

## HumSun 3, LLC - Mitigation Measures, Monitoring, and Reporting Program

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

Mitigation measures were incorporated into conditions of project approval for the project. The following is a list of these measures and a verification form to ensure measures shall be met.

### **Mitigation Measures**

**AQ-1.** During construction and operation, the following dust control measures shall be implemented:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, active graded areas, excavations, and unpaved access roads) shall be watered two times per day in areas of active construction.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All vehicle speeds on unpaved roads shall be limited to 15 mph, unless the unpaved road surface has been treated for dust suppression with water, rock, wood chip mulch, or other dust prevention measures.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. Clear signage shall be provided for construction workers at all access points.
- All construction and operation equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications.

Implementation Time Frame	Party Responsible for Implementation	Party Responsible for Verification	Form of Verification	Date of Verification	Verified/ Comments
During construction activity and project operations (ongoing)	Applicant	Humboldt County Planning and Building Department in consultation with North Coast Air Resources Control Board	Inspection Report		

**BIO-1.** Prior to the commencement of construction activities for stormwater treatment, wetland enhancement, and wetland mitigation, a qualified botanist shall survey the northern/northwestern area of the Proposed Project Area for the locally-rare Howell's yampah (*Perideridia howellii*). Any identified species shall be flagged and either not disturbed during land-disturbing activities, or if they cannot be avoided, the Howell's yampah shall be relocated or replanted at a 1:1 ratio. A relocation/replanting/monitoring plan shall be developed by a qualified botanist and submitted to the Humboldt County Planning and Building Department prior to disturbance.

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No more than one week prior to ground disturbing activities	Qualified Biologist	Humboldt County Planning and Building Department in consultation with the California Department of Fish and Wildlife	Qualified Biologist will prepare report		

**BIO-2.** The use of anticoagulant rodenticides shall be prohibited.

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Life of the Proposed Project	Applicant	Humboldt County Planning and Building Department	Inspection Report		

**BIO-3.** For construction related and land disturbance activities that take place within the nesting season, accepted as March 15th – August 15th, a pre-construction special status nesting bird survey shall be conducted by a qualified biologist for a minimum of one day within the 7-day period prior to vegetation removal and ground disturbing activities and a buffer zone determined by the qualified biologist, depending on the species nesting. This Mitigation Measure applies to construction / land disturbance within in the Proposed Project Area, and to water tank installation/placement on the ridge. If ground disturbance and vegetation removal work lapses for seven days or longer during the breeding season, a supplemental avian pre-construction survey shall be conducted by a qualified biologist before project work is reinitiated. If active nests are found within the construction footprint or within 500-feet of construction activities, the biologist shall flag a buffer around each nest. If nests are documented outside of the disturbance footprint and within 500-feet of the construction area, the biologist will determine the buffer size. Buffer size for common species would be determined with CDFW. Within this buffer zone, no construction shall take place until the qualified biologist determines that the young have fledged, or nesting activity has ceased.

If active nests are detected during the survey, the qualified biologist shall monitor all nests at least once per week to determine whether birds are being disturbed and which activities might disturb nesting activities, which shall be prohibited within the buffer zone until a determination is made. If signs of disturbance or distress are observed, the qualified biologist shall immediately implement adaptive measures to reduce disturbance.

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No more than one week prior to ground disturbing activities, if occurring between March 15 <sup>th</sup> and August 15 <sup>th</sup>	Qualified Biologist	Humboldt County Planning and Building Department in consultation with the California Department of Fish and Wildlife	Qualified Biologist will prepare report		
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**BIO-4.** Once cultivation operations that use fans commence, noise monitoring shall occur monthly during the NSO nesting season (once per month from April - August). Monitoring shall be conducted for eight (8) hours, once per month, to capture the noise produced on a typical operational day. The average of the 8-hour noise measurements shall be calculated and recorded. Noise readings shall be taken using an accurate decibel reader that has the capacity to store and output recorded data. Data outputs shall include the sound pressure measurements, the average of the minimum 8-hour measurement, and the date, time, and duration of monitoring. Readings shall occur at the edge of tree line, located at 40.310680°, -123.660347° and shown in Figure 21. Copies of the readings from the monitor shall be kept on file and delivered to the Humboldt County Planning and Building Department at the end of the operational season, prior to December 31st of the operational year.

Noise readings shall be required during the first year of operation with fans. If data demonstrates that noise pressure from the operation is below 50 dB, noise monitoring shall not be required for subsequent years of operation with the same equipment. If equipment or cultivation techniques are changed, noise monitoring shall again resume for the first year of operation with the new equipment.

If noise readings indicate an average daily sound pressure of greater than 50 decibels at the monitoring location, measures shall immediately be taken to reduce noise levels. Measures shall include reducing the power output on fans within greenhouses, reducing the number of fans, installing noise-dampening barriers (e.g., greenhouse covers), or other applicable sound-reducing actions. Follow-up monitoring shall occur the day after measures have been implemented. The initial noise level readings exceeding 50 decibels, implemented correction measures, and resulting sound pressure shall be documented, and submitted to the Planning and Building Department within ten days of acknowledgement of the noise issue.

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Once a month, or as needed from May – August, for a minimum period of 8 hours	Qualified Biologist or Engineer	Humboldt County Planning and Building Department in consultation with the California Department of Fish and Wildlife	Qualified Biologist or Engineer will prepare report		

**BIO-5.** Pre-construction surveys for amphibians and reptile species shall be conducted within one week prior to ground disturbance within the Proposed Project Area, with a qualified biologist familiar with Northern Red-legged Frog and Western Pond Turtle identification. Any identified individuals shall be relocated to suitable habitat, away from construction activities. If, during construction a Northern Red-legged Frog or Western Pond Turtle is observed in an active construction zone, construction activities shall halt in the observation area and the frog(s) shall be moved to a safe location in a similar habitat outside of the construction zone.

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No more than one week prior to ground disturbing activities	Qualified Biologist	Humboldt County Planning and Building Department in consultation with the California Department of Fish and Wildlife	Qualified Biologist will prepare report		

**BIO-6.** Bat surveys, Sonoma Tree Vole, and West Coast DPS Fisher surveys shall be conducted by a qualified biologist within seven (7) days prior to the start of construction in areas where potential roosts or foraging habitat may be disturbed/removed. Surveys shall be conducted by a qualified biologist. Surveys shall include a visual inspection of the trees surrounding the Proposed Project Areas, with particular interest in large trees/snags with cavities or loose bark. If the presence of a bat roost or Sonoma tree vole nest is identified, tree removal shall be prohibited and no activity generating significant noise shall occur within 300 feet of the roost.

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**BIO-7.** Wetland mitigation shall follow the guidelines and site-specific recommendations in the Wetland Mitigation Summary (J. Regan Consulting, 2024). In total, 2.63 acres (114,562.8 sq. ft.) of wetland mitigation shall be provided for the 0.87 acres of unavoidable wetland impacts from the Proposed Project. The 3:1 mitigation ratio will create 0.88 acres (38,753 sq. ft.) of new wetlands, an additional 0.20 acres (8,778 sq. ft.) of wetland enhancement, 0.45 acres (19,602 sq. ft.) of riparian enhancement and approximately 1.1 acres (46,354 sq. ft.) of new stream riparian enhancement.

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Within 3 years of Project Approval	Qualified Biologist	Humboldt County Planning and Building Department in consultation with the California Department of Fish and Wildlife	Qualified Biologist will prepare report		

**BIO-8.** California oat grass (*Festuca idahoensis* – *Danthonia californica*) shall be mitigated as described in the “Update to *Festuca idahoensis*-*Danthonia californica* Herbaceous Alliance” Memorandum prepared by NorthPoint Consulting Group, 2024. Any impacted California oat grass stand shall be mitigated at a 2:1 ratio. A minimum of 0.42 acres, or a higher area, adjusted for additional unforeseen impacts, of the existing stand of low-quality *Danthonia sp.* located on the Mid-Ridge Site shall be enhanced through (1) removal of invasive species with a Cal-IPC rank of High or Moderate, and (2) installation of wildlife-proof fencing to prevent additional cattle and feral pig impacts. Enhancement shall occur until the success criteria of establishment of a 0.42-acre “high quality” *Festuca idahoensis*-*Danthonia californica* stand with a minimum of 30% *Danthonia californica* cover and no greater than 10% invasive species cover.

A qualified botanist or restoration specialist shall perform annual monitoring to ensure progress toward the success criteria is being made. Monitoring visits and invasive species maintenance shall be conducted within the same three-week period at the end of May or beginning of June. A minimum of three (3) years of monitoring shall occur, or until the target area reaches the success criteria described above.

A Monitoring Report shall be submitted annually to the Planning Department by December 31<sup>st</sup> of each monitoring year. The Annual Monitoring Report shall include:

1. A summary of maintenance and enhancement done that year
2. Description of site conditions
3. Monitoring methods used
4. Photos and photo points
5. Discussion of any needed corrective actions or proposed method changes
6. Results of Annual Monitoring, including total absolute cover estimates for vegetative cover plots, total absolute cover estimates for native herbaceous cover where applicable, absolute cover of target invasive species within the target area, analysis and discussion of progress towards meeting Success Criteria.

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Five years	Qualified Biologist	Humboldt County Planning and Building Department in consultation with the	Qualified Biologist will prepare report		

		California Department of Fish and Wildlife			
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**CUL-1.** If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 50-foot buffer of the discovery location, per the Cultural Resources Investigation Report. Work near the archaeological find(s) shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendation for further action.

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

Implementation Time Frame	Party Responsible for Implementation	Party Responsible for Verification	Form of Verification	Date of Verification	Verified/ Comments
During construction activity and project operations	Applicant and, if necessary, a qualified professional archaeologist	Humboldt County Planning and Building Department in consultation Tribal governments, if necessary	If needed, the qualified professional archaeologist will prepare a Compliance Report.		

**CUL-2.** The applicant shall follow all applicable conditions listed for Resource HS-S1 (Windy Ridge) and Resource HS -S2 (Secret Knoll), as outlined in the Cultural Resource Inventory Report (CRIR) prepared by DZC Archaeology & Cultural Resource Consulting, LLC, developed in March 2020, as adjusted to the currently Proposed Project. The specific applicable conditions are as follows:

- All surface and subsurface cannabis cultivation and related activities are prohibited within 100 feet of the recorded boundaries of HS-S1 and HS-S2. The resource site boundary and 100-ft. resource buffer are identified in Appendix H of the **confidential** CRIR.
- Survey whiskers shall be placed across and within the roadbed at the 100 ft. resource buffer to denote entrance to the resource protective buffer. These shall be replaced as needed to maintain boundary identification. Annual replacement is recommended.

- The road-bed bisecting HS-S1 and HS-S2 shall be capped using No. 2 base rock to a depth of 4 inches within the resource site boundary, the 100-ft. site buffer, and for an additional 100 ft. outside of the site buffer, on both the east and west road approaches to the site. The mitigated road segments are identified in Appendix H of the **confidential** CRIR.
- No blading or road maintenance shall occur outside of the existing road prism within the identified site boundary or mitigated road extent of HS-S1 and HS-S2.
- Should major road repairs be required within the site boundary or 100 ft. buffer, an archaeological monitor shall be present.

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During construction activity and project operations	Applicant and, if necessary, a qualified professional archaeologist	Humboldt County Planning and Building Department in consultation Tribal governments, if necessary	If needed, the qualified professional archaeologist will prepare a Compliance Report.		

**EN-1.** Power supply shall be developed to support the scale of the Proposed Project during phased build out. Mixed-light cultivation shall not occur until required power sourced from a renewable source is brought to the site (e.g., installation of solar power or completion of a PG&E upgrade). Prior to the onset of power, proposed cultivation shall be outdoor cultivation cultivated using light-deprivation techniques in greenhouses. At no point in time shall onsite activities exceed existing site power capacity.

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During construction activity and project operations	Applicant	Humboldt County Planning and Building Department in consultation	Inspection report		

**GEO-1.** If paleontological resources are encountered during implementation of the Project, ground disturbing activities will be temporarily redirected from the vicinity of the find. A qualified paleontologist shall be retained by the developer to make an evaluation of the find. If a significant paleontological resource(s) is discovered on the property, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.

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During construction activity and project operations	Applicant and, if necessary, a qualified paleontologist	Humboldt County Planning and Building Department in consultation Tribal governments, if necessary	If needed, the qualified paleontologist will prepare a Compliance Report		