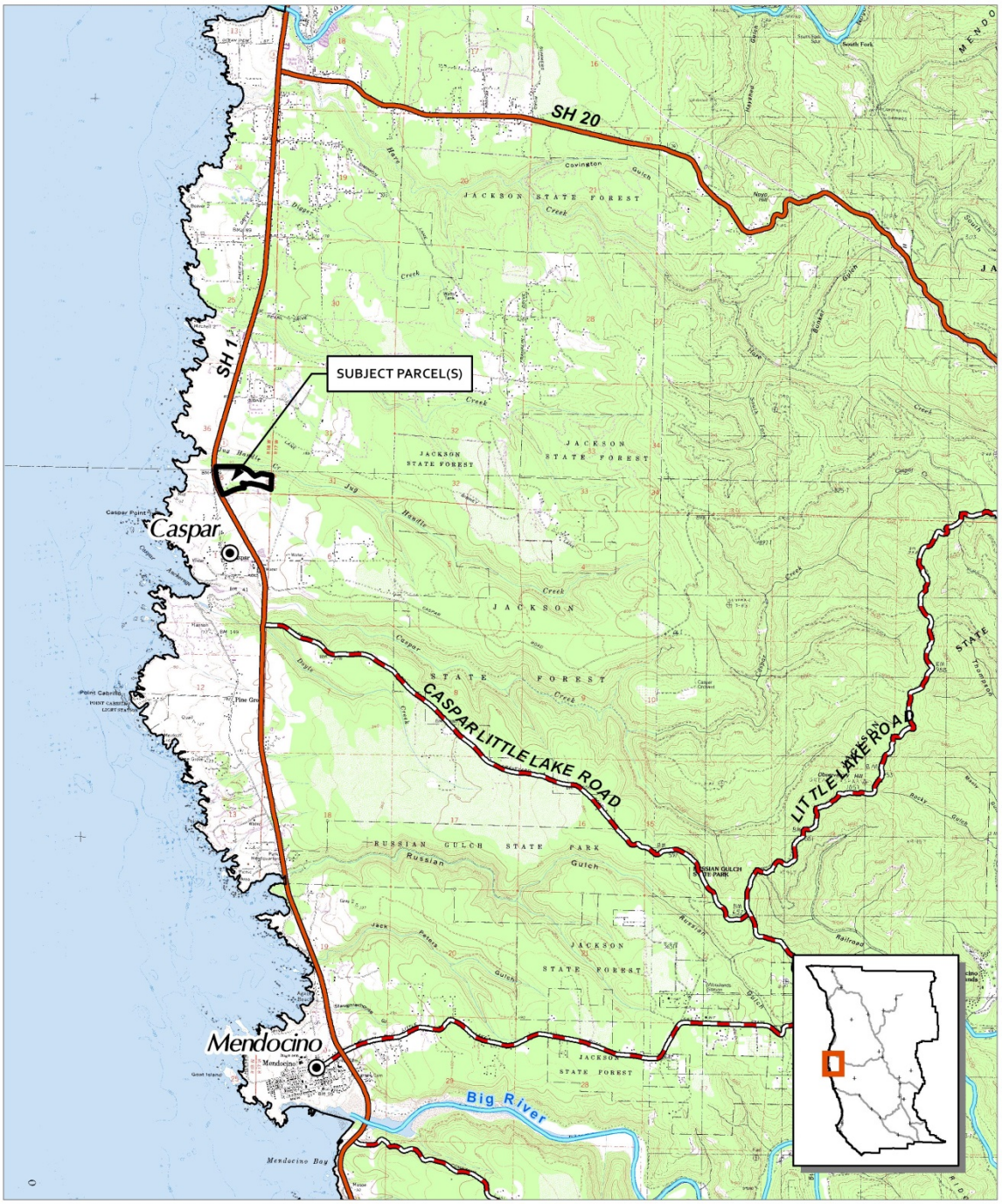
Spade Natural Resources Consulting, April 2, 2012. Biological Scoping Survey, Preliminary Botanical Survey, ESHA and Wetland Delineation Report and Reduced Buffer Analysis. Prepared for Jug Handle Creek Farm, 15501 N. Highway 1, Caspar, CA.

Spade Natural Resources Consulting, October 23, 2014. Reduced Buffer Analysis Grand Fir Forest. Prepared for Jug Handle Creek Farm, 15501 N. Highway 1, Caspar, CA.

Spade Natural Resources Consulting, July 19, 2012. Addendum to Botanical Report and Sonoma Tree Vole Scoping. Prepared for Jug Handle Creek Farm, 15501 N. Highway 1, Caspar, CA.

Spade Natural Resources Consulting, November 14, 2014. Sonoma Tree Vole Survey Report. Prepared for Jug Handle Creek Farm, 15501 N. Highway 1, Caspar, CA.

Figure 1



CASE: CDP 2003-0053
OWNER: Jughandle Creek Farm & Nat. Cent.
APN: 017-250-32
APLCT: Jughandle Creek Farm
ADDRESS: 15501 N. Hwy. 1, CS

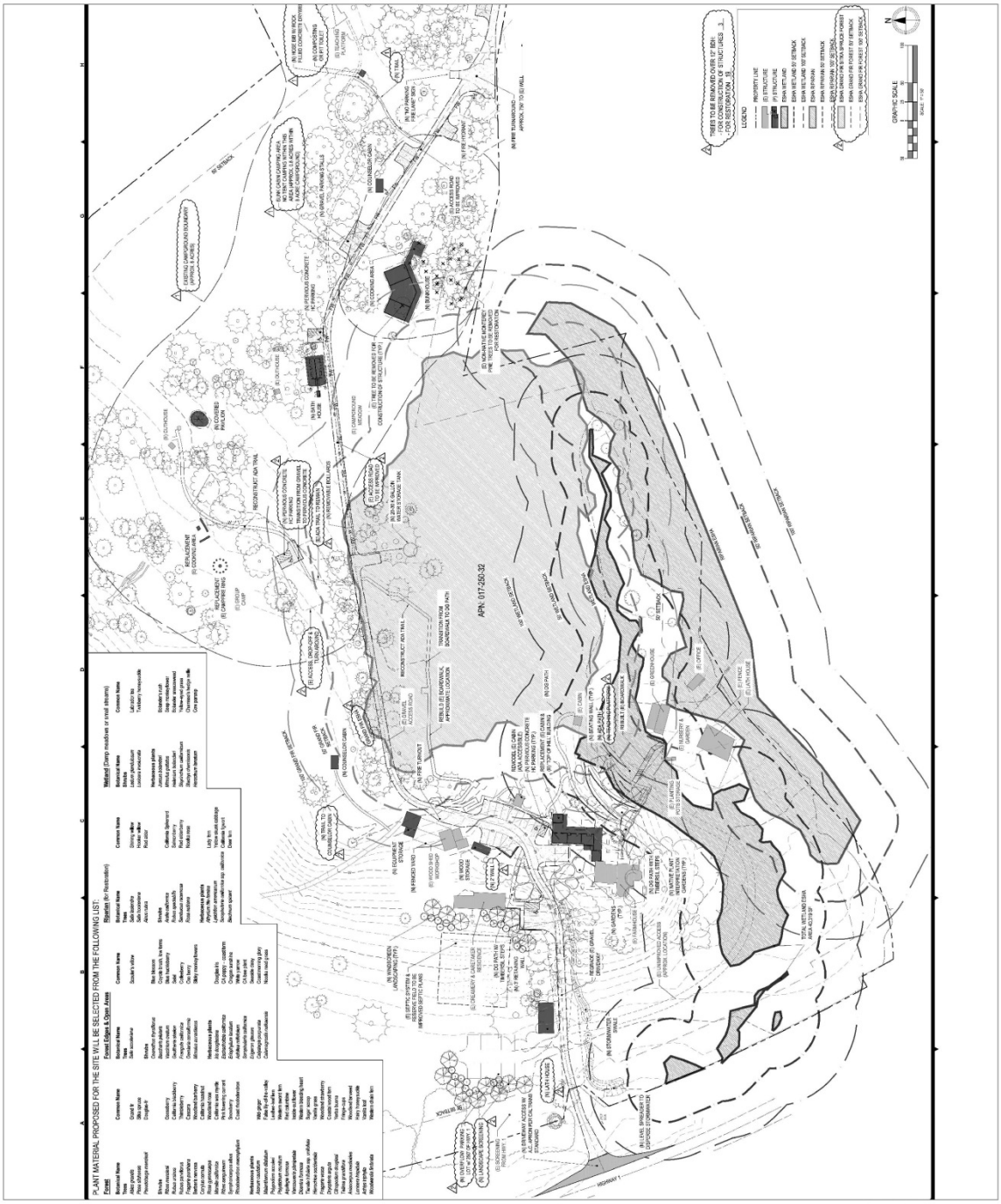
Major Towns & Places
Major Rivers
Highways
Major Roads

0 2,600 5,200 Feet
0 0.5 1 Miles
1:63,360

LOCATION MAP

Map produced by the Mendocino County Planning & Building Services, March, 2015
All spatial data is approximate. Map provided without warranty of any kind.

Figure 2



CASE: CDP 2003-0053
OWNER: Jughandle Creek Farm & Nat. Cent.
APN: 017-250-32
APLCT: Jughandle Creek Farm
ADDRESS: 15501 N. Hwy. 1, CS

NO SCALE

PROPOSED SITE PLAN

Map produced by the Mendocino County Planning & Building Services, March, 2015
All spatial data is approximate. Map provided without warranty of any kind.

Figure 3

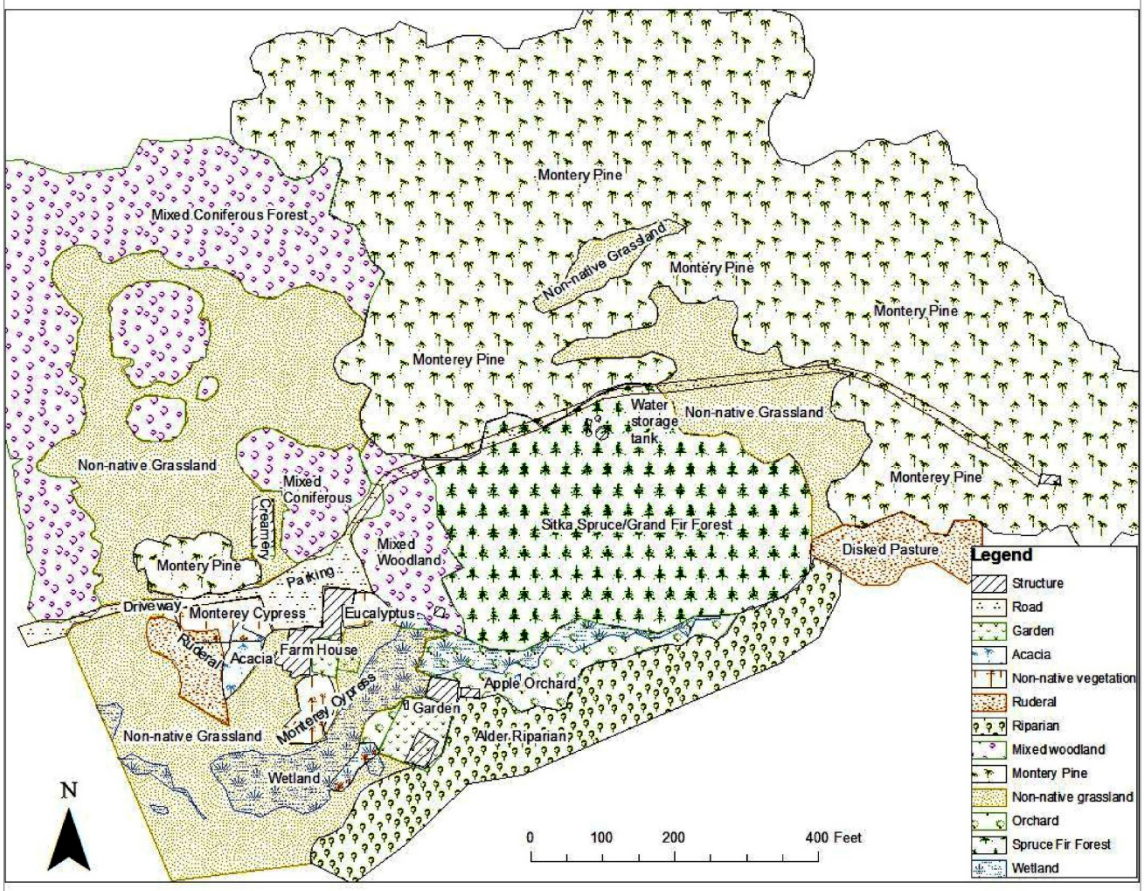


Figure 1. Plant communities map.

Jug Handle Creek Farm and Nature Center 13 Spade

CASE: CDP 2003-0053
OWNER: Jughandle Creek Farm & Nat. Cent.
APN: 017-250-32
APLCT: Jughandle Creek Farm
ADDRESS: 15501 N. Hwy. 1, CS

NO SCALE

PLANT COMMUNITIES

Map produced by the Mendocino County Planning & Building Services, April, 2015
All spatial data is approximate. Map provided without warranty of any kind.