



**Siskiyou County**  
**Planning Commission Staff Report**  
**June 18, 2025**

**New Business Agenda Item No. 1**  
**Waddell Pit Use Permit Amendment (UP-19-74-1M) and**  
**Reclamation Plan Amendment (RP-01-01-1M)**

**Applicant:** Jim Hayes  
Hayes & Sons, Inc.

**Property Owners:** Hayes & Sons, Inc.  
PO Box 258  
Happy Camp, CA

**Project Summary** The applicant is requesting approval of the following:

- Amend existing Use Permit (UP-19-74) and Reclamation Plan to expand the existing surface mine from 8 acres to 18 acres. The proposal also includes extending the end date of operations and updates to the monitoring and reclamation standards in order to bring the reclamation plan up to current requirements.

**Location:** The project site is located on Indian Creek Road, north of the community of Happy Camp; APNs: 009-340-350, 009-330-230 & 009-330-240; Township 17N, Range 7E, Sections 5 & 8, MDB&M.

**General Plan:** Surface Hydrology

**Zoning:** Rural Residential Agricultural, 40-acre minimum (R-R-B-40) and Rural Residential Agricultural, 5-acre minimum (R-R-B-5)

**Exhibits:**

- A. Draft Resolution PC 2025-011  
A Resolution of the Planning Commission of the County of Siskiyou, State of California, Approving the Waddell Pit Use Permit Amendment (UP-19-74-1M), Reclamation Plan Amendment (RP-01-01-1M), and Associated Mitigated Negative Declaration Pursuant to the California Environmental Quality Act
  - A-1. Notations and Recommended Conditions of Approval
  - A-2. Recommended Findings
  - A-3. Mitigation Monitoring and Reporting Program
- B. Draft Mitigated Negative Declaration
- C. Public Hearing Notice and Notice of Intent (NOI)
- D. Use Permit UP-19-74
- E. Reclamation Plan RP-01-01
- F. Comments

## Background

Jim Hayes, owner and operator of Waddell Pit, has requested an amendment to the existing Reclamation Plan and use permit to increase the mine boundaries to achieve stable final slopes and extend the life of the mine. The quarry is currently operated under Use Permit UP-19-74, as approved by the Siskiyou County Planning Commission in 1974. When the State Surface Mining and Reclamation Act (SMARA) was adopted and a Mining and Reclamation Plan became a requirement, a plan was submitted, RP-01-01 and approved by the Siskiyou County Planning Commission in 2002. As part of this Use Permit amendment, a Mitigated Negative Declaration (MND), SCH Number 2025041463, has been prepared pursuant to the California Environmental Quality Act (CEQA). The MND can be found in Exhibit B.

The current quarry cut was blasted at and material removed from the base of the cut, causing a near vertical slope. The reclamation plan should be amended to extend the boundaries to allow removal of material to create a stable, benched back slope. The proposed final slopes will allow the continued removal of material and result in a stable, 1.5:1 overall slope angle as supported by the provided slope stability survey.

The property is a legal parcel that was originally created as Parcel 1, as shown on the map titled, "Unit 1 For: Joseph Waddell, et al". This parcel map was filed in the Siskiyou County Recorder's Office on December 14, 2011, in Town Map Book 8 at page 61.



Figure 1: Project Location



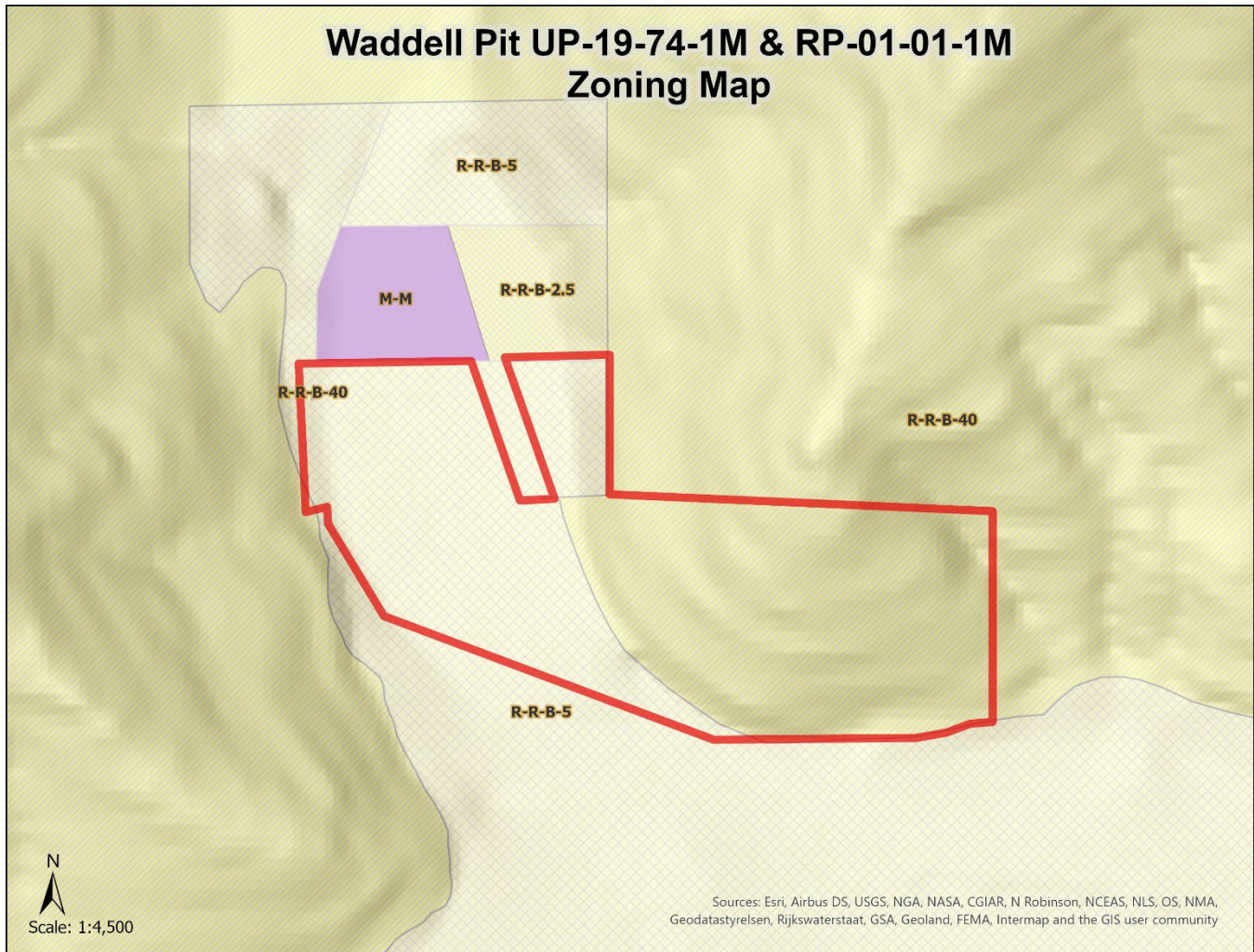


Figure 2: Zoning Map

## Analysis

The Land Use Element of the Siskiyou County General Plan identifies the project site as being within the mapped resource overlay area for Surface Hydrology. In addition, planning staff have identified that Composite Overall Policies 41.3(e), 41.3(f), 41.6, 41.7, 41.9, 41.12, 41.13 and 41.18 apply to the proposed project.

Staff have conducted a detailed analysis of each of the required findings and have found that the proposed project is consistent with the applicable General Plan policies governing the subject site. In addition, the use as conditioned would be compatible with the surrounding land uses, has adequate roadway access for transportation and public health and safety provisions, and would not create environmental impacts to on- or off-site resources. The recommended findings are detailed in the General Plan Consistency Findings section of Exhibit A-2 attached to this staff report and are submitted for the Commission's review, consideration, and approval.

## **Zoning Consistency**

The proposed project site is zoned Rural Residential Agricultural (R-R-B-5 and R-R-B-40).

Pursuant to Siskiyou County Code (SCC) Section 10-6.1501, the uses designated in Article 15 may be allowed subject to the issuance of a use permit. In evaluating a use permit request, the primary focus is compatibility of the proposed surface mining operation with the site and surrounding uses to determine if the proposed project should be allowed, and to review the configuration, design, location, and potential impact(s) of the proposed project. The Planning Commission may approve the use permit application, with or without conditions, only if all the required findings can be made. These findings are detailed in the Zoning Consistency Findings section of Exhibit A-2.

In order for the Commission to approve the requested Use Permit and Reclamation Plan amendments, the Commission must find that the proposed use is consistent with the General Plan, would not be detrimental to the public welfare or injurious to property or improvements in the surrounding area, and not be incompatible with the character of the area due to noise, dust, odors, or other undesirable characteristics. Based on staff's analysis of the proposed project, staff believes that the necessary findings to approve the proposal can be made subject to the incorporation of the recommended conditions of approval. The recommended conditions of approval provided as Exhibit A-1, are based on the consolidation of conditions of the existing Use Permit and Reclamation Plan along with current recommendations from outside agencies and project mitigation measures. The findings are detailed in the Zoning Consistency Findings section of Exhibit A-2 attached to this staff report and are submitted for the Commission's review, consideration, and approval.

## **Discussion**

The location of the project is located north of the community of Happy Camp, on Indian Creek Road, in Township 17N, Range 7E, Sections 5 & 8, MDB&M; Assessor's Parcel Numbers: 009-340-350, 009-330-230 & 009-330-240.

The existing rock quarry is located in a portion of APN 009-340-350 and is proposed to expand further north within the same parcel and into APN 009-330-240. The stockpile area will remain within APN 009-330-230. The main access to the quarry is on Indian Creek Road, approximately 250 feet west of the intersection with South Fork Road. The access to the stockpile area and secondary quarry access route is approximately 1175 feet north of the quarry main access point. The proposed expansion will increase the quarry area from 3.2 acres to 12 acres, for a total of 18 acres of disturbed area due to mining and associated activities. A second top-soil stockpile area is proposed in the northeast area of APN 009-330-240. The subject property is currently only developed with the quarry, stockpile storage areas and access road.

Hours of operation will remain the same, Monday through Friday from 7:00 a.m. to 5:00 p.m. with necessary blasting every two to three years during normal operating hours. Materials transported from the site are estimated to require two hundred and fifty truckloads each year, with an average of five loads each week and one each day.

Annual production is estimated to remain at 5,000 to 30,000 short tons with an estimated total production of 300,000 short tons.



Equipment onsite will include portable truck scales, dump trucks, trailers, loaders, crushing and screening equipment, and other similar diesel-powered heavy machinery. Diesel-powered generators may be used onsite if necessary. The equipment will be stored in the stockpile area. Equipment will be maintained in good working order to reduce air quality impacts and noise generation. Fuel will be obtained from mobile carriers when in the field onsite. Equipment will be on site, when necessary, not on a consistent basis; most machines will be moved off-site when not in use.

This expansion is not only necessary to allow increased material supply to allow the continued operation of the quarry for an additional 30 years but to correct the steep cut face which prevents the site from being reclaimed in accordance with the existing reclamation plan.

As part of the proposed reclamation amendment, the following changes will be made to the plan:

1. Expand the rock quarry by 8 acres with a total disturbance area of 18 acres.
2. Extend the end date of mining to by 30 years.
3. Increase the estimated total production from 100,000 cu/yds to 300,000 short tons (equivalent to 357,000 cu/yds)
4. Removal of approved use of stream gravel skimming from plan.

Overall, the operations and equipment used will remain the same. Processing and stockpiling will remain in the existing location. On average, annual production is not expected to increase. The revegetation plan will remain the same.

## Environmental Review

An Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for this project. The IS/MND was posted to the State Clearinghouse on May 1, 2025, for the minimum 30-day public comment period which ended on June 1, 2025. The MND evaluated the required impacts that are identified in the Appendix G CEQA Guidelines. The analysis concluded that there are no significant environmental impacts, and any *Potentially Significant* impacts have associated mitigated measures, which have lessened the degree of the impacts to *Less than Significant*.

Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Noise, and Transportation were found to be *Potentially Significant* but were reduced to *Less Than Significant* after incorporation of the associated mitigation measures. Below is a summary of the Mitigated Measures that have been or will be incorporated as part of the project:

Under Air Quality, would the project:

- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- c) Expose sensitive receptors to substantial pollutant concentrations?

These areas were reduced to *Less than Significant with Mitigation Incorporated* with the following mitigation measures:

**Mitigation Measure AIR-1 (Dust Control Plan):**

Prior to the expansion of the quarry, a Dust Control Plan shall be submitted to the SCAPCD. Control measures in the plan may include, but are not limited to, watering all active parking areas, soil piles, graded areas, and unpaved roads; limiting traffic speeds to 15 mph on unpaved roads; stabilizing inactive areas of the site; and covering haul trucks transporting soil, sand, or other loose materials likely to give rise to airborne dust. The Dust Control Plan shall be authorized by the SCAPCD prior to the expansion and the plan shall be followed during operations at the Project site.

Under Biological Resources, would the project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?

This was reduced to *Less than Significant with Mitigation Incorporated* with the following mitigation measures:

**Mitigation Measure BIO-1 (Nesting Bird Surveys):**

Vegetation removal or ground-disturbing activities within previously undisturbed areas of the Project site as well as blasting will occur between September 1 and January 31, when birds are not anticipated to be nesting if feasible. If this is not feasible, a pre-construction nesting bird survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the Project area no more than one week prior to the initiation of activities. If activities are delayed or suspended for more than one week after the pre-construction nesting bird survey, the site should be resurveyed. Results of the nesting bird survey shall be documented in a report and provided to Siskiyou County.

If an active nest is located during preconstruction surveys, a non-disturbance buffer should be established around the nest by a qualified biologist in consultation with CDFW and USFWS to comply with FGC sections 3503 and 3503.5 and the Migratory Bird Treaty Act. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified during the survey, as well as ongoing monitoring by biologists.

**Mitigation Measure BIO-2 (Milkweed Survey):**

If feasible, new vegetation removal shall occur outside of the monarch development season (between November 1 and March 31). If vegetation disturbance occurs between April 1 and October 31, surveys will be completed for native milkweed species prior to completing activities. If milkweed is found, then a survey shall be completed to determine if any eggs or caterpillars are present on the plant(s). If monarch eggs or larvae are present, then disturbance to the plant would be avoided until the following year's management period (June 1 to September 30). If avoidance is not possible, and disturbance is unavoidable, then mitigation requirements for monarch butterfly would be determined through consultation with the USFWS.

Under Cultural Resources, would the project:

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
- c) Disturb any human remains, including those interred outside of dedicated cemeteries?

These areas were reduced to *Less than Significant with Mitigation Incorporated* with the following mitigation measures:

**Mitigation Measure CR-1 (Discovery of Cultural Resources):**

If cultural resources, such as chipped or ground stone, or bone are discovered during disturbance activities, work shall be stopped within 50 feet of the discovery, as required by the California Environmental Quality Act (CEQA; January 1999 Revised Guidelines, Title 14 California Code of Regulations [CCR] 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the material and offered recommendations for further action.

**Mitigation Measure CR-2 (Discovery of Human Remains):**

Although unlikely, if human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains is provided. Specific treatment of human remains shall occur consistent with State and Federal law.



Under Geology and Soils, would the project:

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
  - ii. Strong seismic ground shaking?
  - iv. Landslides?
- 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?

These areas were reduced to *Less than Significant with Mitigation Incorporated* with the following mitigation measure:

**Mitigation Measure GEO-1 (Daily Risk Management):**

The mine operator shall observe a schedule of daily risk management during operations, including grooming of cut slopes to remove material that may be prone to sliding.

Under Hazards and Hazardous Materials, would the project:

- a) Create a significant hazard to the public or the environment through the routine transport/use/disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

These areas were reduced to *Less than Significant with Mitigation Incorporated* with the following mitigation measure:

**Mitigation Measure HAZ-1 (Blasting Plan):**

Prior to blasting activities in the expanded quarry area, the mine operator shall provide a site-specific Blasting Plan to Siskiyou County for approval. The Blasting Plan shall identify general blasting procedures including safety, use, storage, and transportation of explosives that are consistent with the minimum safety requirements of federal, State, and local regulations. Blasting activities shall be conducted in accordance with the approved Blasting Plan.

Under Noise, would the project result in:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

This area was reduced to *Less than Significant with Mitigation Incorporated* with the following mitigation measure:

**Mitigation Measure NOI-1 (Topsoil Noise Berm):**

Prior to blasting activities in the expanded quarry area, the mine operator shall provide a site-specific Blasting Plan to Siskiyou County for approval. The Blasting Plan shall identify general blasting procedures including safety, use, storage, and transportation of explosives that are consistent with the minimum safety requirements of federal, State, and local regulations. Blasting activities shall be conducted in accordance with the approved Blasting Plan.

Under Transportation, would the project:

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

This area was reduced to *Less than Significant with Mitigation Incorporated* with the following mitigation measure:

**Mitigation Measure TRAN-1 (Encroachment Permit):**

An encroachment permit shall be procured from Siskiyou County for any operation within the County road right-of-way. All operations shall be performed in compliance with permit conditions or limitations, including but not limited to the use of warning signage and/or flaggers. A copy of the permit shall be provided to the Planning Department prior to operations within the County right-of-way.

A copy of the IS/MND can be found in Exhibit B.

## Comments

This project has been circulated to Siskiyou County Reviewing Agencies and State Responsible Agencies. A Notice of Public Hearing was published in the Siskiyou Daily News on June 4, 2025, and mailed to property owners within 300 feet of the applicant's property. A Notice of Intent (NOI) for the preparation of the IS/MND was published on May 1, 2025, acknowledging the 30-day public comment review.

Copies of the Public Hearing Notice and Notice of Intent can be found in Exhibit C.

No public comments have been received at the time this staff report was written. Agency and public comments can be found in Exhibit F.

### **California Department of Conservation, Division of Mine Reclamation – September 1, 2022**

The Division of Mine Reclamation (DMR) provided comment regarding Geology and Geotechnical Considerations recommending supporting detailed geological description to support the stability of proposed 0.5:1 final slopes to fulfill the requirements under PRC 27729(c)(5)(D) and CCR 3704(f).

*Planning Response: The applicant revised the application package to include a slope stability survey and supporting geological description.*

### **California Department of Forestry and Fire Protection (CalFire) – July 9, 2022**

CalFire had no comments regarding this project.

*Planning Response: No response necessary.*

### **Siskiyou County Air Pollution Control District (SCAPCD) – July 21, 2022**

Air Quality provided comment regarding requirements for this type of project and noted that additional information would be necessary to ensure air quality compliance.

*Planning Response: Mitigation Measure AIR-1 requires a Dust Control Plan to be submitted to SCAPCD prior to mine expansion. Additionally, Condition of Approval #16 requires authorization to be obtained from SCAPCD prior to operation.*

### **California Department of Fish and Wildlife (CDFW) – September 14, 2022**

CDFW provided their standard comments, which recommend conducting biological and botanical surveys, evaluating impacts on nesting birds, and minimizing lighting. Additionally, recommendations were made regarding Indian Creek no-disturbance buffer and Lake or Streambed Alteration Agreement

*Planning Response: Biological and botanical surveys were conducted as part of the IS/MND. No artificial lighting is proposed. Streambed skimming has been removed from the mining plan as part of the proposed amendment. A Storm Water Pollution Prevention Plan is included as part of the mining plan.*



**Siskiyou County Environmental Health Division – May 22, 2025**

No objections to the proposed project. Expansion of the mine area does not affect existing improvements. A Chemical toilet with a handwashing station is required for every 15 employees. Hazardous materials storage may require a Hazardous Materials Business Plan

*Planning Response: Conditions of Approval were included in the approved permitting documents:*

- *COA #14 - During quarrying operations, the operator shall maintain compliance with County Environmental Health Department requirements concerning the handling and storage of hazardous materials. This may include the filing of a Hazardous Materials Business Plan. No hazardous materials may be disposed on the site.*
- *COA #15 – A chemical toilet shall be located on-site during periods of operation. The toilet shall be provided and serviced by a licensed septic pumper, to the satisfaction of the Public Health Department. Bottled water shall be provided on-site if employees are used in conjunction with the quarry.*

**Planning Staff Recommendations**

- Adopt Resolution PC 2025-011 taking the following actions:
  - Approve the proposed Use Permit and Reclamation Plan amendment request based on the recommended findings and subject to the recommended conditions of approval; and
  - Approve CEQA Mitigated Negative Declaration (MND) SCH Number 20250463 for the Waddell Pit.

**Suggested Motion**

I move that we adopt Resolution 2025-011 of the Planning Commission of the County of Siskiyou, State of California, Approving the Waddell Pit Use Permit Amendment (UP-19-74-1M), Reclamation Plan Amendment (RP-01-01-1M) and CEQA Mitigated Negative Declaration (MND) for the Waddell Pit.

**Preparation**

Prepared by the Siskiyou County Planning Division.

For project specific information or to obtain copies for your review, please contact:

Bernadette Cizin, Associate Planner  
Siskiyou County Planning Division  
806 S. Main Street  
Yreka, CA 96097

## **Resolution PC 2025-011**

### **A Resolution of the Planning Commission of the County of Siskiyou, State of California Approving the Waddell Pit Reclamation Plan and Use Permit Amendment Project (RP-01-01-1M & UP-19-74-1M)**

**Whereas**, Section 10-6.1502(d) of the Siskiyou County Code permits surface mining operations within the Rural Residential Agricultural Zoning District subject to approval of a conditional use permit provided the required findings can be met and subject to conditions of approval; and

**Whereas**, in 1975 the County of Siskiyou approved a Use Permit application (UP-19-74) requesting to operate the 4-acre, Waddell Pit surface mining operation; and

**Whereas**, the State Surface Mining and Reclamation Act (SMARA) was adopted in 1999 requiring all surface mining operations to have an approved Mining and Reclamation Plan; and

**Whereas**, Section 10-5.108(a) of the Siskiyou County Code requires approval of a Reclamation Plan for surface mining operations; and

**Whereas**, in 2002 the County of Siskiyou approved a proposed reclamation plan (RP-01-01) for the Waddell Pit, surface mine subject to the incorporated Mitigation Measures of the approve Mitigated Negative Declaration; and

**Whereas**, the Use Permit and Reclamation Plan (UP-19-74/RP-01-01) established that the quarry would be limited to 4 acres; and

**Whereas**, the Use Permit and Reclamation Plan (UP-19-74/RP-01-01) estimated that Reclamation of the quarry would begin in 2017; and

**Whereas**, the Use Permit and Reclamation Plan (UP-19-74/RP-01-01) established the total anticipated production of the mine would be 100,000 cubic yards; and

**Whereas**, on October 25, 2021, the County of Siskiyou received a Reclamation Plan and Use Permit Amendment application for the Waddell Pit Amendment project (UP-19-74/RP-01-01) to extend the boundaries of the Reclamation Plan and Use Permit for the mining operation, extend the end date of the mine site by 30 years, increase production total estimates and add the construction of a stormwater detention pond to the mining plan; and

**Whereas**, an Initial Study/Mitigated Negative Declaration (IS/MND) was prepared pursuant to the California Environmental Quality Act (CEQA); and

**Whereas**, a Notice of Intent (NOI) was submitted to the State Clearinghouse on May 1, 2025, commencing a 30-day public comment period; and

**Whereas**, a Notice of Public Hearing was published in the Siskiyou Daily News on June 4, 2025; and

**Whereas**, hearing notices were posted pursuant to Siskiyou County Code Section 10-6.2805 *et seq.*; and

**Whereas**, the Planning Division presented its oral and written staff report on proposed Waddell Pit Use Permit and Reclamation Plan Amendment project (UP-19-74/RP-01-01) at the Planning Commission's regularly scheduled meeting on June 18, 2025; and

**Whereas**, the Planning Division recommended approval of the Waddell Pit Amendment project (UP-19-74-1M/RP-01-01-1M) subject to the conditions of approval provided in Exhibit A-1 to this Resolution referenced hereto and incorporated herein; and

**Whereas**, on June 18, 2025, the Chair of the Planning Commission opened the duly noticed public hearing on the Waddell Pit Amendment project (UP-19-74-1M/RP-01-01-1M) to receive testimony, both oral and written, following which the Chair closed the public hearing and the Commission discussed the Waddell Pit Amendment project (UP-19-74-1M/RP-01-01-1M) prior to reaching its decision.

**Whereas**, pursuant to CEQA, a Mitigation Monitoring and Reporting Program has been prepared, to ensure that all mitigation measures are fully implemented; and,

**Now, therefore be it resolved** that the Planning Commission takes the following actions:

1. Certify the Mitigated Negative Declaration in accordance with Section 15074 of the CEQA Guidelines and direct staff to file a Notice of Determination.
2. Approve the Mitigation Monitoring or Reporting Program in accordance with Section 15097 of the CEQA Guidelines, attached hereto as Exhibit A-3.
3. Approve the Waddell Pit Amendment project (UP-19-74-1M/RP-01-01-1M) adopting the recommended findings attached hereto as Exhibit A-2 and subject to the recommended conditions of approval attached hereto as Exhibit A-1.
4. The Custodian of Records for the Mitigated Negative Declaration is the Planning Director of Siskiyou County Community Development Department, and which records are located at 806 South Main Street, Yreka, CA.
5. The Planning Commission's determinations on the Mitigated Negative Declaration in relation to the Waddell Pit Amendment project (UP-19-74-1M/RP-01-01-1M) reflects the Commission's independent judgment and analysis

**It is hereby certified** that the foregoing Resolution PC-2025-011 was duly adopted on a motion by Commissioner \_\_\_\_\_ and seconded by Commissioner \_\_\_\_\_, at a regular meeting of the Siskiyou County Planning Commission held on the 18<sup>th</sup> day of June 2025, by the following voice vote:



Ayes:

Noes:

Absent:

Abstain:

Siskiyou County Planning Commission

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Jeff Fowle, Chair

Witness, my hand and seal this 18th day of June 2025.

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Hailey Lang, Secretary of the Commission

Attachments:

Exhibit A-1: Notations and Conditions of Approval

Exhibit A-2: Findings

Exhibit A-3: Mitigation Monitoring or Reporting Program

**Exhibit A-1 to Resolution PC-2025-011**  
**Notations and Recommended Conditions of Approval**

**Notations**

1. Within ten (10) days following the date of the decision of the Siskiyou County Planning Commission, the decision may be appealed to the Siskiyou County Board of Supervisors. The appeal shall be filed with the Clerk of the Board of Supervisors.
2. This permit may be subject to revocation by the Planning Commission and all rights thereunder rescinded if not used for the above purpose (UP-19-74-1M/RP-01-01-1M within two years of approval.
3. The operation is subject to the requirements of PRC 4290 (Fire Safe Regulations).

**Conditions of Approval**

1. The use shall be in accordance with the approved plot plan/reclamation plan and project description.
2. Prior to Use Permit issuance, the owners of the property shall sign and record a Right to Farm Statement of Acknowledgement on a form provided by the Planning Department.
3. Prior to Use Permit issuance, the applicant shall execute a Reclamation Plan agreement with the County of Siskiyou.
4. All Mitigation Measures contained in the Mitigated Negative Declaration must be met.
5. All mining activity shall conclude, and reclamation work commence in earnest, 30 years from the date of approval (*June 18, 2055*)
6. All topsoil removed from mining area shall be conserved and stockpiled for use in reclamation.
7. Material and topsoil stockpiling shall occur in areas delineated on the site map.
8. There will be a 60-foot minimum no disturbance buffer zone back from the cut bank along Indian Creek.
9. The upper portion of the project will be diked to prevent high water from flowing through the project.
10. Prior to Use Permit issuance, the applicant shall secure a Commercial Encroachment Permit, meeting all permit requirements, for the planned access to Indian Creek Road (Mitigation No. TRAN-1).

11. No settling ponds or stagnant water to remain during seasonal periods of non-operation.
12. Heavy equipment shall not operate within 15 feet of any electrical conductors and no excavation shall occur within 25 feet of any power pole.
13. On-site fuel storage is prohibited. All equipment fueling and maintenance shall be performed by service truck.
14. During quarrying operations, the operator shall maintain compliance with County Environmental Health Department requirements concerning the handling and storage of hazardous materials. This may include the filing of a Hazardous Materials Business Plan. No hazardous materials may be disposed on the site
15. A chemical toilet shall be located on-site during periods of operation. The toilet shall be provided and serviced by a licensed septic pumper, to the satisfaction of the Public Health Department. Bottled water shall be provided on-site if employees are used in conjunction with the quarry.
16. Prior to operations, the operator shall demonstrate compliance with the requirements of the Siskiyou County Air Pollution Control Officer (Mitigation No. AIR-1).
17. Prior to Use Permit issuance, the applicant shall provide public liability and property damage insurance in the amount of \$1,000,000 single liability from a company authorized for business in the State of California. Siskiyou County shall be named as additional insured on the policy of insurance.
18. Prior to Use Permit issuance, in order to secure the full and faithful performance of reclamation, the owner/operator shall deposit a performance bond or other security payable to the "Siskiyou County Treasurer and the California Department of Conservation," acceptable to the County, in the amount the most recently approved Financial Assurance Cost Estimate (FACE) providing for the faithful performance of the Use Permit (UP-19-74) and Reclamation Plan (RP-01-01). Said bond or other security shall be written by a company authorized to conduct business in California and acceptable to the County.
19. Prior to commencing any mining or reclamation activities, the site shall be surveyed by a licensed surveyor and survey points established in the field based on the reclamation plan and the site plan to establish the limits of the approved boundaries approved by this permit. Boundaries shall be marked with semi-permanent markers, such as steel t-posts, to ensure they will not easily be moved.  
The limits shall be clearly visible and shall be maintained during the life of the operation, including reclamation.
20. The applicant shall defend, indemnify, and hold harmless the County, its agents, officers, and employees from any claim, action, or proceeding (collectively,



“Action”) against the County, its agents (including consultants), officers or employees to attack, set aside, void, or annul the approvals, or any part thereof, or any decision, determination, or Action, made or taken approving, supplementing, or sustaining, the project or any part thereof, or any related approvals or project conditions imposed by the County or any of its agencies, departments, commissions, agents (including consultants), officers or employees, concerning the project, or to impose personal liability against such agents (including consultants), officer or employees resulting from their non-negligent involvement in the project, which action is brought within the time period provided by law, including any claim for private attorney general fees claimed by or awarded to any party from the County. Said responsibilities shall be pursuant to the County’s standard Agreement for Indemnification in effect at the time of application approval or Agreement for Indemnification if signed and effective prior to the date the application is approved. In the event that the applicant fails to comply with the terms of the applicable agreement, the applicant does hereby consent and agree to all remedies in said agreement and does hereby agree and consent to the County rescinding all applicable project approvals.

# Findings

## **Zoning Consistency Findings**

1. The proposed use permit and reclamation plan, as recommended for approval, are consistent with the applicable elements and policies of the Siskiyou County General Plan, as documented herein below.
2. The proposed use of the property for a surface mining operation is consistent with the applicable zoning provisions outlined in Section 10-1502 of the Siskiyou County Code.
3. Due to size, scale, intensity, and location of the project, the proposed use will not result in a significant change in the existing environment that would in any way threaten the public health, safety, peace, morals, comfort, convenience, or general welfare.
4. Due to the size, scale, intensity, and location of the project, the proposed use will not cause damage or nuisances from noise, smoke, odor, dust, vibration, explosion, contamination, fire, or traffic, and will be reasonably compatible with the existing and permitted uses in surrounding areas.
5. The Planning Commission has considered all written and oral comments received and based its analysis of the public testimony and staff's analysis, the Commission has determined that the project as designed and conditioned would be compatible with existing and planned uses of the area.

## **General Plan Consistency Findings**

### **Composite Overall Policies**

Policy 41.3(e) All proposed uses of the land shall be clearly compatible with the surrounding and planned uses of the area.

*The proposed reclamation plan amendment for the existing mine is compatible with the surrounding area as the mine is an existing use similar in nature to logging and timber management activities which regularly occur in the general vicinity.*

Policy 41.3(f) All proposed uses of the land may only be allowed if they clearly will not be disruptive or destroy the intent of protecting each mapped resource.

*The proposed reclamation of the site will not be disruptive or destroy the intent of protecting each mapped resource, as described herein.*

Policy 41.9 Buildable, safe access must exist to all proposed uses of land. The access must also be adequate to accommodate the immediate and cumulative traffic impacts of the proposed development.

*The proposed site has direct access to Indian Creek Road, a public road. No new development is proposed as part of this project; however, the access is adequate to accommodate the immediate and cumulative traffic impacts of the reclamation project.*

Policy 41.18 Conformance with all policies in the Land Use Element shall be provided, documented, and demonstrated before the County may make a decision on any proposed development.

*Staff has reviewed all Land Use Element policies and has determined that the project is consistent with the Siskiyou County General Plan.*

**Map 8: Surface Hydrology**

Policy 27 – No residential or industrial development shall be allowed on water bodies. Exceptions may be considered for water supply, hydroelectric power generation facilities, public works projects necessary to prevent or stabilize earth movement, erosion, and the enhancement of migratory fish and other wildlife, light commercial, open space, non-profit and non-organizational in nature recreational uses, and commercial/recreational uses.

*No building construction is proposed as part of this project. No activities related to the operation are to occur on or within adjacent Indian Creek.*

**California Environmental Quality Act (CEQA) Findings**

1. In making its recommendation, the Planning Commission has reviewed and considered the proposed project and all comments submitted and has determined that the record, as a whole, demonstrates that there is no evidence that the proposed project will have an individually or cumulatively significant effect.
2. The Planning Commission has reviewed the prepared Initial Study/Mitigated Negative Declaration (IS/MND) and has determined that the environmental documentation for the proposed project is sufficient, and that there is no substantial evidence that the project will have a significant effect on the environment as mitigated.
3. The IS/MND reflects the Planning Commission's independent judgement and analysis.
4. The Planning Commission has determined that the custodian of all documents and other material which constitute the record of proceedings shall rest with the County of Siskiyou Planning Department.

**ADMINISTRATIVE DRAFT  
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

**WADDELL PIT RECLAMATION & MINING PLAN AMENDMENT  
SISKIYOU COUNTY, CALIFORNIA**

*Prepared for*

**Siskiyou County**

*Prepared by*



**VESTRA Resources, Inc.  
5300 Aviation Drive  
Redding, California 96002**

**72448**

**FEBRUARY 2025**

**EXHIBIT B**

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# CEQA ENVIRONMENTAL CHECKLIST

## Waddell Pit Reclamation and Mining Plan Amendment

### 1.0 INTRODUCTION

**Project Title:** Waddell Pit Reclamation and Mining Plan Amendment

**Lead Agency:** Siskiyou County

**Contact Person:** Bernadette Cizin, Associate Planner

**Project Location:** 8000 Indian Creek Road  
Happy Camp, CA 96039  
Siskiyou County APNs 009-340-350, 009-330-230, & 009-330-240

**Applicant:** Hayes & Sons, Inc.  
P.O. Box 774  
Montague, CA 96064  
(530) 598-4040

**Consultant:** VESTRA Resources, Inc.  
5300 Aviation Drive  
Redding, CA 96002  
(530) 223-2585 (office)  
(530) 223-1145 (facsimile)

**General Plan:** Surface Hydrology

**Zoning:** Rural Residential Agriculture (R-R-B-40 and R-R-B-5)

**Description of Project:** The Project includes an amendment to the Waddell Pit Mining and Reclamation Plan (RP-01-01) and Use Permit to expand the quarry's excavation area and allow continued mining activities at the site for an additional 30 years.

**Surrounding Land Uses and Setting:** The Project site is located 8 miles north of Happy Camp and north of the intersection of Indian Creek Road and Forest Route 17N32. The Project site is in a rural area consisting of some developed parcels adjacent to federal land (Klamath National Forest). The general site location is included in Figure 1.

The Project site includes portions of Siskiyou County Assessor Parcel Nos. 009-340-350-000, 009-330-230-000, and 009-330-240-000. The parcels are zoned Rural Residential Agricultural (R-R-B-5 and R-R-B-40). Properties adjacent to the Project site are zoned Rural Residential Agriculture (R-R-B-2.5, R-R-B-5, and R-R-B-40). Parcels immediately adjacent to the Project site to the east, south, and west are currently undeveloped. Parcels to the north of the Project site are developed with residences as well as a logging equipment storage yard.



The existing quarry and proposed expansion area are on the hillside east of Indian Creek Road. The processing and stockpile operations occur on the west side of Indian Creek Road on level ground adjacent to Indian Creek. The Project site is within the burn footprint of the 2020 Slater Fire. The fire burned most of the vegetation within the Project site and adjoining areas. Few live trees remain; however, vegetation is observed to be resprouting.

**Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):**

- Siskiyou County – Approval of the Mining and Reclamation Plan Amendment/CEQA
- California Division of Mine Reclamation (DMR) – Approval of the Mining and Reclamation Plan Amendment
- State Water Resources Control Board – Coverage under the General Permit for Storm Water Discharges Associated with Industrial Activities (Order 2014-0057-DWQ, as amended)
- Siskiyou County Air Pollution Control District – Dust Control Plan and Stationary Source Permits
- State Water Resources Control Board – Initial Statement of Diversion and Use for the diversion and use of water from Indian Creek
- California Department of Fish and Wildlife – Lake or Streambed Alteration Agreement for reclamation activities within the processing and stockpile area, expansion of the processing or stockpile area west of the existing berm, and/or the diversion of water from Indian Creek

## 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.

- |   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> Aesthetics              | <input checked="" type="checkbox"/> Agriculture / Forestry Resources | <input checked="" type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources    | <input checked="" type="checkbox"/> Cultural Resources               | <input checked="" type="checkbox"/> Energy                             |
| <input checked="" type="checkbox"/> Geology/Soils           | <input checked="" type="checkbox"/> Greenhouse Gas Emissions         | <input checked="" type="checkbox"/> Hazards and Hazardous Materials    |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning                           | <input checked="" type="checkbox"/> Mineral Resources                  |
| <input checked="" type="checkbox"/> Noise                   | <input type="checkbox"/> Population/Housing                          | <input type="checkbox"/> Public Services                               |
| <input type="checkbox"/> Recreation                         | <input checked="" type="checkbox"/> Transportation                   | <input checked="" type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities/Service System           | <input checked="" type="checkbox"/> Wildfire                         | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

## DETERMINATION; (to be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

\_\_\_\_\_  
Prepared by:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Reviewed by:

\_\_\_\_\_  
Date

## **2.0 PROJECT DESCRIPTION**

### **2.1 Project Background**

The Project includes continued operation and expansion of an existing sand and gravel quarry. The quarry is on the north side of Indian Creek Road across from the intersection with South Indian Creek Road, 8 miles north of Happy Camp. The general site location is shown in Figure 1.

The existing quarry area is approximately 3.2 acres. Rock harvested from the quarry is hauled to a stockpile and processing area located one-third mile north of the quarry on the west side of Indian Creek Road. The stockpile and processing area of the site is approximately 4.6 acres. The existing limits of the quarry are shown in Figure 2.

The quarry and associated activities were approved by Use Permit in 1974. An Environmental Impact Report (EIR) was also certified at that time. The activities included in the 1974 Use Permit for the quarry consisted of harvesting, crushing, washing, batching, and gravel skimming of rock. The quarry and processing area have operated intermittently to provide rock for construction projects in the area. Permitted annual aggregate production from the site is between 5,000 and 30,000 cubic yards (7,000 to 42,000 short tons). Equipment listed in the 1974 EIR for gravel processing as well as quarry operations included:

- Rubber-tired front-end loaders for excavating and hauling material
- 12-yard end dump trucks
- A portable 24-inch by 36-inch jaw crusher
- 45-inch cone crusher
- Three-deck 5-foot by 14-foot flat screen
- 4-inch diesel-operated pump
- 2-inch electric pump
- Portable diesel electric generator
- 40-inch by 22-inch roll crusher or 72-inch impact crusher
- 900 cubic-feet-per-minute portable air compressor
- Tract drill for blasting
- Bulldozer
- Front-end loader

When the Use Permit was approved in 1974, reclamation plans were not required to be prepared. A Mining and Reclamation Plan for the quarry (RP-01-01) was approved by Siskiyou County in 2002 as required by the State Surface Mining and Reclamation Act (SMARA) and County code and an Initial Study/Mitigated Negative Declaration was adopted for the Reclamation Plan by Siskiyou County in 2002 and included a reclamation date of 2017.

As described in Reclamation Plan RP-01-01, following the completion of mining activities, the site would be groomed, spread with topsoil, and replanted with native species displaced during mining activities to result in a site that blends into the natural environment of the area. Reclamation of the stockpile and processing area would include the removal of all equipment and grooming of the disturbed area to restore the flood channel. The planned end use for the quarry contained in

RP-01-01 is Open Space for wildlife habitat and a potential homesite for the portion of the processing area that is not in a flood zone.

## **2.2 Existing Operations and Proposed Amendments**

The Mining and Reclamation Plan and Use Permit Amendment (Project) includes continued operation of the quarry for an additional 30 years as well as the expansion of the limits of the quarry portion of the mine on the eastern side of Indian Creek Road. The proposed expansion area and overall site plan is shown in Figure 2. The Project will increase the size of the quarry area from 3.2 acres to 12 acres and will result in the disturbance of an additional 1.4 acres for topsoil storage. The proposed excavation plan is included in Figure 3. Cross sections are shown in Figure 4.

Within the quarry area, benches will be a minimum of 20 feet wide with a maximum height of 30 feet and a maximum slope of 0.5:1. A stormwater detention pond will be constructed along the toe of the cut slope with a capacity of 64 cubic feet per linear foot. The Amendment does not include the expansion of the existing stockpile and processing area limits on the west side of Indian Creek Road.

The quarry currently operates Monday through Friday from 7:00 a.m. to 5:00 p.m. Maximum production from the quarry is 30,000 short tons per year. Equipment currently used for operations includes the following:

- Portable track-mounted 24-inch by 36-inch jaw crusher
- Portable track-mounted 45-inch cone crusher
- Portable track-mounted impact crusher
- Portable track-mounted 5-foot by 20-foot three-deck screen plant
- CAT dozer
- CAT excavator
- CAT loader
- Semi end dump
- Track drill
- Portable truck scales

Blasting is required every two to three years and occurs in the late winter/early spring between 7:00 a.m. and 5:00 p.m. on weekdays. Transport of material from the site requires an estimated 250 truckloads each year, with an average of five loads each week and one load each day.

The Project does not include a change in existing hours of operation, additional equipment/processing activities, or an increase in the maximum annual production of the quarry. The proposed expansion would increase the material supply to allow the continued operation of the quarry at existing rates for an additional 30 years. The proposed average annual production of the quarry is 5,000 short tons and the estimated maximum annual production is 30,000 short tons. The estimated total production of the quarry is 300,000 short tons.

As with existing operations, rock on the east side of the Indian Creek Road would continue to be mined and hauled to the west side of the road for processing. Processing would include crushing and screening of rock. The gravel skimming operations within the stream and gravel washing authorized by the 1974 Use Permit no longer occur at the site and are not proposed in the Amendment.

The end use of the site upon reclamation would be open ranchland and wildlife use. Reclamation would occur as the bench cuts move north. Reclamation will be completed at an average of 0.25 to 0.5 acres per year based on 15-year periods. Topsoil would be spread onto quarry areas that are level enough for equipment access to depths of three to four inches and the site planted with bluegrass, natural vetch, Douglas fir, and Mahonia/Oregon grape. Trees would be planted at a rate of 100 trees per acre.

The proposed Project changes from existing operations include the following:

- Expansion of the mining and reclamation area by 11.2 acres including expanded excavation area limits and additional acreage for topsoil storage on the east side of Indian Creek Road
- Increase in total production of the mine from 100,000 cubic yards to 214,285 cubic yards, or 141,750 tons to 300,000 tons<sup>1</sup>
- Extension of the life of the mine for an additional 30 years
- Construction of a stormwater detention pond at the toe of the quarry to detain stormwater runoff

### 3.0 ENVIRONMENTAL CHECKLIST

I. AESTHETICS Except as provided in Public Resources Code Section 21099, Would the project:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion

The Project site includes an existing quarry as well as a stockpile and processing area. The 4.6-acre stockpile and processing area contains equipment and stockpiled material. Approximately 3.2 acres of the quarry area are currently disturbed with exposed soil and rock. The proposed quarry expansion area contains montane-conifer forest that has been impacted by recent wildfires and currently contains resprouting vegetation including conifer and oak saplings. The existing quarry and proposed expansion area are located on a slope within a narrow river valley and are not visible from areas a long distance from the Project site due to intervening topography.

a) Expansion of the quarry would result in vegetation and topsoil removal within the expansion area as well as changes in topography throughout the mining area as mining progresses. In addition, a detention pond will be constructed along the toe of the quarry as well as an additional internal road. Reclamation of the quarry would occur as the bench cuts move north and areas where mining has been completed will be revegetated. Approximately 8 to 10 acres of the mining area will be disturbed at a time.

Views of the quarry from a distance are limited due to the topography of the Project area and would become further screened as vegetation regrows within the areas affected by recent wildfires. Since the area from which the Project site would be visible is limited and mining operations are already occurring on a portion of the Project site, the Project would not result in a substantial adverse effect on a scenic vista. **Less than significant impact.**

b) There are no officially designated State Scenic Highways in the Project vicinity. The Project will not damage scenic resources within a state scenic highway. **No impact.**

c) The Project site is visible to the public from segments of Indian Creek Road as well as several forest service roads in the Project vicinity. Quarrying activities are currently visible and continued operation and expansion of the quarry would be consistent with the existing visual character of the site. Following mining activities, reclamation including revegetation of the quarry benches would occur. The Project would not substantially degrade the existing character or quality of public views of the site and its surroundings. **Less than significant impact.**

d) The Project does not include changes to the hours of operations outlined in the existing Use Permit for the site or installation of permanent lighting sources. Quarry activities will occur between 7:00 am to 5:00 pm Monday through Friday. The Project would not result in new sources of light or glare that would affect day or nighttime views in the area. **No impact.**

## II. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining impacts to forest resources including timberland are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature that could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Discussion

The Project site is zoned Rural Residential Agricultural District (R-R). The proposed expansion area meets the definition of forest land as defined in Public Resources Code section 12220(g) since it can support 10 percent native tree cover of any species under natural conditions.

a) The Project site is not designated as prime farmland, unique farmland, or farmland of statewide importance and will not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use. **No impact.**

b) A Williamson Act Contract is not in effect on the property. The Project site is zoned Rural Residential Agricultural District (R-R). The proposed quarry expansion area is unusable for farming or grazing due to steep slopes. The end use of the site upon reclamation would be open ranchland and wildlife use. The Project would not conflict with a Williamson Act contract or result in a change to the existing zoning of the site. **No impact.**

c) The Project site is not zoned forest land, timberland, or timberland zoned Timberland Production. The Project does not include rezoning of the Project site. **No impact.**

d) The proposed expansion area meets the definition of forest land as defined in Public Resources Code section 12220(g) since it can support 10 percent native tree cover of any species under natural conditions. The Project site has recently burned and currently contains resprouting vegetation. This vegetation will be removed as mining progresses and replaced upon reclamation with Douglas fir at a rate of 100 trees per acre. Since the forested areas of the Project site will be revegetated with trees upon reclamation, impacts to forest land will be temporary and the Project will not result in the permanent conversion of forest land. **Less than significant impact.**

e) As discussed in d) above, the Project will result in the temporary use of forest land for non-forest use but would restore 10 percent native tree cover following reclamation. The Project does not involve other changes in the existing environment that could result in the conversion of farmland to non-agricultural use or the conversion of forest land to non-forest use. **Less than significant impact.**

<b>III. AIR QUALITY</b> 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 w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

applicable federal or state ambient air quality standard?				
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Discussion

The Project site is within the Northeast Plateau Air Basin which includes the Siskiyou, Modoc, and Lassen Air Pollution Control Districts. The Siskiyou County Air Pollution Control District (SCAPCD) is responsible for the enforcement of federal and state air quality regulations within Siskiyou County. SCAPCD requires Stationary Source Permits for plants, rock crushers, and stationary internal combustion engine generators greater than or equal to 50 horsepower.

Existing operations include the operation of portable crushing equipment, and screening plant powered by generators as well as mobile equipment and trucks to haul material. These operations produce exhaust emissions as well as dust at the Project site. Work areas are watered periodically for dust control.

**a)** Siskiyou County is in attainment or unclassified for California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for criteria pollutants and is not subject to an air quality plan. Therefore, the Project would not conflict with or obstruct the implementation of an air quality plan. **No impact.**

**b)** Criteria air pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), respirable particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>) and lead. Siskiyou County is in attainment or unclassified for CAAQS and NAAQS and has not adopted mass emission thresholds for criteria air pollutants.

Equipment at the Project site including the screening plant, rock crushers, and stationary internal combustion engine generators greater than or equal to 50 horsepower are subject to SCAPCD permits. Permitted sources are inspected for compliance on a regular basis. The Project does not include changes in equipment operated at the Project site or an increase in annual production that would result in an increase in annual emissions of criteria pollutants from equipment.

Although emissions generated by onsite equipment would not increase compared to existing operations, increased dust (particulate matter) could be generated due to the increased size of the excavation and topsoil storage areas. Similar to existing operations, these areas would be watered periodically to control dust. **Mitigation Measure AIR-1** requires the preparation of a Dust Control Plan to minimize particulate matter generated by the Project. With the implementation of a Dust Control Plan, the Project would not result in a cumulatively considerable net increase of particulate matter or other criteria pollutants. **Less than significant with mitigation incorporated.**

**c)** As discussed in b) above, the Project does not include changes to processing activities at the Project site and would not result in additional emissions related to crushing, screening, or aggregate

production compared to existing operations. Expansion of the quarry area to the north will result in the excavation and soil stockpiling activities occurring closer to the closest residences (sensitive receptors) located north of the Project site. The closest receptors to the Project site are shown in Figure 5. Activities in the expansion areas would generate dust (particulate matter) that could affect these residences. **Mitigation Measure AIR-1** includes the preparation of a Dust Control Plan to minimize dust emissions from the Project. With the implementation of a Dust Control Plan, the Project would not expose sensitive receptors to substantial pollutant concentrations. **Less than significant with mitigation incorporated.**

**d)** Diesel-operated equipment can produce odorous emissions. The Project does not include an increase in production or equipment operation at the site over baseline conditions. The Project does not include additional or new odor sources and the site is within a rural, sparsely populated area. The Project would not result in other emissions, including those leading to odors that would adversely affect a substantial number of people. **Less than significant impact.**

#### **Air Quality Mitigation Measures**

The following mitigation measure is included to reduce particulate matter emissions from dust within the expanded quarry area to the extent feasible:

##### **Mitigation Measure AIR-1: Dust Control Plan**

Prior to the expansion of the quarry, a Dust Control Plan shall be submitted to the SCAPCD. Control measures in the plan may include, but are not limited to, watering all active parking areas, soil piles, graded areas, and unpaved roads; limiting traffic speeds to 15 mph on unpaved roads; stabilizing inactive areas of the site; and covering haul trucks transporting soil, sand, or other loose materials likely to give rise to airborne dust. The Dust Control Plan shall be authorized by the SCAPCD prior to the expansion and the plan shall be followed during operations at the Project site.

<b>IV. BIOLOGICAL RESOURCES</b>				
Would the project:				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant w/ Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Game or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including but not	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion

A Biological Resources Assessment (BRA) was prepared for the Project by GeoServe, Inc. and is included as Appendix A. The Study Area for the assessment consisted of the existing exposed Waddell Rock pit as well as the land immediately adjacent to the current permitted boundaries. According to the BRA, the proposed expansion area is characterized by a former conifer/hardwood forest that has been severely burned; in many areas, mortality approaches 100 percent both onsite and in surrounding visible land. Site visits show a return of these features, largely through oak resprouting and conifer saplings. No water features exist onsite, though Indian Creek runs immediately south of the Study Area on the southern side of Indian Creek Road (GeoServ, 2023).

The expansion area consists of a Montane hardwood-conifer vegetation community. Montane hardwood-conifer communities consist of hardwood species (especially Oregon white oak and/or California black oak) as well as conifers (including Douglas fir, ponderosa pine, incense cedar, etc.); additional vegetation includes pacific madrone and tanoak (CDFW 1988a). Montane hardwood-conifer represents a transitional zone between purer stands of higher-elevation conifer forest and lower elevation hardwood woodland/forest, and they typically occur on coarse, well-drained mesic soils (CDFW 1988a). The significant presence of both conifers and hardwoods makes this community unique and able to support a wide range of wildlife (CDFW 1988a). Onsite, the montane hardwood-conifer community has been impacted by a recent severe, stand-replacing wildfire. Many portions of the Study Area approach 100 percent mortality of trees, though conifer/oak saplings and oak resprouts demonstrate that the area is recovering (GeoServ, 2023).

a) The BRA prepared for the Project evaluated the presence of special-status species and/or habitats and assessed the potential for special-status species to occur on or near the site of the proposed quarry expansion area. The discussion below is based on the findings of the BRA. Additional details including the records search and literature review conducted and details of the field survey and methodology can be found in Appendix A.

### ***Special-Status Plants***

The BRA determined there was potential for sixteen special status plant species to occur within the expansion area which included marbled wild-ginger (*Asarum marmoratum*), Koehler's stipitate rockcress (*Boechera koehleri*), Siskiyou paintbrush (*Castilleja elata*), bunchberry (*Camus unalaschensis*), Oregon fireweed (*Epilobium oreganum*), Henderson's fawn lily (*Erythronium hendersonii*), Howell's fawn lily (*Erythronium howellii*), California globe mallow (*Iliamna latibracteata*), Heckner's Lewisia (*Lewisia cotyledon* var. *heckneri*), Howell's Lewisia (*Lewisia cotyledon* var. *howellii*), Coast range lomatium (*Lomatium martindalei*), ghost-pipe (*Monotropa uniflora*), white-flowered rein orchid (*Piperia candida*), Redding checkerbloom (*Sidalcea celata*), Hooker's catchfly (*Silene hookeri*), and robust false lupine (*Thermopsis robusta*). The study area was surveyed for these species in April and June 2023. No special-status plants were observed during the botanical surveys and are not expected to occur within the Project area. Therefore, the Project will not result in impacts to special-status plants.

### ***Special-status Fish Species and Habitat***

A record search was conducted within the Project area for special-status fish, critical habitat, and essential fish habitat through the following sources: CNDDDB, National Oceanic and Atmospheric Administration (NOAA) essential fish habitat mapper, NOAA Protected Resources APP, and the USFWS IPaC report.

No critical habitat was recorded in the Study Area; however, essential fish habitat for Coho salmon (*Oncorhynchus kisutch*) and Chinook salmon (*Oncorhynchus tshawytscha*) is present in Indian Creek, south of the Study Area. Additionally, CNDDDB records indicate that the Klamath River lamprey (*Entosphenus similis*) and coast cutthroat trout (*Oncorhynchus clarkia clarkia*) have the potential to occur in the portion of Indian Creek that passes near the Study Area. Lastly, the USFWS IPaC report lists two fish species, Lost River sucker (*Deltistes luxatus*) and shortnose sucker (*Chamistes brevirostris*) as potentially being impacted by the Project.

Indian Creek is not within the Study Area but rather occurs downslope on the opposite side of Indian Creek Road from the proposed rock pit expansion. Nevertheless, significant impacts to these fish species or essential fish habitat could occur if erosion or hazardous materials entered Indian Creek and polluted the downstream habitat. However, no instream quarrying is proposed for the Project. With the implementation of Best Management Practices (BMPs) for erosion control and spill prevention (as described in the Reclamation Plan Amendment), impacts to these fish species and their potential habitat would not occur.

### ***Special-Status Wildlife Species***

The CNDDDB records and USFWS IPaC records identified the following special status wildlife species that could potentially occur in the Project area:

- American peregrine falcon (*Falco peregrinus anatum*)
- Bald eagle (*Haliaeetus leucocephalus*)
- Franklin's bumblebee (*Bombus franklini*)
- Suckley's cuckoo bumblebee (*Bombus suckleyi*)
- Western bumblebee (*Bombus occidentalis*)
- Conservancy fairy shrimp (*Branchinecta conservation*)
- Vernal pool fairy shrimp (*Lepidurus packardii*)

- Foothill yellow-legged frog-north coast Distinct Population Segment (*Rana boylei* population 1)
- Gray wolf (*Canis lupus*)
- Marbled murrelet (*Brachyramphus marmoratus*)
- Monarch butterfly (*Danaus plexippus*)
- North American wolverine (*Gulo luscus*)
- Northern goshawk (*Accipiter gentilis*)
- Northern spotted owl (*Strix occidentalis caurina*)
- Pacific tailed frog (*Ascaphus truei*)
- Del Norte salamander (*Plethodon elongatus*)
- Siskiyou Mountains salamander (*Plethodon stormi*)
- Southern torrent salamander (*Rhyacotriton variegatus*)
- Yellow-billed cuckoo (*Coccyzus americanus*)

Potential impacts to these wildlife species are discussed below.

#### *American Peregrin Falcon*

American peregrine falcons are birds of prey that can be found in woodland, coastal, and forested habitats. The species has been delisted federally and at the state level after recovering from DDT-related declines but remains a state Fully Protected species. Proximity to water, such as inland wetlands or riparian areas, is characteristic of American peregrine falcon habitat in both breeding and non-breeding areas. Typically, American peregrine falcons prey on birds, catching prey while in flight. American peregrine falcons breed from late March to early August, relying on cliff sites for nesting.

American peregrine falcons have been observed in an adjacent quadrangle to the Project site according to CNDDDB records and therefore may utilize the Project site. However, a nesting bird survey prior to vegetation removal occurring during the nesting bird season (**Mitigation Measure BIO-1**) would reduce impacts to American peregrine falcons to **less than significant** levels.

#### *Bald Eagles*

Bald eagles are birds of prey that can be found across the United States. Once federally endangered due to DDT impacts, bald eagles have been delisted federally but remain listed as Endangered at the State level. Bald eagles require large bodies of water, as their primary food source is fish. Individuals will perch on the limbs of large trees or snags while observing the water below to hunt. Bald eagles typically nest near water too, with over 80 percent of nests found within a mile of water. Nest sites are typically large, live trees, especially ponderosa pine. Bald eagles breed from February to July.

According to CNDDDB records, bald eagles have been observed approximately 11 miles southwest of the Project site. However, the recent severe fire has greatly reduced the number of live trees that bald eagles may use to nest or roost. Therefore, bald eagles are not expected to occur in the Study Area but would nevertheless be identified through pre-operation nesting bird surveys included as **Mitigation Measure BIO-1**. Therefore, impacts to bald eagles would be less than significant.

#### *Franklin's Bumble Bee*

Franklin's bumble bee is an extremely range-restricted bumble bee, only ever found within Northern California and Southern Oregon between the Sierra-Cascade Mountain and Coast Mountain ranges. Relatively abundant in its range until 1998, the species has experienced steep declines since then and was last seen in 2006 in Oregon near Mt. Ashland. Habitat requirements for Franklin's bumble bee are poorly understood, but the species is known to require floral plants such as Agastache, Eschscholzia, Lupinus, Monardella, and Vicia for a food source. Abandoned rodent burrows or rotting logs are also crucial as dwelling sites for the species.

Solitary queen bees who have successfully mated establish Franklin's bumble bee colonies, collecting nectar and pollen to support egg production. As the colony develops, offspring begin to assume food gathering and colony defense tasks. Eventually, new queens are produced that mate with males, allowing the colonization process to begin again. At this point, the original queen, males, and workers die, allowing the mated females to carry on the lineage. In total, colonies consist of 50 to 400 worker bees plus the queen. Franklin's bumble bees may be extirpated in California and may be extinct in general. Provided the species still exists in California, threats include introduced diseases from commercial bees as well as pesticide use in its area.

CNDDDB records indicate that the nearest occurrence of Franklin's bumblebee occurred in 1997 approximately 26 miles southeast east of the Study Area, outside of the normal nine-quad scoping area for the Project. Additionally, the last sighting of Franklin's bumblebee occurred in 2006 near Mt. Ashland in Oregon, even farther away. Therefore, Franklin's bumblebee is not expected to occur in the Project area, and no impacts to Franklin's bumblebee would occur as a result of the Project.

#### *Western Bumble Bee and Suckley's Cuckoo Bumble Bee*

Western bumble bees are current candidates for California Endangered Species Act protections. The species has experienced sharp declines since the 1990s, likely due to a variety of factors, including novel pathogens, insecticide use, and habitat fragmentation. Western bumble bees require a diversity of wildflower resources and a stable supply of pollen; they are known to visit a wide array of bee-pollinated flower species, though their short tongues hamper their ability to feed from tube-shaped flowers. Western bumble bees will typically use abandoned rodent burrows as areas to establish colonies.

Like most bumble bees, western bumble bees come in three forms: queens, workers, and males. Fertilized queens begin colonies in the spring, first producing worker bees and caring for them herself). Once a supply of workers is established, the queen focuses her time on egg-laying, while the workers take care of additional offspring. The queen will then produce males and additional queens, who will then mate before entering diapause (similar to hibernation) to overwinter. A rare form of parasitic bumble bee, Suckley's cuckoo bumble bee, has also become a Candidate for CESA protection. Suckley's cuckoo bumble bee is a social parasite, meaning queens cannot establish a viable colony on her own. Suckley's cuckoo bumble bees cannot produce worker bees, and therefore seek out the colony of another bumble bee species (such as *Bombus occidentalis*), incapacitate the queen, and then commandeer the colony. The parasitized colony then enables the queen Suckley's cuckoo bumble bee to lay her own eggs (males and queens), as the workers will provide for the offspring. Once males and queens mature and mate, queens overwinter and repeat the process the following spring.

Suckley's cuckoo bumble bees have similar habitat requirements to other bumble bee species in that they require a diversity and constant supply of flowers. The species has short- to medium-sized tongues, meaning they too struggle to feed on flowers with deep tube shapes. Within the Study Area, floral diversity is somewhat limited due to the disturbance at the existing Waddell rock pit extents. Additionally, because CNDDDB recorded observations of the species approximately nine miles away from the Study Area, these bumble bees are not expected to occur in the Study Area. Therefore, no impacts to these bumble bees are expected to occur.

#### *Crustaceans*

The USFWS IPaC report for the Project identified vernal pool fairy shrimp (*Branchinecta lynchi*, U.S. Threatened), Conservancy fairy shrimp (*Branchinecta conservation* U.S. Endangered), and vernal pool tadpole shrimp (*Lepidurus packardii*, U.S. Endangered) as potentially occurring in the Project area. The vernal pool fairy shrimp and Conservancy fairy shrimp are both dependent on vernal pools and vernal pool-like habitats. The vernal pool tadpole shrimp occurs in a wider variety of ephemeral wetland habitats in addition to vernal pools. However, field surveys confirmed no ephemeral wetland habitats that could support these shrimp species are present on the Project site; therefore, vernal pool fairy shrimp, Conservancy fairy shrimp, and vernal pool tadpole shrimp have no potential to occur in the Project area, and Project implementation would have no impacts on these species.

#### *Foothill Yellow-Legged Frog*

The Foothill yellow-legged frog is a species found in or near rocky streams in hardwood, hardwood-conifer, riparian, pine, mixed conifer, coastal scrub, chaparral, and wet meadows (CDFW 2000b), with the stream habitat being the most crucial. The species is rarely found far from permanent water, with normal home ranges less than 33 feet in length (CDFW 2000b).

Foothill yellow-legged frog adults consume invertebrates, especially insects (California Herps 2022). Adults will bask on exposed rock surfaces near streams but will quickly retreat to underwater sediments or rocks when they perceive a threat. Winter activities are typically spent hiding under rocks in or near the stream (CDFW 2000b).

Foothill yellow-legged frogs typically begin breeding/egg-laying from mid-March to May, with amplexus occurring in the water (CDFW 2000b, California Herps 2022). Egg clusters of 200 to 300 eggs are attached to gravel or rocks in moving water near the edge of a stream (CDFW 2000b). Tadpoles require at least three to four months of water to survive to metamorphosis (CDFW 2000b). Tadpoles eat detritus and algae attached to the rocky substrate (California Herps 2022).

Ecologically, garter snakes are the primary predator of foothill yellow-legged frogs (CDFW 2000b). The species faces a variety of threats, including habitat modification from dam construction and altered streamflows/water releases, which can force adults upland and disrupt/detach egg masses within the stream areas (CFGC 2020). According to the California Fish and Game Commission (CFGC), habitat modifications that threaten the species include mining, illegal cannabis cultivation, grazing, timber harvest, and even some restoration projects (CFGC 2020). Drought, wildfires, and other climate-related events also may impact Foothill yellow-legged frog populations (CFGC 2020). Environmental threats such as chytrid fungus and agricultural pesticides add an additional threat to the species (CFGC 2020).



CNDDB records indicate that Foothill yellow-legged frogs have been found near streams approximately 13 miles northwest of the Study Area. However, the lack of wet areas within the Study Area precludes Foothill yellow-legged frog presence in the Study Area, and none were observed onsite during field surveys. Therefore, no impacts to Foothill yellow-legged frogs would occur.

#### *Gray Wolf*

The gray wolf is a habitat generalist that only recolonized California in 2009 (CDFW 2022a). Historically, wolves have occurred in forests, grasslands, deserts, and the tundra (CDFW 2011). In general, crucial habitat components include a water source, adequate prey (typically ungulates such as deer and elk), and a lack of human disturbance or population (CDFW 2011). Wolves historically occurred over large portions of the state, especially in the north; however, their total abundance was likely somewhat low (CDFW 2011).

Individual wolves can travel over 30 miles in a day and can disperse as far as 680 miles from their birthing place (CDFW 2011). Wolves typically travel in packs consisting of a mating alpha pair, as well as subordinate wolves, typically offspring (CDFW 2011). Subordinate wolves may leave the pack to start their own or join another pack (CDFW 2011). Packs typically claim and defend territories from other wolves; these territories can range from 20 square miles to 400 square miles (CDFW 2011). These large territorial needs, plus gray wolves' relatively successful recovery, has necessitated the species' expansion into new areas, including California.

Typically, alpha wolf pairs begin to breed at two years of age and thereafter produce one litter of pups per year (CDFW 2011). Successful pup-rearing requires a den for birthing, such as a hole, crevice, or hollow log/stump; as pups grow, they typically remain near older wolves at rendezvous sites, while the rest of the pack hunts (CDFW 2011). Wolves that survive to adulthood typically live four years, though they can live up to 13 years (CDFW 2011).

Currently, gray wolf individuals and packs have been sighted in Siskiyou and Trinity counties, and even farther south in rare instances. As gray wolves are habitat generalists with the propensity for long-distance dispersal, it is possible that gray wolves could use the Study Area for foraging, dispersal, or denning. If a gray wolf den or rendezvous site is present in the Project area, construction activities could potentially impact the gray wolf. These impacts would be significant. However, the potential for gray wolves to occur on the Project area is exceedingly low, due to the current and historic disturbances (severe fire, rock quarrying, and nearby quarry material processing). Additionally, no gray wolves, dens, or rendezvous sites were observed onsite during field surveys or in CNDDB records. Therefore, there would be no impacts to the gray wolf.

#### *Marbled Murrelet*

Marbled murrelets are coastal birds that rely on old-growth forest characteristics for their habitats (USFWS 1997). These old-growth characteristics include large trees, multistoried canopies, and moderate to high canopy closure (USFWS 1997). Marbled murrelets are rarely found more than 50 miles inland from the coast (USFWS 1997). Therefore, as the Project is approximately 53 miles due east of the California coast and the region has lost its old-growth characteristics from recent severe, stand-replacing fire, marbled murrelets have no potential to occur in the Study Area. No impacts to the marbled murrelet are expected as a result of this Project.

### *Monarch Butterfly*

The USFWS IPaC report for the Project identified the monarch butterfly (*Danaus plexippus*, U.S. Candidate) as potentially occurring in the Project area. The monarch butterfly is a migratory butterfly species that uses northern California as part of its vast summer breeding area, before overwintering in coastal California and Baja California (USFWS 2020). Adult monarch butterflies require a diversity of blooming nectar resources during breeding and migration, with its obligate host plant, milkweed (*Asclepias* sp.) essential for breeding (USFWS 2020).

When monarch caterpillars hatch in their breeding grounds, they spend 9 to 18 days as caterpillars, eating milkweed and molting several times (USFWS 2020). After 6 to 14 days in a chrysalis, adult monarch butterflies begin their reproductive life, mating, laying eggs on milkweed, and replenishing lipid stores with nectar-producing flowers (USFWS 2020). Typically, monarch butterflies live 2 to 5 weeks as adults before dying (USFWS 2020). This reproductive cycle occurs multiple times throughout the warm summer months; however, every year the final generation of monarchs become overwintering monarchs, with a different life history (USFWS 2020).

Overwintering monarchs enter reproductive diapause and instead make a migratory journey of 500 km to 1600 km (310 to 995 miles) to the overwintering grounds on the coast of California or Baja California. Here, the monarchs wait out the winter, still relying on nectar-producing flowers to feed (USFWS 2020). The following spring, monarch adults who survived the winter breed at the overwintering site before migrating back to the area where they hatched. Adult female monarchs lay their eggs on milkweed as they encounter it along the way (USFWS 2020). In total, overwintering monarchs live 6 to 9 months as adults (USFWS 2020).

As discussed, the monarch butterfly requires its host plant, milkweed (*Asclepias* sp.), to breed in the area. Two heartleaf milkweed (*Asclepias cordifolia*) plants were observed during the 2023 botanical surveys within the Study Area, making the Study Area potentially suitable for monarch butterfly use. Quarrying activities that remove these milkweeds could significantly impact the species if monarch butterflies are using the milkweeds at the time of vegetation removal, and the removal of these plants would constitute a small reduction of monarch butterfly habitat.

To mitigate these impacts, observed milkweeds will be flagged by a qualified biologist and checked for monarch butterfly adults, caterpillars, or chrysalises prior to removal (**Mitigation Measure BIO-2**). If monarch butterflies of any life stage are discovered, milkweed removal will not occur until the butterflies have completed their use of the plants. Given that milkweed is present abundantly in the wider region (having recovered well post-fire), the removal of the two observed milkweed plants onsite will not result in significant impacts to the monarch butterfly. Impacts to monarch butterfly will be **less than significant with mitigation incorporated**.

### *North American Wolverine*

Wolverines are highly mobile mammals that can travel long distances in a day and typically inhabit very large home ranges (upwards of 100 square miles) (USFWS 2018b). Wolverines are extremely territorial, with individuals of the same sex rarely inhabiting the same areas (USFWS 2018b). The large wolverine territories plus the strong territorial behavior in wolverines is a major factor for the low population densities of wolverines, even in areas where the species is thriving (CDFW 1988b).

Wolverines typically inhabit coniferous forest, alpine dwarf-shrub, or montane riparian habitats (CDFW 1988b). However, wolverines strongly prefer to settle in territories with low human disturbance and are commonly found in relatively human-inaccessible areas (USFWS 2018b). Wolverines will both scavenge for food and will hunt, with prey often changing based on the season and available prey/carrion items. The species uses caves as well as hollows in logs, rock outcrops, and burrows for cover.

Wolverines exhibit an unusual reproductive behavior: males are polygamous, but females have an extended pregnancy, as implantation can be delayed for up to six months, followed by a short (40 days or less) gestation period (USFWS 2018b). This reproductive life history leads wolverines to reproduce from May to July, but wolverine births typically occur from January to April (CDFW 1988b).

CNDDDB records indicate a wolverine was observed 2.1 miles southwest of the study area in 1971. However, the study area has gone through recent severe fire and nearby rock quarrying and quarry material processing. Therefore, the amount of human disturbance and low-quality habitat in the area precludes wolverine occupancy of the area. Therefore, there is minimal potential for wolverines to occur in the Study Area. No impact would occur to North American wolverines.

#### *Northern Goshawk*

Northern goshawks are birds of prey that typically do not exhibit migratory behavior, relying mainly on a specific territory or home range as habitat and prey conditions allow (CDFW 2005a). Northern goshawks typically occur in dense, mature, closed-canopy coniferous forests, though they will also occur in deciduous forests with similar habitat characteristics (CDFW 2005a). Prey requirements include various bird and mammal species such as Douglas squirrels, Belding's ground squirrels, northern flickers, and Steller's jays (Shuford and Gardali 2008).

Northern goshawks typically begin to breed in April to June and will aggressively defend their nest (CDFW 2005a). Water is a crucial component of northern goshawks' territory, with a water source typically nearby; in particular, northern goshawks will typically construct nests in a dense part of their forested habitat, yet in an area near an opening in the forest and near water (CDFW 2005a). Habitat loss and degradation are the primary threats to the species (Shuford and Gardali 2008).

CNDDDB records indicate that a northern goshawk was observed 13 miles southwest of the Study Area. However, northern goshawks rely on mature coniferous forests for their habitat and are sensitive to human disturbance. Therefore, severe fire impacts that occurred in the Study Area preclude northern goshawk habitation of the site. Nevertheless, as part of environmental mitigations, the Project area will be subject to a nesting bird survey prior to vegetation removal (**Mitigation Measure BIO-1**), eliminating any possible harm to northern goshawks. Therefore, impacts to northern goshawks would be less than significant.

#### *Northern Spotted Owl*

Northern spotted owls are birds of prey that require old-growth coniferous forests for nesting and roosting (USFWS 2011). Specific habitat requirements are stand complexity, including a multilayered, multispecies canopy with high canopy closure, including decadent trees, snags, broken-topped trees, and cavities for nesting (USFWS 2011). Northern spotted owls feed on rodents; woodrats are a primary food source (USFWS 2011).

Northern spotted owls typically begin their breeding season in late February with the prelaying stage, with the female spending most of her time in the selected nest cavity (USFWS 2012). Copulation and nesting last for approximately six days, followed by an approximate 30-day incubation period, where the female will only leave the eggs for 10 to 20 minutes at a time (USFWS 2012). Upon hatching, spotted owl nestlings spend approximately 35 days as nestlings, temporarily exiting the nest to perch on nearby limbs (USFWS 2012). Fledglings spend 80 to 120 days (until mid to late September) out of the nest but remain dependent on their parents for food (USFWS 2012).

Northern spotted owls are primarily threatened by the loss of old-growth habitat due to logging and catastrophic wildfire (USFWS 2011); however, the introduction of the barred owl (*Strix varia*) to historic northern spotted owl habitat has created an additional threat, as barred owls will outcompete, harm, and even hybridize with spotted owls (USFWS 2011).

In the Northern California Klamath region, northern spotted owls typically occupy home ranges within a 1.3-mile radius (USFWS 2012). Disturbances, noise impacts, and/or vegetation removal within this home range of a known spotted owl activity center would be considered significant impacts to the species. Additionally, northern spotted owl critical habitat (within U.S. Forest Service ownership) abuts the quarry area to the north.

According to CNDDDB records, the nearest spotted owl observation from the Project area is approximately 1.7 miles away, which places the Project area outside of any northern spotted owl home range. Additionally, the high-severity burn that moved through the Study Area and the nearby critical habitat make the area unsuitable for spotted owl nesting, roosting, or foraging. Northern spotted owls have minimal potential to occur in the Project area, and thus would not be impacted by the Project. As quarrying will not occur on public land, critical habitat will also be unaffected by the Project.

#### *Pacific Tailed Frog*

The Pacific tailed frog (also known as the coastal tailed frog) is found from the northern California coast to as far inland as eastern Siskiyou County (CDFW 2013). The Pacific tailed frog is found in permanent streams, which are crucial to the species' reproductive methods. Mating occurs underwater, and eggs are attached to the underside of submerged rocks (CDFW 2000c). Tadpoles require 2 to 3 years to metamorphose into adults, so only permanent streams are capable of supporting the species. Therefore, although CNDDDB records place Pacific tailed frogs as close as eight miles away from the Study Area, the species has no potential to occur in the Study Area which lacks streams. Therefore, no impacts would occur to Pacific tailed frogs.

#### *Salamanders*

Two species of terrestrial salamanders, Del Norte salamander (*Plethodon elongatus*, CA Watchlist) and Siskiyou Mountains salamander (*Plethodon stormi*, CA Threatened), have been recorded within one mile of the Study Area, according to CNDDDB records. Both salamander species are part of the closely related *Plethodon elongatus* species complex, a trio of recently diverged taxa that also include the Scott Bar salamander (*Plethodon asupake*). These terrestrial salamanders typically occur in "old-growth with rocky soils containing fractured rock outcrops or stable talus" (USFWS 2018c). Wildfire is noted as a primary threat to the species complex, as the removal of old-growth forest conditions can cause the desiccation of soil that previously provided suitable moisture levels for these salamanders (USFWS 2018c). Therefore, similar to the northern spotted owl, the Study

Area likely provided suitable habitat for these salamanders prior to the recent severe, stand-replacing fire. Given the current, post-fire conditions, these salamanders have no potential to occur within the study area, and no impacts to the Del Norte salamander or Siskiyou Mountains salamander would occur.

A third salamander species, the southern torrent salamander (*Rhyacotriton variegatus*, CA Species of Special Concern) relies on cold, well-shaded permanent streams and spring seepages (CDFW 2005b). As there are no permanent springs or streams mapped or observed in the Study Area, southern torrent salamanders have no potential to occur in the Study Area, and no impacts to southern torrent salamanders would occur.

#### *Yellow-billed Cuckoo*

Yellow-billed cuckoos are insectivorous birds that generally breed in large blocks of riparian habitat; in particular, cottonwood and willow trees are important habitat components for yellow-billed cuckoos (USFWS 2014). In the western United States, yellow-billed cuckoos tend to be restricted to the larger rivers that cut through more arid environments, such as the Sacramento River (Cornell 2022b).

Large caterpillars are the main food source for yellow-billed cuckoos (Cornell 2022b). In the arid west, cuckoos will forage in cottonwoods, but will build stick nests on horizontal branches in willow trees near their cottonwood foraging sites (Cornell 2022b).

The USFWS IPaC report for the Project identified the yellow-billed cuckoo (*Coccyzus americanus*, U.S. Threatened) as potentially occurring in the Project area. However, no riparian elements nor cottonwoods occur in the Study Area, though Indian Creek is south of the Study Area. Nevertheless, the nesting bird survey conducted prior to Project construction (**Mitigation Measure BIO-1**) would eliminate the possibility of impacts to yellow-billed cuckoos, if present. Therefore, impacts to yellow-billed cuckoos would not be significant.

**b)** No sensitive natural communities were observed within the study area during the biological surveys conducted for the BRA. The stockpile area of the Project site is adjacent to the riparian corridor of Indian Creek and contains riparian habitat within the westernmost limits of the boundary. The current footprint of processing and stockpile operations within the stockpile area is separated from the riparian habitat by an earthen berm. Prior to any activities west of this berm and prior to the reclamation of this area upon the completion of mining activities, CDFW will require notification to determine if a Lake or Streambed Alteration Agreement (LSA) is required. In addition, if the diversion of water from Indian Creek is required to supply water for dust suppression, an LSA would be required from CDFW. The LSA would include measures to protect fish and wildlife resources including screening criteria for water diversions. **Less than significant impact.**

**c)** Based on the BRA prepared for the Project, no water features exist onsite. No wetlands potentially subject to U.S. Army Corps of Engineers jurisdiction were identified on the site. Additionally, no wetland features were mapped onsite by the National Wetland Inventory mapper or National Hydrography Dataset. Therefore, the Project will have no impact to State or federally protected wetlands. **No impact.**

d) The Project will expand the boundary of the excavation area by an additional 8.8 acres. Reclamation will occur as mining is completed. The expansion would not interfere substantially with the movement of any native resident or migratory fish or wildlife species and there are no established native resident or migratory wildlife corridors within the Project site. The Project could impede the use of native wildlife nursery sites for nesting birds if expansion or blasting occurs during the nesting bird season. **Mitigation Measure BIO-1** would avoid impacts to nesting birds. **Less than significant with mitigation incorporated.**

e) There are no applicable local policies or ordinances protecting biological resources applicable to the Project. **No impact.**

f) The Project site is not subject to a Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. **No impact.**

### **Biological Resources Mitigation Measures**

The following mitigation measures have been developed, so that Project implementation will have a less than significant impact to special-status wildlife species, nesting birds, and riparian habitat.

#### **Mitigation Measure BIO-1: Nesting Bird Surveys**

Vegetation removal or ground-disturbing activities within previously undisturbed areas of the Project site as well as blasting will occur between September 1 and January 31, when birds are not anticipated to be nesting if feasible. If this is not feasible, a pre-construction nesting bird survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the Project area no more than one week prior to the initiation of activities. If activities are delayed or suspended for more than one week after the pre-construction nesting bird survey, the site should be resurveyed. Results of the nesting bird survey shall be documented in a report and provided to Siskiyou County.

If an active nest is located during preconstruction surveys, a non-disturbance buffer should be established around the nest by a qualified biologist in consultation with CDFW and USFWS to comply with FGC sections 3503 and 3503.5 and the Migratory Bird Treaty Act. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified during the survey, as well as ongoing monitoring by biologists.

#### **Mitigation Measure BIO-2: Milkweed Survey**

If feasible, new vegetation removal shall occur outside of the monarch development season (between November 1 and March 31). If vegetation disturbance occurs between April 1 and October 31, surveys will be completed for native milkweed species prior to completing activities. If milkweed is found, then a survey shall be completed to determine if any eggs or caterpillars are present on the plant(s). If monarch eggs or larvae are present, then disturbance to the plant would be avoided until the following year's management period (June 1 to September 30). If avoidance is not possible, and disturbance is unavoidable, then mitigation requirements for monarch butterfly would be determined through consultation with the USFWS.

<b>V. CULTURAL RESOURCES</b>				
Would the project:				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant w/ Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Discussion

An Archaeological Survey and Findings Report was prepared for the Project by Vann Cultural Resource Management in 2023. A records search through the Northeast Information Center at CSU-Chico was conducted by the Siskiyou County Planning Department to determine if there have been any sites previously recorded within or in the vicinity of the Project area. Following the records search a pedestrian survey of the Area of Potential Effect (APE) was conducted by Vann Cultural Resource Management to determine if any undocumented archaeological resources exist and to properly record them. Fieldwork procedures followed guidelines set forth by the State Historic Preservation Office (SHPO).

Based on the final Project recommendations included in the Archaeological Survey and Findings Report, a comprehensive and thorough effort was made to identify all Heritage Resources located within the APE for the Project and the results of the survey have been incorporated into the Project design. The areas that will be impacted are located on extremely steep terrain. Based on this and the low probability of encountering cultural resources, the archaeologist concluded that no impacts would occur to cultural resources.

**a-b)** The Archaeological Survey and Findings Report prepared for the Project determined no impacts to known cultural resources would occur from the Project. However, the report is based on an inventory-level surface survey only and there is always the possibility that significant sub-surface cultural resources could be encountered below ground level during Project activities. In the event that previously unidentified cultural resources are encountered during Project implementation, work will be suspended and archaeological consultation should be sought immediately (**Mitigation Measure CR-1**). Impacts to cultural resources will be **less than significant with mitigation incorporated**.

**c)** No known burial sites are located within the Project site. Although unlikely, human remains could be inadvertently unearthed during excavation within the quarry. **Mitigation Measure CR-2** includes proper treatment of human remains should they be encountered during Project activities. Impacts to human remains would be **less than significant with mitigation incorporated**.

## Cultural Resources Mitigation Measures

The following mitigation measures have been developed so that Project implementation will have a **less than significant impact to cultural resources**:

### Mitigation Measure CR-1: Discovery of Cultural Resources

If cultural resources, such as chipped or ground stone, or bone are discovered during disturbance activities, work shall be stopped within 50 feet of the discovery, as required by the California Environmental Quality Act (CEQA; January 1999 Revised Guidelines, Title 14 California Code of Regulations [CCR] 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the material and offered recommendations for further action.

### Mitigation Measure CR-2: Discovery of Human Remains

Although unlikely, if human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains is provided. Specific treatment of human remains shall occur consistent with State and Federal law.

<b>VI. ENERGY</b> Would the project:				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant w/ Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion

The Energy Element of the Siskiyou County General Plan contains goals, policies, and implementation measures pertaining to energy needs, efficient land use and transportation, efficient buildings, efficient commerce and agriculture, efficient community services, renewable resource use, and energy facilities; however, the implementation measures included in the Energy Element are not directly applicable to mining operations or the proposed Project.

a) The Project does not include an increase in the currently permitted annual production from the quarry, an increase in hours of equipment operation, or an increase in annual haul trucks.



Therefore, the annual energy consumption of the Project would not be increased compared to existing operations. Extension of the life of the mine an additional 30 years and expansion of the quarry would prolong the energy use of the Project.

Compliance with State, federal, and local air quality regulations (limiting idling times, etc.) would reduce and/or minimize energy demand during Project operations to the extent feasible. In addition, the Project would provide a source of material for local construction Projects and could result in an overall decrease in energy use from reduced transport distances that would be required if the material was sourced from a site at a location further from local demand. Energy use would occur based on demand for material from the site and would cease upon the end of the 30-year operational period of the Project. Project energy use would not be wasteful, inefficient, or unnecessary. **Less than significant impact.**

**b)** The Project would not obstruct the goals or policies contained in the Siskiyou County General Plan Energy Element. The Project does not include buildings that would be subject to the California Energy Commission Building Energy Efficiency Standards. The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **No impact.**

<b>VII. GEOLOGY AND SOILS</b>				
Would the project:				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant w/ Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(1994), creating substantial risks to life or property?				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion

A slope stability analysis (*Waddell Rock Quarry Slope Stability Analysis Report*) was prepared for the Project by GeoServ, Inc. (GSI) and is included as Appendix B. The slope stability analysis determined the existing slopes of the quarry have a Factor of Safety (FOS) of 1 for static conditions and that the design slopes have a FOS greater than 1.5 under static conditions.

The quarry is not located within an Alquist-Priolo Earthquake Fault Zone established by the State. Multiple pre-Quaternary faults are located within one to two miles of the Project site. The closest Quaternary faults (Sulfur Creek Fault and Lost Man Fault) are west of the Project site along the coast of California.

**ai)** The quarry is not located within an Alquist-Priolo Earthquake Fault Zone; therefore, the likelihood of faulting across the quarry site is very low. The Project is not likely to cause the risk of loss, injury, or death from rupture of a known earthquake fault. **Less than significant impact.**

**aii, aiv)** The Project will result in ground disturbance and the creation of cut benches within the existing quarry and expansion area as material is mined from the quarry. Mining activities on the slope of the hillside could result in landslide due to seismic ground shaking or other factors. Based on the slope stability analysis completed for the Project by GSI, slope stability modeling results indicate that the existing slopes have a FOS of 1 for static conditions. The design slopes have a FOS greater than 1.5 under static conditions. Modeling results for static rock slope stability conditions indicate the proposed quarry geometry is stable with FOS greater than the design criteria. Based on this information, the existing slope of the quarry face will become more stable as mining continues and benches are constructed pursuant to the proposed excavation plan.

The final bench geometry of the quarry will be the same as that contained in the existing reclamation plan for the quarry, but benches will be created over an expanded area. Benches will be a minimum of 20 feet wide and a maximum of 30 feet in height. The maximum slope of the bench faces will be 0.5:1. A mitigation measure was included in the CEQA document for RP-01-01 requiring the mine operator to observe a schedule of daily risk management including grooming of cut slopes to remove material that may be prone to sliding to mitigation of potential impacts to public safety associated with falling rock. This measure will be required for continued operations at the quarry and within the proposed expansion area and is included as **Mitigation Measure GEO-1** in this document. In addition, k-rail will be placed at the toe of the quarry slope to contain rock within the mining area. **Less than significant with mitigation incorporated.**

**aiii)** The Project site is not within a liquefaction zone and the Project does not include construction of structures or permanent development. The Project would not result in the risk of loss, injury, or death from liquefaction or seismic-related ground failure. **No impact.**

**b)** Mining and reclamation activities have the potential to result in erosion and loss of topsoil within the Project site. As described in the Reclamation Plan Amendment and shown in the excavation plan, topsoil removed from the site during mining activities would be stored in two areas adjacent to the quarry, planted, and not disturbed until reclamation.

Erosion control measures for the Project are outlined in the Reclamation Plan Amendment and Stormwater Pollution Prevention Plan (SWPPP) for the site and include construction and repair of stormwater runoff controls including berms, filter fences, and/or energy dissipaters and repairing areas of erosion, implementation of effective wind erosion control, stabilization of inactive areas, finished slopes, and other erodible areas prior to forecasted storm events, maintaining perimeter controls and all site entrances and exits to control discharge of erodible materials, diversion of run-on and stormwater within the facility away from all erodible material, and use of water bars on slopes. With the erosion controls described in the Reclamation Plan Amendment and SWPPP, the Project is not anticipated to result in substantial soil erosion or loss of topsoil. **Less than significant impact.**

**c)** Quarrying activities have the potential to result in slope failures from blasting and activities on the quarry face. As discussed under a) above, modeling results for static rock slope stability conditions indicate the proposed quarry geometry is stable with FOS greater than the design criteria. The Project site is currently quasi-stable under static conditions and will become more stable as benches are constructed pursuant to the proposed excavation plan. **Mitigation Measure GEO-1** requires grooming of cut slopes to remove material that may be prone to sliding to reduce the potential impacts of falling rock. Impacts related to landslide will be **less than significant with mitigation incorporated.**

**d)** The Project does not include construction of structures, therefore there will be no risk to life or property from expansive soils. **No impact.**

**e)** The Project does not include installation of a septic system onsite. The Project will use portable toilets. **No impact.**

**f)** There are no known paleontological resources onsite or unique geologic features at this site. **No impact.**

### **Geology and Soils Mitigation Measures**

The following mitigation measure is included to reduce the risk of falling rocks at the site:

#### **Mitigation Measure GEO-1: Daily Risk Management**

The mine operator shall observe a schedule of daily risk management during operations, including grooming of cut slopes to remove material that may be prone to sliding.

VIII. GREENHOUSE GAS EMISSIONS				
Would the project:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

The existing operation produces greenhouse gas emissions from the operation of mobile and processing equipment and the transport of material. Neither the SCAPCD nor Siskiyou County has adopted numerical thresholds of significance for GHG emissions that would apply to the proposed Project.

a) The Project does not include additional equipment or processes at the site and does not include an increase in annual production or annual duration of equipment operation. The Project will result in increased overall GHG emissions due to the extended life of the mine but will not result in an increase in annual GHGs generated by existing baseline operations at the site.

The SCAPCD has not adopted numerical thresholds of significance for GHG emissions. Due to the intermittent operations at the site, few pieces of equipment used onsite, and the low number of annual truck trips required to haul material, the Project is not anticipated to generate greenhouse gas emissions that may have a significant impact on the environment. In addition, continued operation of the quarry will provide a supply of aggregates for local construction projects, which could reduce emissions for material transport compared to the use of material sourced farther away. **Less than significant impact.**

b) The Project would not result in increased annual GHG emissions compared to existing, baseline operations. The Project will not result in substantial greenhouse gas emissions or conflict with any adopted plans, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions. **Less than significant impact.**

IX. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport/use/disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Discussion

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. Government Code section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. Based on a review of the California Environmental Protection Agency Cortese List Data Resources (CalEPA, 2024), the Project site does not contain facilities identified as meeting the Cortese List requirements.

**a,b)** No hazardous materials or fuels are currently stored at the Project site for existing operations and hazardous material storage is not proposed in the reclamation plan amendment. Fuels and lubricants are used in onsite equipment and volumes are limited to the tank capacity of each piece of equipment. BMPs are included in the SWPPP for the site including preventative maintenance of vehicles and equipment and procedures for reporting and cleaning spills or leaks at the site.

As with existing operations, blasting within the quarry would be required every two to three years. Explosives are not stored at the Project site. Blasting operations are planned so that the explosives will be used on the day of delivery or the surplus returned to the supplier's magazine. Blasting is conducted by A qualified blasting contractor properly trained and licensed in accordance with all federal and State agencies and regulations. The Project does not include a change in blasting practices but would require blasting within a larger area and closer to adjacent developed land uses

as a result of the expanded quarry boundary. **Mitigation Measure HAZ-1** includes the preparation of a Blasting Plan for expanded quarry operations to address and minimize potential hazards of blasting to the public and surrounding uses. Hazards to the public or environment through the routine use and transport of hazardous material and from accident conditions involving the release of hazardous material into the environment would be **less than significant with mitigation incorporated**.

c) The Project is not located within one-quarter mile of a school and will not emit hazardous emissions or handle acutely hazardous materials, substances, or waste. **No impact.**

d) The Project is not located on sites that are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and will not create a significant hazard to the public or the environment. **No impact.**

e) The Project site is not located within two miles of an airport. The closest airport (Happy Camp Airport) is more than six miles south of the Project site. The Project will not result in a safety hazard related to airports for the people working in the Project area. **No impact.**

f) The Project is accessed using Indian Creek Road which serves as an evacuation route for the Happy Camp area. The Project does not include any changes to traffic or operations that would impair the implementation of or physically interfere with an adopted emergency response or evacuation plan. **No impact.**

g) The Project does not include changes to activities at the site that would increase the risk of wildland fires. Fire prevention requirements applicable to operations at the site are discussed in more detail in Section XX (Wildfire) of this document. The Project does not include the construction of additional structures. The Project will not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. **Less than significant impact.**

#### **Hazards and Hazardous Materials Mitigation Measures**

The following mitigation measure has been included to ensure public safety during blasting operations at the Project site:

##### **Mitigation Measure HAZ-1: Blasting Plan**

Prior to blasting activities in the expanded quarry area, the mine operator shall provide a site-specific Blasting Plan to Siskiyou County for approval. The Blasting Plan shall identify general blasting procedures including safety, use, storage, and transportation of explosives that are consistent with the minimum safety requirements of federal, State, and local regulations. Blasting activities shall be conducted in accordance with the approved Blasting Plan.

<b>X. HYDROLOGY</b>				
Would the project:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) result in substantial erosion or siltation on or off site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk of release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion

The Project site does not contain surface water or wetlands. The Project site is adjacent to Indian Creek, a tributary to the Klamath River and portions of the existing processing and stockpile area are within the FEMA 100-year flood zone of Indian Creek. The boundaries of the 100-year flood zone are shown on Figure 2.

The Project site is not within the boundaries of a groundwater basin. The closest groundwater basin to the Project site is the Happy Camp Town Area Groundwater Basin (Basin Number 1-015) 5.6 miles south of the Project site.

a) The Project does not include discharges of waste to land and does not have the potential to substantially degrade groundwater quality. Stormwater discharges from the Project site flow to Indian Creek and could potentially impact surface water quality. The quarry currently has coverage under the *General Permit for Storm Water Discharges Associated with Industrial Activities* (IGP) and a SWPPP has been prepared for the site. Compliance with the IGP and implementation of the BMPs included in the SWPPP for the site will minimize pollutants in stormwater discharge from the site. The Project impacts to surface or groundwater quality would be less than significant. **Less than significant impact.**

b) The Project does not include changes at the site that would interfere with groundwater recharge in the area. The Project would require continued occasional use of 3,000 to 5,000 gallons of water per day for dust abatement which would be imported to the site. The source of water would be the Happy Camp Community Service District or Indian Creek. Water demands of the Project would cease upon reclamation of the site. The Project would not substantially decrease groundwater supplies or interfere with groundwater recharge. **Less than significant impact.**

c) Project activities would not alter the course of a stream or river or result in additional impervious surfaces at the Project site. The Project would result in minor changes to the existing drainage pattern of the site as the quarry is expanded and mining progresses.

i) The Project includes stormwater drainage features to minimize erosion or siltation on and offsite including construction of a stormwater detention pond along the toe of the quarry. Erosion control outlined in the SWPPP for the site and in the Mining and Reclamation Plan Amendment would minimize erosion or siltation from the site while the Project is operational. Following mining operations, the mining area would be revegetated and stabilized as outlined in the Reclamation Plan Amendment. The Project would not result in substantial erosion or siltation onsite or offsite. **Less than significant impact.**

ii) The Project could increase the rate or amount of surface runoff from the quarry area as vegetation and topsoil are removed as the quarry expands. As mining progresses, areas where mining has been completed will be reclaimed which will minimize the size of the disturbed areas. As discussed under i) above, the Project includes the construction of a stormwater detention pond along the toe of the quarry that would contain some stormwater runoff onsite, and the Project is not anticipated to result in flooding on or offsite. **Less than significant impact.**

iii) The Project could result in additional stormwater runoff following removal of vegetation and topsoil as the size of the quarry increases. As discussed in ii), the Project includes the construction of a stormwater detention pond at the toe of the quarry slope sized to accommodate stormwater runoff from the site. The Project would not contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. **Less than significant impact.**

iv) The western portion of the Project site is within the 100-year floodplain of Indian Creek. No changes to the volume of material stored within this area are proposed. However, the volume of material stored is small and would not redirect or impact flood flows. **Less than significant impact.**



d) A portion of the Project site is within the 100-year floodplain of Indian Creek as shown in Figure 2. The Project does not include changes from baseline conditions within this portion of the site. Blasted material is only stored in the processing area during the summer months of operation or is left in the pit face above the floodplain until it can be processed. This material contains the highest concentration of fines. The material generated consists of ¾- to 1½-inch aggregate base rock containing 5 percent or less of fine materials. Other materials consist of 2- and 3-inch clean, screened rock and rip-rap boulders stacked in the northwestern section of the property. The low percentage of fines in the blasted material and methods of stockpiling will not result in a significant release of sedimentation. **Less than significant impact.**

e) The Project site is not within a groundwater basin and is not subject to a sustainable groundwater management plan. BMPs to reduce pollutants in stormwater from the Project site will be implemented as outlined in the SWPPP for the operation to minimize the impacts of the Project to surface water quality. The Project will not conflict with a water quality control plan or sustainable groundwater management plan. **No impact.**

<b>XI. LAND USE AND PLANNING</b>				
Would the project:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion

a) The Project site includes an existing quarry, processing area, and adjacent undeveloped land. The Project would not divide an established community. **No impact.**

b) The Project will not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. There is no conflict with any land use plan, policy, or regulation. **No impact.**

<b>XII. MINERAL RESOURCE</b>				
Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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### Discussion

The Project site is not within a California Geological Survey (CGS) study area where mineral resources have been studied or mapped. The Siskiyou County General Plan does not include maps or a discussion of locally important mineral resource areas.

a) The Project includes continued extraction of mineral resources of value and will not result in a loss of availability of mineral resources that would be of value to the region and the residents of the state. The Project would not preclude future mining activities at the Project site. **No impact.**

b) The Project includes continued extraction of mineral resources. The Project will not result in the loss of a locally important mineral resources recovery site delineated on a local general plan, specific plan, or other land use plan. **No impact.**

<b>XIII. NOISE</b>				
Would the project result in:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

Noise sources within the Project vicinity include noise generated by existing mining operations at the Project site as well as vehicle traffic on Indian Creek Road. Mining activities consist of excavation and blasting within the quarry and processing (crushing, screening, and aggregate production) in the stockpile portion of the Project site. Reference noise levels for various equipment are included in Table 1.

<p style="text-align: center;"><b>Table 1</b> <b>REFERENCE EQUIPMENT NOISE LEVELS</b></p>	
<b>Equipment/Process</b>	<b>Maximum Noise Level (<math>L_{max}</math>) @ 50 feet</b>
Dozer	82
Dump Truck	76
Excavator	81
Front End Loader	79
Rock Drill	81
Generator	81
Blasting	94
<b>Source: FHWA, 2006.</b>	

The Siskiyou County General Plan Noise Element contains noise criteria for various land use categories. Properties adjacent to the Project site are zoned for rural residential agriculture and light industrial uses. For residential land uses, exterior noise levels up to 60 dB  $L_{dn}$  are considered acceptable according to the Siskiyou County General Plan Noise Element. The closest residences to the Project site (sensitive receptors) are shown in Figure 5.

The Day-Night Average Sound Level ( $L_{dn}$ ) is a noise metric to describe noise exposure over a 24-hour period. The  $L_{dn}$  describes a receiver's cumulative noise exposure from all events over a full 24 hours with a 10 dB penalty applied to nighttime hours (between 10 p.m. and 7:00 a.m.). This metric corresponds well to human annoyance levels (FHWA, 2017b).

a) No changes in processes or equipment at the site are proposed that would result in increased noise levels from the processing or stockpile area compared to existing operations. The Project would expand the excavation area of the quarry so that excavation, topsoil storage, and blasting would occur closer to the residences north of the Project site. As shown in Table 1, rock drills, bulldozers, and excavators produce maximum noise levels of up to 82 dB at a distance of 50 feet. Blasting produces noise up to 94 dB at a distance of 50 feet.

Activities within the new topsoil storage area adjacent to the property line would be limited to initial vegetation removal and occasional use of an excavator and/or truck to unload topsoil removed from the mining area and to load topsoil during reclamation activities. Activities within the excavation limits of the mine would involve the use of equipment for longer periods of time and could exceed 60 dB  $L_{dn}$  at the adjacent residential property line depending on the proximity of equipment to the property line and duration of equipment operation each day. The Project would also include blasting closer to the nearest residential land use.

The northernmost portion of the excavation area is approximately 250 feet from the property line of the closest residential land use and 500 feet from the exterior of the residential structure. Estimated noise levels for the simultaneous operation of a dozer, excavator, and dump truck at these distances are included in Table 2. Since blasting would occur infrequently and the duration of blasting noise would be short, blasting would result in minimal contribution to the 24-hour noise metric ( $L_{dn}$ ) and is not included in the noise estimate in Table 2. Blasting is discussed further under impact b).

<p style="text-align: center;"><b>Table 2</b> <b>ESTIMATED NOISE LEVELS FROM EXCAVATION AREA</b></p>			
<b>Distance from Equipment (feet)</b>	<b>Estimated L<sub>max</sub><sup>1</sup></b>	<b>Estimated L<sub>eq</sub><sup>2</sup></b>	<b>Estimated L<sub>dn</sub><sup>3</sup></b>
250	67.7	66.9	64
500	61.7	60.9	60
<p><b>Source:</b> Roadway Construction Noise Model</p> <p><sup>1</sup>L<sub>max</sub> of Maximum Sound Level descriptor is the highest sound level measured during a single noise event (such as a vehicle pass-by), in which the sound level changes value as time goes on. The maximum sound level is important in judging the interference caused by a noise event with common activities. L<sub>max</sub> ignores the number and duration of these events, and cannot be totaled into a one-hour or a 24-hour cumulative measure of impact (FHWA 2017b)</p> <p><sup>2</sup>The L<sub>eq</sub>(t), or Time-Equivalent Sound Level, descriptor accounts for noise fluctuations from moment to moment by averaging the louder and quieter moments, and giving more weight to the louder moments. It represents the equivalent continuous sound pressure level over a given period of time (FHWA 2017b)</p> <p><sup>3</sup>The L<sub>dn</sub> (Day-Night Average Sound Level) descriptor describes a receiver's cumulative noise exposure from all events over a full 24 hours with a 10 decibel (dB) penalty applied to nighttime hours (between 10pm and 7am)(FHWA 2017b). The estimated L<sub>dn</sub> was calculated assuming equipment would be operated from 7:00 a.m. to 5:00 p.m. (during proposed hours of operation) and that background noise levels during the remaining hours are 50 dB.</p>			

Noise levels from the expanded excavation area are not anticipated to exceed 60 dB L<sub>dn</sub> at the exterior of the closest residence; however, equipment operated closer than 500 feet could exceed 60 dB L<sub>dn</sub> at the property line of the residence. **Mitigation Measure NOI-1** includes the configuration of topsoil stockpiles along the northern boundary of the topsoil storage area to form a noise berm prior to excavation activities within 500 feet of the northern property line of the quarry. Noise barriers high enough to block the line of sight between a noise source and noise receptor can result in a 5 dB or more reduction in noise levels, and a berm will typically provide an extra 1 to 3 dB of attenuation (FHWA). Construction of the barrier would reduce estimated noise levels from excavation activities within the expanded excavation area to comply with the 60 dB L<sub>dn</sub> standard at the closest residential property line. **Less than significant with mitigation incorporated.**

**b)** The Project does not include a change to equipment in the stockpile and processing area of the site that would result in increased levels of vibration. The Project will include continued excavation, drilling, and blasting within the quarry area. The proposed expansion will result in these activities occurring closer to the residential land uses north of the Project site.

The vibration threshold of perception for humans is approximately 65 VdB, a vibration level of 85 VdB in a residence can cause strong annoyance, and a vibration level of 100 VdB is the threshold for the risk of minor cosmetic damage for fragile buildings. The vibration velocity level L<sub>v</sub>(D), at any distance (D) from the vibration source is determined by the following equation:

$$L_v(D) = L_v(25 \text{ feet}) - (30 \times \log_{10} (D/25 \text{ feet}))$$

Blasting will be the strongest source of vibration generated by Project activities and can generate a vibration velocity level of 100 VdB at a distance of 50 feet from the source (FTA, 2018). The closest structure to the Project site is a residence located more than 500 feet north of the excavation area where blasting could be conducted. At this distance from blasting, the estimated vibration velocity is 70 VdB. Vibration levels at the nearest structures will be highest when blasting is conducted in the northern portion of the excavation area, with levels lower for blasting conducted further from the northern property line. Other equipment in the expansion area will result in lower levels of vibration than blasting.

Vibration from blasting is not anticipated to cause a risk of damage to the closest residential structure. Estimated vibration from blasting will be perceptible at the closest residence but below the strong annoyance threshold of 85 VdB. Blasting will only occur intermittently at the site (every two to three years) during the daytime operational hours of the mine. In addition, Code of Federal Regulations (CFR) 816.62 requires notifications of all residents or owners of dwellings or structures located within ½ mile of the Project area of blasting at least 30 days before initiation of blasting as well as pre-blasting surveys of structures within this area. **Less than significant impact.**

c) The Project is not within an airport land use plan, or within two miles of a public airport, or within the vicinity of a private airstrip. The Project will not expose people residing or working in the Project area to excessive noise levels from aircraft. **No impact.**

### Noise Mitigation Measures

The following mitigation measure is included to reduce noise levels from excavation activities in the expanded excavation area at the closest residential property line:

#### Mitigation Measure NOI-1: Topsoil Noise Berm

Prior to excavation activities within 500 feet of the northern residential property line, topsoil shall be stockpiled along the northernmost portion of the stockpile area to create a noise berm blocking the line of sight between the expanded excavation area and the closest residence to the north of the quarry. The portion of the stockpile along the northern boundary shall be maintained during mining activities and used last during reclamation activities. The topsoil stockpile is on the east side of Indian Creek Road and not in the existing stockpile area.

XIV. POPULATION AND HOUSING				
Would the project:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

a) Continued operation of the quarry would not require additional employees or result in population growth in the area. The Project does not include the extension of roads or other infrastructure that would facilitate population growth in the area. **No impact.**

b) The Project includes expansion and continued operation of an existing quarry on undeveloped land. The Project would not displace a substantial number of people requiring the construction of replacement housing elsewhere. **No impact.**

<b>XV. PUBLIC SERVICES</b> 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:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

Continued operation and expansion of the existing quarry would not require new or altered facilities for fire protection, police protection, schools, parks, or other public facilities. **No impact.**

<b>XVI. RECREATION</b> Would the project:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

a) The Project would not result in population increases or an increase in the use of existing neighborhood and regional parks or other recreational facilities. The Project will not result in the physical deterioration of a recreational facility. **No impact.**

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

<b>XVII. TRANSPORTATION</b>				
Would the project:				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant w/ Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA guidelines 15064.3, subdivision?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion

The Project site is adjacent to and accessed from Indian Creek Road (County Road 7J001 and Forest Road 48). Indian Creek Road is a two-lane paved road used for travel between Happy Camp and southwest Oregon. Existing operations include the excavation of materials on the east side of Indian Creek Road and the transport of materials to the stockpile and processing area on the west side of the road.

Mitigation Measure 5 for the currently permitted operations required an encroachment permit to be procured for any operations within the County right-of-way. The existing Use Permit and Reclamation Plan for the mine does not include a limit on traffic for the operations. Existing operations require an average of 250 truckloads each year (an average of five each week and one each day) to transport material.

a) The Project does not include a change to existing site access or traffic volumes generated by existing operations. The Project will not conflict with any program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities. **Less than significant impact.**

b) Section 15064.3 states that “vehicle miles traveled” (VMT) is the preferred method for evaluating transportation impacts. The Use Permit and Reclamation Plan for the quarry do not include information or limits on haul trips or vehicle traffic from the site or a limit for the number of trips from the site. The Project does not include an increase to the maximum annual or daily production previously authorized for the quarry and would not result in an increase in annual VMT generated by current operations. **Less than significant impact.**

c) The Project does not include additional driveways or access points off Indian Creek Road. The proposed expansion area will be adjacent to, but not within, the County right-of-way. Any activities

within the County right-of-way will require an encroachment permit. This requirement was included as a mitigation measure for the current Reclamation Plan and is included as **Mitigation Measure TRAN-1** in this document. In addition, “Trucks Entering Roadway” signs will be placed at locations within 500 feet of truck access points during active hauling operations to alert drivers on the roadway and the Blasting Plan required pursuant to **Mitigation Measure HAZ-1** will outline when road closures are required during blasting activities. Road closures, when required, will be coordinated with the Siskiyou County Public Works Department. **Less than significant with mitigation incorporated.**

d) The Project does not include changes to the existing access to the Project site. **No impact.**

### Transportation Mitigation Measures

The following mitigation measure is included to reduce traffic hazards from trucks and equipment operated within and adjacent to Indian Creek Road:

#### Mitigation Measure TRAN-1: Encroachment Permit

An encroachment permit shall be procured from Siskiyou County for any operation within the County road right-of-way. All operations shall be performed in compliance with permit conditions or limitations, including but not limited to the use of warning signage and/or flaggers. A copy of the permit shall be provided to the Planning Department prior to operations within the County right-of-way.

<b>XVIII. TRIBAL CULTURAL RESOURCES</b>				
Would the project:				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k) or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Discussion

AB 52 was enacted on July 1, 2015, and establishes that “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (Public Resources Code Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource when feasible (PRC Section 21084.3).

Public Resources Code Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and meets either of the following criteria:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California cities, counties, and tribes regarding tribal cultural resources. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Tribal notification letters were mailed on February 3, 2023 to the standard Siskiyou County list of tribes. No comments were received as a result of the notification.

**a) i-ii** There is no evidence of historical resources at the site that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code 5024.1. There are no known tribal cultural resources within the Project site and mitigation measures included in Section V include measures that will be taken in the event that archaeological resources or remains are encountered during Project activities. **Less than significant impact.**

<b>XIX. UTILITIES AND SERVICE SYSTEMS</b>				
Would the project:				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant w/ Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Require or result in the construction of new water or wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

or relocation of which could cause significant environmental effects?				
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion

There are no water or wastewater services at the Project site. Electric power is available but not used for current operations. There is no water service provided or wastewater systems at the Project site. Water for dust suppression is imported to the site. A portable toilet and bottled drinking water are provided onsite for employees during mining operations.

**a)** The Project includes the construction of a pond to detain stormwater runoff from the quarry area along the toe of the cut slope. Construction of the stormwater detention basin is considered in the analysis of this Project and would not cause significant environmental effects. Drinking water for employees will be provided as bottled water, and a portable toilet will be onsite when the quarry is operational. Water for dust suppression will be transported to the site in a water truck. No additional utilities are proposed. **Less than significant impact.**

**b)** The Project does not include an increase in existing onsite water use. Drinking water at the Project site will be supplied as bottled water. As with existing operations, the Project will require the use of 3,000 to 5,000 gallons of water periodically for dust suppression. Water for dust suppression will be sourced from the Happy Camp Community Services District or Indian Creek. Water supplies have been sufficient to serve the Project during normal, dry, and multiple dry years. Water use will cease upon reclamation of the site. **Less than significant impact.**

**c)** The Project site is not served by a wastewater treatment provider. Portable toilets will continue to be used at the site. The Project will not generate wastewater. **No impact.**

**d)** The Project will not generate large quantities of solid waste. Small quantities of solid waste generated by the Project employees will be bagged, removed from the site, and transported to the Happy Camp Transfer Station for disposal. The Project would not generate solid waste in quantities that would exceed the capacity of local infrastructure or impair the attainment of solid waste reduction goals. **Less than significant impact.**

e) The Project will comply with all federal state and local statues and regulations relating to solid waste and disposal. **No impact.**

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

## Discussion

State Responsibility Areas (SRAs) are lands in California where the California Department of Forestry and Fire Protection (CAL FIRE) has legal and financial responsibility for wildland fire protection and where CAL FIRE administers fire hazard classifications and building standard regulations. The site is within an SRA and a Very High Hazard Severity Zone

As Siskiyou County has small pockets of population centers, no countywide evacuation plan has been developed for the region. The major highways that traverse Siskiyou County act as the primary routes for Siskiyou County communities (GreenDot, 2021). Greyback Road serves as an emergency evacuation route for the Happy Camp area when State Route 96 is affected.

a) Siskiyou County does not have a countywide evacuation plan. The Project does not include increases in traffic volumes or other changes to the existing site access off of Greyback Road. The Project does not include changes that would impair an adopted emergency response plan or emergency evacuation plan. **No impact.**

b) The Project includes expansion and continued operation of an existing quarry. The Project does not include a change to mining methods or equipment operated onsite and would not result in an increased risk of fire compared to existing operations. In addition, mining operations are

required to follow Mine Safety and Health Administration (MSHA) rules related to fire prevention and control included in Part 56 Subpart C of Title 30 of the Federal Regulations (CFR). Compliance with MSHA fire prevention and control requirements would reduce the risk and uncontrolled spread of fire at the Project site. The Project is also subject to Public Resource Code Section 4427, which requires clearing of flammable material within 10 feet of equipment operation and maintenance of a shovel and fire extinguisher for use in the immediate area any time of year when burning permits are required. The Project does not include the construction of new housing and the only occupants of the Project site would be employees onsite during active mining or processing operations. The Project does not include changes that would increase the exposure of Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. **Less than significant impact.**

c) The Project includes installation of an additional internal mine road which is analyzed as part of the Project. The Project will not result in temporary or ongoing impacts to the environment beyond that evaluated in this document. **No impact.**

d) The Project does not include construction of structures and the Project site will not be permanently occupied. The Project would require workers to be onsite intermittently during mining operations during the 30-year life of the mine. Following reclamation, the quarry would be reclaimed to open rangeland and wildlife use. There have been multiple wildfires in the Project vicinity. The most recent wildfire affecting the Project site was the Slater Fire that occurred in 2020. Vegetation has started to resprout since the fire occurred and no post-fire slope instability, flooding, or drainage changes have affected the Project site since the fire occurred. The Project does not include any changes that would increase the surrounding people or structure to significant risks from downslope or downstream flooding, post-fire slope instability, or drainage changes. **Less than significant impact.**

XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
	Potentially Significant Impact	Less Than Significant w/ Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Discussion

a) Impacts to Biological Resources and Cultural and Tribal Cultural Resources are discussed in Sections IV, V, and XVIII of this document. Mitigation measures are included to reduce potentially significant impacts to these resources to a less-than-significant level. Implementation of the mitigation measures included Sections IV, V, and XVIII will ensure the Project does not degrade any 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. **Less than significant with mitigation incorporated.**

b) The Project includes continued operation and expansion of an existing quarry. With the exception of the reconstruction of residential structures burned during the Slater Fire, which would result in minimal impacts to the environment, there are no other planned development projects within the Project vicinity. With the implementation of the mitigation measures included in this document, cumulative impacts of the Project would be less than significant. **Less than significant with mitigation incorporated.**

c) Project impacts that could result in adverse effects on human beings either directly or indirectly including impacts related to air quality, geologic hazards, hazards and hazardous materials, and noise were evaluated in this document and determined to be less than significant with mitigation incorporated. No additional adverse effects to humans beyond those analyzed in this document are anticipated. **Less than significant with mitigation incorporated.**

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Appendix A  
**Biological Resources Assessment**

**EXHIBIT B**



# Biological Resources Assessment

## WADDELL ROCK PIT EXPANSION

Happy Camp, Ca 96039

Siskiyou County APNs:

009-330-230, 009-330-240 & 009-340-350

2024

GeoServ, Inc

Mount Shasta, CA



EXHIBIT B

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## INTRODUCTION

GeoServ, Inc. conducted a Biological Resources Assessment (BRA) for a Study Area located north of Happy Camp, Siskiyou County, California. The purpose of the assessment was to collect information on sensitive biological resources present or with the potential to occur in the Study Area.

## PURPOSE

The purpose of this reconnaissance-level BRA is to evaluate the presence of special-status species and/or habitats, as well as assess the potential for special-status species discussed in this BRA and listed in Appendices A-C to occur on or near the site of the proposed Waddell Rock Pit Expansion, pursuant to applicable Federal, State, and local regulations. This BRA also analyzes the potential for jurisdictional wetlands and other Waters of the United States to exist onsite.

## PROJECT DESCRIPTION

The proposed Project would involve expanding the boundaries of the existing Waddell Rock Pit to allow for additional rock quarrying. The surrounding area contains recently burned forestland as well as industrial uses. Indian Creek Road runs through the Study Area, while Indian Creek itself runs south and west of the existing materials stockpile area. Public land previously identified as Northern Spotted Owl critical habitat occurs adjacent to the project on its northern end.

## LOCATION

### Site Overview

The Study Area is located north of Happy Camp in Siskiyou County. The Study Area encompasses portions of Section 08, Township 17 North, Range 7 East of the Deadman Point USGS 7.5-minute Quadrangle. It is situated at an elevation range between approximately 1515 feet and 2040 feet above mean sea level. The Study Area is located on Siskiyou County Assessor Parcel Numbers (APNs) 009-330-230, 009-330-240, and 009-340-350. The approximate center of the Study Area is located at latitude 41°53'4.36"N (WGS84) and longitude 123°25'46.32"W (WGS84) within the Lower Klamath (Hydrologic Unit Code #18010209) Watershed (Natural Resources Conservation Service [NRCS], USGS, and U.S. Environmental Protection Agency [USEPA] 2016).



## Critical Habitat

Critical Habitat is designated by the U.S. Fish & Wildlife Service and provides special protections for habitats considered important for long-term persistence of endangered or threatened species. Specific to fish species, critical habitat and essential fish habitat are also designated by the National Oceanic and Atmospheric Administration (NOAA).

According to the NOAA Essential Fish Habitat Mapper, the portion of Indian Creek that runs near the materials stockpile area contains Essential Fish Habitat for Coho salmon and Chinook Salmon. However, with the implementation of best management practices (BMPs) for erosion and sedimentation, the expansion of the Waddell Rock Pit would not significantly impact Indian Creek. The existing stockpile area would not significantly impact Essential Fish Habitat/Critical Habitat through the continued implementation of its existing BMPs.

According to the USFWS IPaC report for the project (Appendix C), critical habitat for the Northern Spotted Owl (*Strix occidentalis caurina*, US Threatened) overlaps with the Study Area. site visits confirmed that the critical habitat does not occur in the Study Area, but rather is adjacent to the Study Area boundary on public (US Forest Service) ownership.



## Landforms & Water Features

The Study Area consists of the existing exposed Waddell rock pit, the land adjacent to the current permitted boundaries, and the existing materials stockpile area (See Sheet C1, “Overall Site Plan”, in the Reclamation Plan Amendment application associated with this project). The area is characterized by former conifer/hardwood forest that has been severely burned; in many areas, mortality approaches 100 percent both onsite and in surrounding visible land. Site visits show a return of these features, largely through oak resprouting and conifer saplings. No water features exist onsite, though Indian Creek runs west of the existing materials stockpile area.

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### Existing Structures

The Study Area includes the existing quarry area, with clear evidence of previous rock extraction. The materials stockpile area includes various stockpiles of rock/gravel, truck weighing scales, and various pieces of construction equipment (excavators, etc.). The materials stockpile area has a large gate to prevent public access. Indian Creek Road runs through the Study Area, running between the materials stockpile area and the proposed quarry boundaries.

### Regional Land Uses

Surrounding land uses are largely public land and industrial uses. Public (US Forest Service) forestland exists to the north of the Study Area and is coincident with the Northern Spotted Owl critical habitat in the area. Additional forested land exists further out from the project. Additional industrial uses occur north of the Study Area.

## METHODS

### Records Search & Literature Review Conducted

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) record search for the “Deadman Point” 7.5-minute quadrangle and the eight surrounding USGS quadrangles (Appendix A);
- California Native Plant Society (CNPS) electronic Inventory of Rare and Endangered Plants of California was queried for the “Deadman Point” 7.5-minute quadrangle and the eight surrounding USGS quadrangles (Appendix B).

- United States Fish and Wildlife Service (USFWS) Information, Planning, and Consultation (IPaC) System Resource Report List for the Study Area (USFWS 2024, Appendix C).
- National Oceanic and Atmospheric Administration (NOAA) Protected Resources Map Application (NOAA 2024a).
- NOAA Essential Fish Habitat Map Application (NOAA 2024b).
- USFWS National Wetlands Inventory (NWI) Mapper (USFWS 2024).
- National Resource Conservation Service (NRCS) Web Soil Survey (NRCS 2024).

Additional literature was consulted to determine if sensitive species discussed have any potential to occur in the Study Area. See the References section for a full list.

### Field Surveys

Two botanical and wildlife surveys were conducted throughout the Study Area in April and June 2023, when all sensitive plant species searched for would have been in bloom across the two dates. A follow-up survey was conducted in February 2024. Using CNDDB, CNPS, and USFWS records, the biologist developed a target list of sensitive species. Prior to the surveys, this target list was narrowed down by removing species which would not occur in the area due to characteristics such as elevation and habitat type. The survey was conducted by an experienced biologist, who has over six years of professional wildlife and botanical experience. The botanist extensively searched the project area, focusing on areas that contained habitat elements that may include one of the target species.

No sensitive species were discovered during the biological reconnaissance surveys, though several sensitive species have the potential to occur in the study area. These species have been addressed in mitigation recommendations later in this document.

## RESULTS

### NATURAL COMMUNITIES IN THE EVALUATION AREA

Using the field visits, a review of published literature, and the knowledge of GeoServ, Inc. staff, the natural communities present in the Study Area were cataloged and evaluated to determine the presence or likely presence of sensitive natural communities.

### NATURAL COMMUNITIES WITHIN THE PROJECT SITE

Vegetation communities were identified within the Study Area based on the classification system presented in the California Wildlife Habitat Relationships



System. CNDDDB results (Appendix A) indicate that there are no sensitive natural communities within the study area, though two *Darlingtonia* seep areas were identified within the nine-quad scoping area.

No sensitive natural communities were observed within the Project area during the biological surveys. Vegetation types and communities observed during the field survey include the following:

### Montane Hardwood-Conifer

Montane hardwood-conifer communities consist of hardwood species (especially Oregon white oak and/or California black oak) as well as conifers (including douglas-fir, ponderosa pine, incense cedar, etc.); additional vegetation includes pacific madrone and tanoak (CDFW 1988a). Montane hardwood-conifer represents a transitional zone between purer stands of higher-elevation conifer forest and lower-elevation hardwood woodland/forest, and they typically occur on course, well-drained mesic soils (CDFW 1988a). The significant presence of both conifers and hardwoods makes this community unique and able to support a wide range of wildlife (CDFW 1988a).

Onsite, the montane hardwood-conifer community has been impacted by recent severe, stand-replacing wildfire. Many portions of the Study Area approach 100 percent mortality of trees, though conifer/oak saplings and oak resprouts demonstrate that the area is recovering.

### Unvegetated

The materials stockpile area, as well as portions of the existing quarry area, are largely unvegetated.

## SPECIAL-STATUS PLANTS WITHIN THE PROJECT SITE

The botanical scoping process included a sensitive species search from the California Native Plant Society (CNPS) and California Natural Diversity Database (CNDDDB) within a nine-quadrangle area centered around the Study Area. The USFWS IPaC report (Appendix C) was also consulted, but did not include any federally listed plant species.

The records searches yielded a total of 74 sensitive species detections within the 9-quadrangle area. Of



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these 74 species, 13 were deemed to have no potential to occur due to the Project's elevational range: cut-leaf anemone (*Anemone multifida* var. *multifida*), green shield-moss (*Buxbaumia viridis*), split-hair paintbrush (*Castilleja schizotricha*), Mt. Eddy draba (*Draba carnosula*), yellow willowherb (*Epilobium luteum*), Siskiyou fireweed (*Epilobium siskiyouense*), Oregon bedstraw (*Galium oreganum*), Regel's rush (*Juncus regelii*), Oregon bluebells (*Mertensia bella*), Siskiyou phacelia (*Phacelia leonis*), snow dwarf bramble (*Rubus nivalis*), water bulrush (*Schoenoplectus subterminalis*), and Cascade stonecrop (*Sedum divergens*). All of these species have a lower elevational range well above the Study Area's maximum elevation of 2,040 feet.

Nine species were deemed to have no potential to occur due to the absence of their required serpentine habitat: Waldo rockcress (*Arabis aculeolata*), McDonald's rockcress (*Arabis mcdonaldiana*), serpentine sedge (*Carex serpenticola*), Waldo daisy (*Erigeron bloomeri* var. *nudatus*), Klamath mountain buckwheat (*Eriogonum hirtellum*), Siskiyou iris (*Iris bracteata*), horned butterwort (*Pinguicula macroceras*), Gasquet rose (*Rosa gymnocarpa* var. *serpentina*), and Del Norte checkerbloom (*Sidalcea elegans*).

Thirty-six species were considered non-status species, as they have a CNPS Rare Plant Rank of 4. The remaining 16 special status species were surveyed throughout the Study Area in April and June 2023, and February 2024. Focal plants included:

Scientific Name	Common Name	CNPS Rare Plant Rank
<i>Asarum marmoratum</i>	Marbled wild-ginger	2B.3
<i>Boechera koehleri</i>	Koehler's stipitate rockcress	1B.3
<i>Castilleja elata</i>	Siskiyou paintbrush	2B.2
<i>Cornus unalaschkensis</i>	Bunchberry	2B.2
<i>Epilobium oreganum</i>	Oregon fireweed	1B.2
<i>Erythronium hendersonii</i>	Henderson's fawn lily	2B.3
<i>Erythronium howellii</i>	Howell's fawn lily	1B.3
<i>Iliamna latibracteata</i>	California globe mallow	1B.2
<i>Lewisia cotyledon</i> var. <i>heckneri</i>	Heckner's lewisia	1B.2
<i>Lewisia cotyledon</i> var. <i>howellii</i>	Howell's lewisia	3.2
<i>Lomatium martindalei</i>	Coast range lomatium	2B.3

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<i>Monotropa uniflora</i>	Ghost-pipe	2B.2
<i>Piperia candida</i>	White-flowered rein orchid	1B.2
<i>Sidalcea celata</i>	Redding checkerbloom	3
<i>Silene hookeri</i>	Hooker's catchfly	2B.2
<i>Thermopsis robusta</i>	Robust false lupine	1B.2

All species observed during the survey were recorded, regardless of rare plant status, and are listed below:

Scientific Name	Common Name	Comment
<i>Achillea millefolium</i>	Common Yarrow	
<i>Adelina grandis</i>	Hound's tongue	
<i>Allium bolanderi</i>	Bolander's onion	
<i>Amsinckia menziesii</i>	Fiddleneck	
<i>Arbutus menziesii</i>	Pacific madrone	
<i>Asclepias cordifolia</i>	Heartleaf milkweed	Monarch butterfly host plant
<i>Berberis aquifolium</i>	Oregon grape	
<i>Bromus tectorum</i>	Cheatgrass	
<i>Cardamine sp.</i>	Bittercress	
<i>Ceanothus sp.</i>	Ceanothus	
<i>Claytonia perfoliata</i>	Miner's lettuce	
<i>Cytisus scoparius</i>	Scotch Broom	
<i>Eriogonum nudum</i>	Naked buckwheat	
<i>Eriophyllum lanatum</i>	Common woolly sunflower	
<i>Erythranthe moschata</i>	Musk monkeyflower	Genus formerly <i>Mimulus</i>
<i>Grindelia nana</i>	Idaho gumweed	
<i>Isatis tinctoria</i>	Dyer's woad	
<i>Juncus occidentalis</i>	Western rush	

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<i>Lupinus sp.</i>	Lupine	
<i>Nicotiana attenuata</i>	Tobacco	
<i>Notholithocarpus densiflorus</i>	Tanoak	
<i>Penstemon heterophyllus</i>	Foothill penstemon	
<i>Penstemon deustus</i>	Hot rock penstemon	
<i>Pinus lambertiana</i>	Sugar pine	ID'd by cone given post-fire conditions
<i>Pinus ponderosa</i>	Ponderosa pine	ID'd by cone given post-fire conditions
<i>Plantago lanceolata</i>	Ribwort plantain	
<i>Polystichium munitum</i>	Western swordfern	
<i>Primula hendersonii</i>	Henderson's shooting star	
<i>Pseudotsuga menziesii</i>	Douglas-fir	ID'd by cone given post-fire conditions
<i>Pteridium aquilinum</i>	Western brackenfern	
<i>Hordeum murinum</i>	Barley	
<i>Tragopogon sp.</i>	Salsify	
<i>Trifolium sp.</i>	Clover	
<i>Ranunculus sp.</i>	Buttercup	
<i>Ribes roezlii</i>	Sierra gooseberry	
<i>Rubus armeniacus</i>	Himalayan blackberry	
<i>Sanicula graveolens</i>	Northern sanicle	
<i>Quercus kelloggii</i>	California black oak	ID'd from resprout
<i>Quercus garryana</i>	Oregon white oak	ID'd from resprout

No special-status plants were observed during the botanical surveys, and they are not expected to occur within the Project area.

## WILDLIFE

### Special-status Fish Species and Habitat:

#### Fish:

A records search was conducted within the Project area for special-status fish, critical habitat, and essential fish habitat through the following sources: CNDDDB (Appendix A), NOAA essential fish habitat mapper, NOAA Protected Resources App, and the USFWS IPaC report (See Appendix C).

No critical habitat was recorded in the Study Area; however, essential fish habitat for Coho salmon (*Oncorhynchus kisutch*) and Chinook salmon (*Oncorhynchus tshawytscha*) is present in Indian Creek, which runs south and east of the materials stockpile area. Additionally, CNDDDB records indicate that the Klamath River lamprey (*Entosphenus similis*, CA Species of Special Concern) and coast cutthroat trout (*Oncorhynchus clarkii clarkii*, CA Species of Special Concern) have the potential to occur in the portion of Indian Creek that passes near the Study Area.

Indian Creek runs south and west of the existing materials stockpile area, while the existing and proposed quarry areas are further from the creek across Indian Creek Road. No instream mining is proposed for this project; however, significant impacts to these fish species or essential fish habitat could occur if erosion or hazardous materials entered Indian Creek and polluted downstream habitat. With the implementation of Best Management Practices (BMPs) for erosion control and spill prevention (as described in the project's associated reclamation plan amendment), impacts to these fish species and their potential habitat would not occur. This would include existing BMPs as implemented at the existing materials/stockpile area, as well as BMPs associated with the current and expanded quarry area.

### Special-Status Wildlife Species

The CNDDDB records and USFWS IPaC records identified the following special-status wildlife species that could potentially occur in the Project area:

- American peregrine falcon (*Falco peregrinus anatum*, CA Fully Protected)
- Bald Eagle (*Haliaeetus leucocephalus*, CA Endangered, CA Fully Protected)
- Bumble Bees:
- Franklin's bumblebee (*Bombus franklini*, US Endangered)
- Suckley's cuckoo bumblebee (*Bombus suckleyi*, CA Candidate endangered)
- Western bumblebee (*Bombus occidentalis*, CA Candidate Endangered)
- Crustaceans:
- Conservancy fairy shrimp (*Branchinecta conservatio*, US Endangered)
- Vernal pool fairy shrimp (*Branchinecta lynchi*, US Threatened)
- Vernal pool tadpole shrimp (*Lepidurus packardi*, US Endangered)

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- Foothill yellow-legged frog - north coast Distinct Population Segment (DPS) (*Rana boylei* population 1)
- Gray wolf (*Canis lupus*, US Endangered)
- Pacific marten, Coastal Distinct Population Segment (*Martes Caurina*)
- Marbled murrelet (*Brachyramphus marmoratus*, US Threatened)
- Monarch butterfly (*Danaus plexippus*, US Candidate)
- North American Wolverine (*Gulo gulo luscus*, US Proposed Threatened, CA Threatened, CA Fully Protected).
- Northern goshawk (*Accipiter gentilis*, CA Species of Special Concern)
- Northern spotted owl (*Strix occidentalis caurina*, US Threatened, CA Threatened)
- Pacific tailed frog (*Ascaphus truei*, CA Species of Special Concern)
- Salamanders:
- Del Norte salamander (*Plethodon elongatus*, CA Watchlist)
- Siskiyou Mountains Salamander (*Plethodon stormi*, CA Threatened)
- Southern torrent salamander (*Rhyacotriton variegatus*, CA Species of Special Concern)
- Yellow-billed cuckoo (*Coccyzus americanus*, US Threatened)

#### American Peregrine Falcon:

American peregrine falcons are birds of prey that can be found in woodland, coastal, and forested habitats (CDFW 2000a). The species has been delisted federally and at the state level after recovering from DDT-related declines (CDFW 2000a, Cornell 2023a), but remains a state Fully Protected species.

Proximity to water, such as inland wetlands or riparian areas, is characteristic of American peregrine falcon habitat in both breeding and non-breeding areas (CDFW 2000a). Typically, American peregrine falcons' prey on birds, catching prey while in flight (CDFW 2000a).

American peregrine falcons breed from late March to early August, relying on cliff sites for nesting (CDFW 2000a).

American peregrine falcons have been observed in an adjacent quadrangle to the Study Area according to CNDDDB records, and therefore may utilize the project site. However, a nesting bird survey prior to vegetation removal would reduce impacts to American peregrine falcons to less than significant levels.

#### Bald Eagle:

Bald eagles are birds of prey that can be found across the United States. Once federally endangered due to DDT impacts, bald eagles have been delisted federally but remain listed as Endangered at the state level.



Bald eagles require large bodies of water, as their primary food source is fish (CDFW 1999). Individuals will perch on the limbs of large trees or snags while observing the water below to hunt (CDFW 1999).

Bald eagles typically nest near water too, with over 80% of nests found within 1 mile of water (CDFW 1999). Nest sites are typically large, live trees, especially Ponderosa pine (CDFW 1999). Bald eagles breed from February to July (CDFW 1999).

According to CNDDB records, bald eagles have been observed approximately 11 miles southwest of the Study Area. However, the recent severe fire has greatly reduced the number of live trees that bald eagles may use to nest or roost. Therefore, bald eagles are not expected to occur in the Study Area, but would nevertheless be identified through pre-operation nesting bird surveys. Therefore, impacts to bald eagles would be less than significant.

#### Franklin's bumble bee:

Franklin's bumble bee is an extremely range-restricted bumble bee, only ever found within Northern California and Southern Oregon between the Sierra-Cascade Mountain ranges and Coast Mountain ranges (USFS 2022). Relatively abundant in its range until 1998, the species has experienced steep declines since that point, and was last seen in 2006 in Oregon near Mt. Ashland (USFS 2022, USFWS 2018a).

Habitat requirements for Franklin's bumble bee are poorly understood (USFWS 2018a, USFWS 2021), but the species is known to require floral plants such as *Agastache*, *Eschscholzia*, *Lupinus*, *Monardella*, and *Vicia*, for a food source (USFS 2022). Abandoned rodent burrows or rotting logs are also crucial as dwelling sites for the species (USFS 2022, USFWS 2018a).

Solitary queen bees who have successfully mated establish Franklin's bumble bee colonies, collecting nectar and pollen to support egg production (USFS 2022, USFWS 2018a). As the colony develops, offspring begin to assume food gathering and colony defense tasks (USFS 2022, USFWS 2018a). Eventually, new queens are produced, who mate with males, allowing the colonization process to begin again (USFS 2022). At this point, the original queen, males, and workers die, allowing the mated females to carry on the lineage (USFWS 2018a). In total, colonies consist of 50-400 worker bees plus the queen (USFWS 2018a).

Franklin's bumble bees may be extirpated in California and may be extinct in general (USFWS 2018a). Provided the species still exists in California, threats include introduced diseases from commercial bees, as well as pesticide use in its area (USFS 2022).

CNDDDB records indicate that the nearest occurrence of Franklin's bumblebee occurred in 1997 approximately 26 miles southeast east of the Study Area, outside of the normal nine-quad scoping area for the project. Additionally, the last sighting of Franklin's bumblebee occurred in 2006 near Mt. Ashland in Oregon, even further away. Therefore, Franklin's bumblebee is not expected to occur in the Project area, and no impacts to Franklin's bumblebee would occur as a result of the Project.

#### **Western Bumble Bee and Suckley's Cuckoo Bumble Bee:**

Western bumble bees are current candidates for California Endangered Species Act protections. The species has experienced sharp declines since the 1990s, likely due to a variety of factors, including novel pathogens, insecticide use, and habitat fragmentation (Xerxes 2008). Western bumble bees require a diversity of wildflower resources and a stable supply of pollen; they are known to visit a wide array of bee-pollinated flower species, though their short tongues hamper their ability to feed from tube-shaped flowers (Xerxes 2008). Western bumble bees will typically use abandoned rodent burrows as areas to establish colonies (Xerxes 2008).

Like most bumble bees, western bumble bees come in three forms: queens, workers, and males. Fertilized queens begin colonies in the spring, first producing worker bees and caring for them herself (Xerxes 2008). Once a supply of workers are established, the queen focuses her time on egg-laying, while the workers take care of additional offspring (Xerxes 2008). The queen will then producing males and additional queens, who will then mate before entering diapause (similar to hibernation) to overwinter (Xerxes 2008).

A rare form of parasitic bumble bee, Suckley's cuckoo bumble bee, has also become a Candidate for CESA protections. Suckley's cuckoo bumble bee is a social parasite, meaning queens cannot establish a viable colony on her own. Suckley's cuckoo bumble bees cannot produce worker bees, and therefore seek out the colony of another bumble bee species (such as *Bombus occidentalis*), incapacitate the queen, and then commandeer the colony (Xerxes 2008). The parasitized colony then enables the queen Suckley's cuckoo bumble bee to lay her own eggs (males and queens), as the workers will provide for the offspring. Once males and queens mature and mate, queens overwinter and repeat the process the following spring (Xerxes 2008).

Suckley's cuckoo bumble bees have similar habitat requirements to other bumble bee species in that they require a diversity and constant supply of flowers (Xerxes 2008). The species has short to medium sized tongues, meaning they too struggle to feed on flowers with deep tube shapes (Xerxes 2008).

Within the Study Area, floral diversity is somewhat limited due to the disturbance at the existing Waddell rock pit extents. Additionally, because CNDDDB records



observed these species approximately nine miles away from the Study Area, these bumble bees are not expected to occur in the Study Area. Therefore, no impacts to these bumble bees are expected to occur.

#### Crustaceans:

The USFWS IPaC report for the Project identified vernal pool fairy shrimp (*Branchinecta lynchi*, US Threatened), Conservancy fairy shrimp (*Branchinecta* conservation US Endangered), and vernal pool tadpole shrimp (*Lepidurus packardii*, US Endangered) as potentially occurring in the Project area. The vernal pool fairy shrimp and Conservancy fairy shrimp are both dependent on vernal pools and vernal pool-like habitats (USFWS 2005). The vernal pool tadpole shrimp occurs in a wider variety of ephemeral wetland habitats in addition to vernal pools (USFWS 2007). However, field surveys confirmed no ephemeral wetland habitats that could support these shrimp species are present on the project site; therefore, vernal pool fairy shrimp, Conservancy fairy shrimp, and vernal pool tadpole shrimp have no potential to occur in the Project area, and Project implementation would have no impacts on these species.

#### Foothill Yellow-legged Frog:

The foothill yellow-legged frog is a species found in or near rocky streams in hardwood, hardwood-conifer, riparian, pine, mixed conifer, coastal scrub, chaparral, and wet meadows (CDFW 2000b), with the stream habitat being the most crucial. The species is rarely found far from permanent water, with normal home ranges less than 33 feet in length (CDFW 2000b).

Foothill yellow-legged frog adults consume invertebrates, especially insects (California Herps 2022). Adults will bask on exposed rock surfaces near streams but will quickly retreat to underwater sediments or rocks when they perceive a threat; winter activities are typically spent hiding under rocks in or near the stream (CDFW 2000b).

Foothill yellow-legged frogs typically begin breeding/egg-laying from mid-March to May, with amplexus occurring in the water (CDFW 2000b, California Herps 2022). Egg clusters of 200-300 eggs are attached to gravel or rocks in moving water near the edge of the stream (CDFW 2000b). Tadpoles require at least three to four months of water to survive to metamorphosis (CDFW 2000b); tadpoles eat detritus and algae attached to the rocky substrate (California Herps 2022).

Ecologically, garter snakes are the primary predator of foothill yellow-legged frogs (CDFW 2000b). The species faces a variety of threats, including habitat modification from dam construction and altered streamflows/water releases, which can force adults upland and disrupt/detach egg masses within the stream areas (CFGF 2020). According to the California Fish and Game Commission (CFGF),

habitat modifications that threaten the species include mining, illegal cannabis cultivation, grazing, timber harvest, and even some restoration projects (CFGF 2020). Drought, wildfires, and other climate-related events also may impact foothill yellow-legged frog populations (CFGF 2020). Environmental threats such as chytrid fungus and agricultural pesticides add an additional threat to the species (CFGF 2020).

CNDDDB records indicate that foothill yellow-legged frogs have been found near streams approximately 13 miles northwest of the Study Area. However, the lack of wet areas within the Study Area precludes foothill yellow-legged frog presence in the Study Area, and none were observed onsite during field surveys. Therefore, no impacts to foothill yellow-legged frogs would occur.

### Gray Wolf:

The gray wolf is a habitat generalist that only recolonized California in 2009 (CDFW 2022). Historically, wolves have occurred in forests, grasslands, deserts, and the tundra (CDFW 2011). In general, crucial habitat components include a water source, adequate prey (typically ungulates such as deer and elk), and a lack of human disturbance or population (CDFW 2011). Wolves historically occurred over large portions of the state, especially in the north; however, their total abundance was likely somewhat low (CDFW 2011).

Individual wolves can travel over 30 miles in a day and can disperse as far as 680 miles from their birthing place (CDFW 2011). Wolves typically travel in packs consisting of a mating alpha pair, as well as subordinate wolves, typically offspring (CDFW 2011). Subordinate wolves may leave the pack to start their own or join another pack (CDFW 2011). Packs typically claim and defend territories from other wolves; these territories can range from 20 square miles to 400 square miles (CDFW 2011). These large territorial needs, plus gray wolves' relatively successful recovery, has necessitated the species' expansion into new areas, including California.

Typically, alpha wolf pairs begin to breed at two years of age, and thereafter produce one litter of pups per year (CDFW 2011). Successful pup rearing requires a den for birthing, such as a hole, crevice, or hollow log/stump; as pups grow, they typically remain near older wolves at rendezvous sites, while the rest of the pack hunts (CDFW 2011). Wolves that survive to adulthood typically live four years, though they can live up to 13 years (CDFW 2011).

Currently, gray wolf individuals and packs have been sighted in Siskiyou County, Trinity County, and even further south in rare instances. As gray wolves are habitat generalists with the propensity for long-distance dispersal, it is possible that gray wolves could use the Study Area for foraging, dispersal, or denning. If a gray wolf den or rendezvous site is present on the Project area, construction

activities could potentially impact the gray wolf. These impacts would be significant. However, the potential for gray wolves to occur on the project area is exceedingly low, due to the current and historic disturbances (severe fire, rock quarrying, and nearby quarry material processing). Additionally, no gray wolves, dens, or rendezvous sites were observed onsite during field surveys or in CNDDDB records. Therefore, there would be no impacts to the gray wolf.

#### **Pacific Marten (Coastal Distinct Population Segment):**

The Pacific marten is a mammal found in the forests of the North Coast, Sierra Nevada, Cascade, and Klamath Mountains (CDFW 1988c). Martens are carnivorous and typically eat small mammals, but will also take birds, insects, and even fruit if other food sources are unavailable (CDFW 1988c). Martens are primarily nocturnal or crepuscular.

In general, martens require old-growth coniferous forest with decadent features for denning and nesting purposes. Martens rely on cavities for denning, and may utilize large tree cavities, snags, stumps/logs, burrows, or caves/crevices for such purposes. Martens will use similar den habitats for nesting (CDFW 1988c). Small clearings, meadows, and riparian areas are crucial for foraging, but large areas with no tree canopy are typically avoided (CDFW 1988c). Human disturbance typically excludes martens from using a habitat area.

Pacific martens are not considered sensitive species in their inland populations. However, the Coastal Distinct Population Segment (DPU) is listed as threatened under the U.S. Endangered Species Act, while it is also listed as Endangered by the California Endangered Species Act (USFWS 2020a, CDFW 2024).

Similar to other species dependent on old-growth forests discussed in this document, the severe, stand-replacing fires that have recently occurred in and around the project area preclude Pacific martens from utilizing the site. As mentioned above, martens typically refrain from using areas with human disturbance and areas with no tree canopy. Taken together, the severe fire, previous human disturbance, and lack of tree canopy all indicate that Pacific martens do not use the Study Area, and no impacts to Pacific martens would occur as a result of the Project.

#### **Marbled Murrelet:**

Marbled murrelets are coastal birds that rely on old-growth forest characteristics for their habitats (USFWS 1997). These old growth characteristics include large trees, multistoried canopies, and moderate to high canopy closure (USFWS 1997). Marbled murrelets are rarely found more than 50 miles inland from the coast (USFWS 1997). Therefore, as the project is approximately 53 miles due east of the California coast and the region has lost its old growth characteristics from recent

severe, stand-replacing fire, marbled murrelets have no potential to occur in the Study Area. No impacts to the marbled murrelet are expected as a result of this project.

### **Monarch Butterfly:**

The USFWS IPaC report for the Project identified the monarch butterfly (*Danaus plexippus*, US Candidate) as potentially occurring in the Project area.

The monarch butterfly is a migratory butterfly species which uses northern California as part of its vast summer breeding area, before overwintering in coastal California and Baja California (USFWS 2020b). Adult monarch butterflies require a diversity of blooming nectar resources during breeding and migration, with its obligate host plant, milkweed (*Asclepias* sp.) essential for breeding (USFWS 2020b).

When monarch caterpillars hatch in their breeding grounds, they spend 9-18 days as caterpillars, eating milkweed and molting several times (USFWS 2020b). After 6-14 days in a chrysalis, adult monarch butterflies begin their reproductive life, mating, laying eggs on milkweed, and replenishing lipid stores with nectar-producing flowers (USFWS 2020b). Typically, Monarch butterflies live 2-5 weeks as adults before dying (USFWS 2020b). This reproductive cycle occurs multiple times throughout the warm summer months; however, every year the final generation of monarchs become overwintering monarchs, with a different life history (USFWS 2020b).

Overwintering monarchs enter reproductive diapause, and instead make a migratory journey of 500 km to 1600 km (310 to 995 miles) to the overwintering grounds on the coast of California or Baja California. Here, the monarchs wait out the winter, still relying on nectar-producing flowers to feed (USFWS 2020b). The following spring, monarch adults who survived the winter breed at the overwintering site before migrating back to the area where they hatched; adult female monarchs lay their eggs on milkweed as they encounter it along the way (USFWS 2020b). In total, overwintering monarchs live 6-9 months as adults (USFWS 2020b).

As discussed above, the monarch butterfly requires its host plant, milkweed (*Asclepias* sp.) to breed in the area. Two heartleaf milkweed (*Asclepias cordifolia*) plants were observed during the 2023 botanical surveys within the Study Area, making the Study Area potentially suitable for monarch butterfly use. Quarrying activities which remove these milkweeds could significantly impact the species of monarch butterflies are using the milkweeds at the time of vegetation removal, and the removal of these plants would constitute in a small reduction of monarch butterfly habitat.

To mitigate these impacts, observed milkweeds will be flagged by a qualified biologist and checked for monarch butterfly adults, caterpillars, or chrysalises prior to removal. If monarch butterflies of any life stage are discovered, milkweed removal will not occur until the butterflies have completed their use of the plants. Given that milkweed is present abundantly in the wider region (having recovered well post-fire), the removal of the two observed milkweed plants onsite will not result in significant impacts to the monarch butterfly.

#### **North American Wolverine:**

Wolverines are highly mobile mammals that can travel long distances in a day and typically inhabit very large home ranges (upwards of 100 square miles) (USFWS 2018b). Wolverines are extremely territorial, with individuals of the same sex rarely inhabiting the same areas (USFWS 2018b). The large wolverine territories plus the strong territorial behavior in wolverines is a major factor for the low population densities of wolverines, even in areas where the species is thriving (CDFW 1988b).

Wolverines typically inhabit coniferous forest, alpine dwarf-shrub, or montane riparian habitats (CDFW 1988b). However, wolverines strongly prefer to settle in territories with low human disturbance and are commonly found in relatively human-inaccessible areas (USFWS 2018b). Wolverines will both scavenge for food and will hunt, with prey often changing based on the season and available prey/carrion items. The species uses caves as well as hollows in logs, rock outcrops, and burrows for cover.

Wolverines exhibit an unusual reproductive behavior: males are polygamous, but females have an extended pregnancy, as implantation can be delayed for up to six months, followed by a short (40 days or less) gestation period (USFWS 2018b). This reproductive life history leads wolverines to reproduce from May to July, but wolverine birth typically occurs from January to April (CDFW 1988b).

CNDDDB records indicate a wolverine was observed 2.1 miles southwest of the study area in 1971. However, the study area has gone through recent severe fire, nearby rock quarrying, and quarry material processing. Therefore, the amount of human disturbance and low-quality habitat in the area precludes wolverine occupancy of the area. Therefore, there is minimal potential for wolverines to occur in the Study Area. No impact would occur to North American wolverines.

#### **Northern Goshawk:**

Northern goshawks are birds of prey which typically do not exhibit migratory behavior, relying mainly on a specific territory or home range as habitat and prey conditions allow (CDFW 2005a). Northern goshawks typically occur in dense, mature, closed-canopy coniferous forests, though they will also occur in deciduous forests with similar habitat characteristics (CDFW 2005a). Prey requirements

include various bird and mammal species such as Douglas squirrels, Belding's ground squirrels, Northern flickers, and Steller's jays (Shuford and Gardali 2008).

Northern goshawks typically begin to breed in April to June and will aggressively defend their nest (CDFW 2005a). Water is a crucial component of northern goshawks' territory, with a water source typically nearby; in particular, northern goshawks will typically construct nests in a dense part of their forested habitat, yet in an area near an opening in the forest and near water (CDFW 2005a). Habitat loss and degradation are the primary threats to the species (Shuford and Gardali 2008).

CNDDDB records indicate that a northern goshawk was observed 13 miles southwest of the Study Area. However, northern goshawks rely on mature coniferous forests for their habitat and are sensitive to human disturbance. Therefore, severe fire impacts that occurred in the Study Area preclude northern goshawk habitation of the site. Nevertheless, as part of environmental mitigations, the Project area will be subject to a nesting bird survey prior to vegetation removal, eliminating any possible harm to northern goshawks. Therefore, impacts to northern goshawks would be less than significant.

#### **Northern Spotted Owl:**

Northern spotted owls are birds of prey which require old-growth coniferous forests for nesting and roosting (USFWS 2011). Specific habitat requirements include stand complexity, including a multilayered, multispecies canopy with high canopy closure, including decadent trees, snags, broken-topped trees, and cavities for nesting (USFWS 2011). Northern spotted owls feed on rodents; woodrats are a primary food source (USFWS 2011).

Northern spotted owls typically begin their breeding season in late February with the prelaying stage, with the female spending most of her time in the selected nest cavity (USFWS 2012). Copulation and nesting lasts for approximately six days, followed by an approximate 30-day incubation period, where the female will only leave the eggs for 10 to 20 minutes (USFWS 2012). Upon hatching, spotted owl nestlings spend approximately 35 days as nestlings, temporarily exiting the nest to perch on nearby limbs (USFWS 2012). Fledglings spend 80 – 120 days (until mid to late September) out of the nest but still dependent on their parents for food (USFWS 2012).

Northern spotted owls are primarily threatened by loss of old-growth habitat due to logging and catastrophic wildfire (USFWS 2011); however, the introduction of the barred owl (*Strix varia*) to historic Northern spotted owl habitat has created an additional threat, as barred owls will outcompete, harm, and even hybridize with spotted owls (USFWS 2011).



In the Northern California Klamath region, northern spotted owls typically occupy home ranges with a 1.3-mile radius (USFWS 2012). Disturbances, noise impacts, and/or vegetation removal within this home range of a known spotted owl activity center would be considered significant impacts to the species. Additionally, Northern Spotted Owl critical habitat (US Forest Service ownership) abuts the quarry area to the north.

According to CNDDDB records, the nearest spotted owl observation from the project area is approximately 1.7 miles away, which places the project area outside of any northern spotted owl home range. Additionally, the high-severity burn that moved through the Study Area and the nearby critical habitat make the area unsuitable for spotted owl nesting, roosting, or foraging. Northern spotted owls have minimal potential to occur in the project area, and thus would not be impacted by the project. As quarrying will not occur on public land, critical habitat will also be unaffected by the project.

#### **Pacific Tailed Frog:**

The Pacific tailed frog (also known as the coastal tailed frog) is a frog found from the northern California coast to as far inland as eastern Siskiyou County (CDFW 2013). The Pacific tailed frog is found in permanent streams, which is crucial to the species' reproductive methods. Mating occurs underwater, and eggs are attached to the underside of submerged rocks (CDFW 2000c). Tadpoles require 2 to 3 years to metamorphose into adults, so only permanent streams are capable of supporting the species. Therefore, although CNDDDB records place Pacific tailed frogs as close as eight miles away from the Study Area, the species has no potential to occur in the Study Area, which lacks streams. Therefore, no impacts would occur to Pacific tailed frogs.

#### **Salamanders:**

Two species of terrestrial salamanders, Del Norte salamander (*Plethodon elongatus*, CA Watchlist) and Siskiyou Mountains salamander (*Plethodon stormi*, CA Threatened), have been recorded within one mile of the Study Area, according to CNDDDB records. Both salamander species are part of the closely-related *Plethodon elongatus* species complex, a trio of recently-diverged taxa which also includes the Scott Bar salamander (*Plethodon asupak*). These terrestrial salamanders typically occur in "old-growth with rocky soils containing fractured rock outcrops or stable talus" (USFWS 2018c). Wildfire is noted as a primary threat to the species complex, as the removal of old-growth forest conditions can cause the dessication of soil which previously provided suitable moisture levels for these salamanders (USFWS 2018c). Therefore, similar to the northern spotted owl, the Study Area likely provided suitable habitat for these salamanders prior to the recent severe, stand-replacing fire. Given the current, post-fire conditions, these salamanders have no

potential to occur within the study area, and no impacts to the Del Norte salamander or Siskiyou Mountains salamander would occur.

A third salamander species, the southern torrent salamander (*Rhyacotriton variegatus*, CA Species of Special Concern) relies on cold, well-shaded permanent streams and spring seepages (CDFW 2005b). As there are no permanent springs or streams mapped or observed in the Study Area, southern torrent salamanders have no potential to occur in the Study Area, and no impacts to southern torrent salamanders would occur.

### **Yellow-billed Cuckoo:**

Yellow-billed cuckoos are insectivorous birds that generally breed in large blocks of riparian habitat; in particular, cottonwood and willow trees are an important habitat component for yellow-billed cuckoos (USFWS 2014). In the Western United States, yellow-billed cuckoos tend to be restricted to the larger rivers which cut through more arid environments, such as the Sacramento River (Cornell 2022b).

Large caterpillars are a main food source for yellow-billed cuckoos (Cornell 2022b). In the arid west, cuckoos will forage in cottonwoods, but will build stick nests on horizontal branches in willow trees near their cottonwood foraging sites (Cornell 2022b).

The USFWS IPaC report for the Project identified the yellow-billed cuckoo (*Coccyzus americanus*, U.S. Threatened) as potentially occurring in the Project area. However, no riparian elements nor cottonwoods occur in the Study Area, though Indian Creek is south of the Study Area. Nevertheless, the nesting bird survey conducted prior to project construction would eliminate the possibility of impacts to yellow-billed cuckoos, if present. Therefore, impacts to yellow-billed cuckoos would not be significant.

### **Non-status Wildlife:**

CNDDDB records identified nine non-status animals as potentially occurring in the area: hooded lancetooth (*Ancotrema voyanum*), great blue heron (*Ardea herodias*), obscure bumblebee (*Bombus caliginosus*), western ridged mussel (*Gonidea angulata*), highcap lanx (*Lanx alta*), silver-haired bat (*Lasionycteris noctivagans*), hoary bat (*Lasiurus cinereus*), western pearlshell (*Margaritifera falcata*), and Klamath tailedropper (*Prophysaon* sp. 1). Though no specific actions are proposed for non-status species, great blue herons would be identified and protected if encountered during a nesting bird survey. Aquatic species would likewise be protected from best management practices for erosion and sedimentation. Additionally, none of these species were observed during field surveys.



## WETLANDS AND STREAMS

The NWI wetland mapper identified an 0.57-acre Riverine habitat classified as R4SBC (Riverine, Intermittent, Streambed, Seasonally Flooded) as occurring within the Study Area. The mapped feature purportedly runs across the western side of the materials stockpile area from the northeast to the southwest. However, the feature was not observed during the biological surveys, and appears to be nonexistent. The feature was mapped from aerial imagery captured in 1975 at a 1:80,000 scale; therefore, it appears the feature is an imprecision of the wetland mapping effort, and not a real feature.

As mentioned previously, Indian Creek runs to the west and south of the materials stockpile area. The NWI wetland mapper identifies Indian Creek as R3USC (Riverine, Upper Perennial, Unconsolidated Shore, Seasonally Flooded). Though Indian Creek is not within the quarrying area or materials stockpile area, BMPs for erosion and sedimentation for quarrying and stockpiling operations should be implemented to prevent impacts to Indian Creek. The existing BMPs for the materials stockpile area should also be maintained.

## SOILS & LOCAL GEOMORPHOLOGY

According to the Natural Resources Conservation Service Web Soil Survey (NRCS 2024), three soil types were identified in the Study Area:

- Clallam, deep-Deadwood families association, 50 to 90 percent slopes (112)
- Clallam family, very deep-River wash association, 0 to 15 percent slopes (115)
- Deadwood-Clallam, deep families association, 50 to 90 percent slopes (118)

The soil units are composed of residuum weathered from metamorphic rock, as well as sandy and gravelly alluvium.

## SUMMARY & CONCLUSIONS

### Wildlife

Protection measures for surveyed species are summarized below:

Species	Preemptive Action	Protection Trigger	Follow-up Action
Nesting Bird or Raptor	Nesting Bird Survey prior to vegetation removal or noise disturbance in	Nest Site	CDFW Consultation

Waddell Rock Pit  
Expansion Project  
Biological Resources Assessment

	quarry expansion area		
Monarch butterfly	Examine Milkweed ( <i>Asclepias sp.</i> ) for chrysalis prior to removal	Discovery of Monarch butterfly, caterpillar, or chrysalis	USFWS Consultation; no milkweed removal until monarch use of milkweed is complete.
Sensitive Fish & Essential Fish Habitat	Best management practices for erosion and sedimentation.	N/A	N/A

With the implementation of the above protection measures, sensitive species potentially occurring on the Project area would not be significantly impacted.

### Plants

No special-status species were observed during the botanical surveys. Therefore, no protection measures are required.

### Wetlands

Surveys confirmed that no wetlands occur within the Project boundaries. However, Indian Creek flows near to the materials stockpile area, and BMPs for erosion/sedimentation should be implemented to prevent impacts to Indian Creek.

## REGULATORY FRAMEWORK

### FEDERAL ENDANGERED SPECIES ACT

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over federally listed threatened and endangered species under the federal Endangered Species Act (FESA). The ESA protects plants and animals that are listed as endangered or threatened by USFWS and the National Marine Fisheries Service (NMFS). Section 9 of ESA prohibits, without authorization, the taking of listed wildlife, where take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” [50 Code of Federal Regulations (CFR) 17.3]. For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant under federal jurisdiction and removing, cutting, digging up, damaging, or destroying any listed plant in any other area in knowing violation of state law [16 U.S. Code (USC) 1538].

Under Section 7 of ESA, federal agencies are required to consult with USFWS and/or NMFS if their actions, including permit approvals and funding, could

adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion (BO), USFWS and NMFS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of ESA provides for the issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

## CALIFORNIA ENDANGERED SPECIES ACT

The California Endangered Species Act (CESA) protects any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. Species identified as candidates for listing may also receive protection. Section 2080 of the California ESA prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit. Take is defined in Section 86 of the California Fish and Game Code as “hunt, pursue, catch,

capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The California ESA allows for incidental to otherwise lawful projects under permits issued by CDFW.

## CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 15380(b) of the California Environmental Quality Act (CEQA) Guidelines provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria include definitions like definitions used in ESA, the California ESA, and NPPA. Section 15380 was included in the CEQA Guidelines primarily to address situations in which a project under review may have a significant effect on

a species that has not been listed under ESA, the California ESA, or NPPA, but that may meet the definition of endangered, rare, or threatened. Animal species identified as species of special concern (SSC) by CDFW, and plants identified by the CNPS as rare, threatened, or endangered may meet the CEQA definition of rare or endangered.

## CLEAN WATER ACT

Under Section 404 of the federal Clean Water Act, the U.S. Army Corps of Engineers (Corps) is responsible for regulating the discharge of fill material into

waters of the United States. Waters of the U.S. and their lateral limits are defined in 33 CFR Part 328.3 (a) and include streams that are tributary to navigable waters and their adjacent wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, may also be subject to Corps jurisdiction.

Projects involving activities that have no more than minimal individual and cumulative adverse environmental effects may meet the conditions of one of the Nationwide Permits already issued by USACE (Federal Register [FR] 82:1860, January 6, 2017). If impacts on wetlands could be substantial, an individual permit is required. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

## CALIFORNIA WATER QUALITY REGULATORY PROGRAMS

Pursuant to Section 401 of the federal Clean Water Act and the state's Porter-Cologne Act, projects that are regulated by the Corps must obtain water quality certification from the Regional Water Quality Control Board (RWQCB). These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of stormwater runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Stormwater Pollution Prevention Plan.

Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, with any region that could affect the water of the state" [Water Code 13260(a)]. Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" [Water Code 13050 (e)]. The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State, that are not regulated by USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of a Waste Discharge Requirements for these activities.

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## Appendix A

### CNDDDB Results



SNAME	CNAME	TAXONGROUP	FEDLIST	CALLIST	RPLANTRANK	CDFWSTATUS	
Accipiter gentilis	northern goshawk	Birds	None	None		SSC	
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None			
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None			
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None			
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None			
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None			
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None			
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None			
Ancotrema voyanum	hooded lancetooth	Mollusks	None	None			
Anemone multifida var. multifida	cut-leaf anemone	Dicots	None	None	2B.2		
Arabis aculeolata	Waldo rockcress	Dicots	None	None	2B.2		
Arabis mcdonaldiana	McDonald's rockcress	Dicots	Endangered	Endangered	1B.1		
Arabis mcdonaldiana	McDonald's rockcress	Dicots	Endangered	Endangered	1B.1		
Ardea herodias	great blue heron	Birds	None	None			
Ardea herodias	great blue heron	Birds	None	None			
Ardea herodias	great blue heron	Birds	None	None			
Ardea herodias	great blue heron	Birds	None	None			
Ardea herodias	great blue heron	Birds	None	None			
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3		
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3		
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3		
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3		
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3		
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3		
Asarum marmoratum	marbled wild-ginger	Dicots	None	None	2B.3		
Ascaphus truei	Pacific tailed frog	Amphibians	None	None		SSC	
Ascaphus truei	Pacific tailed frog	Amphibians	None	None		SSC	
Ascaphus truei	Pacific tailed frog	Amphibians	None	None		SSC	
Ascaphus truei	Pacific tailed frog	Amphibians	None	None		SSC	
Ascaphus truei	Pacific tailed frog	Amphibians	None	None		SSC	
Boechera koehleri	Koehler's stipitate rockcress	Dicots	None	None	1B.3		
Boechera koehleri	Koehler's stipitate rockcress	Dicots	None	None	1B.3		
Boechera koehleri	Koehler's stipitate rockcress	Dicots	None	None	1B.3		
Bombus caliginosus	obscure bumble bee	Insects	None	None			
Bombus occidentalis	western bumble bee	Insects	None	Candidate Endangered			
Bombus suckleyi	Suckley's cuckoo bumble bee	Insects	None	Candidate Endangered			
Buxbaumia viridis	green shield-moss	Bryophytes	None	None	2B.2		
Carex serpenticola	serpentine sedge	Monocots	None	None	2B.3		
Castilleja elata	Siskiyou paintbrush	Dicots	None	None	2B.2		
Castilleja elata	Siskiyou paintbrush	Dicots	None	None	2B.2		
Castilleja schizotricha	split-hair paintbrush	Dicots	None	None	1B.3		
Castilleja schizotricha	split-hair paintbrush	Dicots	None	None	1B.3		
Castilleja schizotricha	split-hair paintbrush	Dicots	None	None	1B.3		
Castilleja schizotricha	split-hair paintbrush	Dicots	None	None	1B.3		
Castilleja schizotricha	split-hair paintbrush	Dicots	None	None	1B.3		

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Cornus unalaschensis	bunchberry	Dicots	None	None	2B.2		
Darlingtonia Seep	Darlingtonia Seep	Marsh	None	None			
Darlingtonia Seep	Darlingtonia Seep	Marsh	None	None			
Draba carnosula	Mt. Eddy draba	Dicots	None	None	1B.3		
Entosphenus similis	Klamath River lamprey	Fish	None	None		SSC	
Entosphenus similis	Klamath River lamprey	Fish	None	None		SSC	
Entosphenus similis	Klamath River lamprey	Fish	None	None		SSC	
Entosphenus similis	Klamath River lamprey	Fish	None	None		SSC	
Epilobium luteum	yellow willowherb	Dicots	None	None	2B.3		
Epilobium oreganum	Oregon fireweed	Dicots	None	None	1B.2		
Epilobium siskiyouense	Siskiyou fireweed	Dicots	None	None	1B.3		
Epilobium siskiyouense	Siskiyou fireweed	Dicots	None	None	1B.3		
Epilobium siskiyouense	Siskiyou fireweed	Dicots	None	None	1B.3		
Erigeron bloomeri var. nudatus	Waldo daisy	Dicots	None	None	2B.3		
Erigeron bloomeri var. nudatus	Waldo daisy	Dicots	None	None	2B.3		
Erigeron bloomeri var. nudatus	Waldo daisy	Dicots	None	None	2B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Eriogonum hirtellum	Klamath Mountain buckwheat	Dicots	None	None	1B.3		
Erythronium hendersonii	Henderson's fawn lily	Monocots	None	None	2B.3		
Erythronium howellii	Howell's fawn lily	Monocots	None	None	1B.3		
Falco peregrinus anatum	American peregrine falcon	Birds	Delisted	Delisted		FP	
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			

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Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gonidea angulata	western ridged mussel	Mollusks	None	None			
Gulo gulo	wolverine	Mammals	Proposed Threatened	Threatened		FP	
Gulo gulo	wolverine	Mammals	Proposed Threatened	Threatened		FP	
Haliaeetus leucocephalus	bald eagle	Birds	Delisted	Endangered		FP	
Iliamna latibracteata	California globe mallow	Dicots	None	None	1B.2		
Juncus regelii	Regel's rush	Monocots	None	None	2B.3		
Lanx alta	highcap lanx	Mollusks	None	None			
Lasionycteris noctivagans	silver-haired bat	Mammals	None	None			
Lasionycteris noctivagans	silver-haired bat	Mammals	None	None			
Lasiurus cinereus	hoary bat	Mammals	None	None			
Lewisia cotyledon var. heckneri	Heckner's lewisia	Dicots	None	None	1B.2		
Lewisia cotyledon var. heckneri	Heckner's lewisia	Dicots	None	None	1B.2		
Lomatium martindalei	Coast Range lomatium	Dicots	None	None	2B.3		
Margaritifera falcata	western pearlshell	Mollusks	None	None			
Margaritifera falcata	western pearlshell	Mollusks	None	None			
Margaritifera falcata	western pearlshell	Mollusks	None	None			
Margaritifera falcata	western pearlshell	Mollusks	None	None			
Margaritifera falcata	western pearlshell	Mollusks	None	None			
Mertensia bella	Oregon bluebells	Dicots	None	None	2B.2		
Mertensia bella	Oregon bluebells	Dicots	None	None	2B.2		
Mitellastra caulescens	leafy-stemmed mitrewort	Dicots	None	None	4.2		
Monotropa uniflora	ghost-pipe	Dicots	None	None	2B.2		
Oncorhynchus clarkii clarkii	coast cutthroat trout	Fish	None	None		SSC	
Phacelia leonis	Siskiyou phacelia	Dicots	None	None	1B.3		
Phacelia leonis	Siskiyou phacelia	Dicots	None	None	1B.3		
Phacelia leonis	Siskiyou phacelia	Dicots	None	None	1B.3		
Phacelia leonis	Siskiyou phacelia	Dicots	None	None	1B.3		
Pinguicula macroceras	horned butterwort	Dicots	None	None	2B.2		
Pinguicula macroceras	horned butterwort	Dicots	None	None	2B.2		
Pinguicula macroceras	horned butterwort	Dicots	None	None	2B.2		
Piperia candida	white-flowered rein orchid	Monocots	None	None	1B.2		
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	
Plethodon elongatus	Del Norte salamander	Amphibians	None	None		WL	

## EXHIBIT B

[illegible]

## EXHIBIT B

Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Ptilidium californicum	Pacific fuzzwort	Bryophytes	None	None	4.3		
Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	Amphibians	None	None		SSC	
Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	Amphibians	None	None		SSC	
Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	Amphibians	None	None		SSC	
Rhyacotriton variegatus	southern torrent salamander	Amphibians	None	None		SSC	
Rhyacotriton variegatus	southern torrent salamander	Amphibians	None	None		SSC	
Rhyacotriton variegatus	southern torrent salamander	Amphibians	None	None		SSC	
Rosa gymnocarpa var. serpentina	Gasquet rose	Dicots	None	None	1B.3		
Rubus nivalis	snow dwarf bramble	Dicots	None	None	2B.3		
Rubus nivalis	snow dwarf bramble	Dicots	None	None	2B.3		
Sedum divergens	Cascade stonecrop	Dicots	None	None	2B.3		
Sedum divergens	Cascade stonecrop	Dicots	None	None	2B.3		
Silene hookeri	Hooker's catchfly	Dicots	None	None	2B.2		
Thermopsis robusta	robust false lupine	Dicots	None	None	1B.2		
Thermopsis robusta	robust false lupine	Dicots	None	None	1B.2		
Thermopsis robusta	robust false lupine	Dicots	None	None	1B.2		
Thermopsis robusta	robust false lupine	Dicots	None	None	1B.2		
Thermopsis robusta	robust false lupine	Dicots	None	None	1B.2		

## EXHIBIT B

## Appendix B

### CNPS- RPI



ScientificName	CommonName	CRPR	CESA	FESA	BloomingPeriod	ElevationLow_ft	ElevationHigh_ft
Galium oreganum	Oregon bedstraw	3	None	None	May-Sep	4920	4920
Sidalcea celata	Redding checkerbloom	3	None	None	Apr-Aug	445	5005
Lewisia cotyledon var. howellii	Howell's lewisia	3.2	None	None	Apr-Jul	490	6595
Iris bracteata	Siskiyou iris	3.3	None	None	May-Jun	590	3510
Sidalcea elegans	Del Norte checkerbloom	3.3	None	None	May-Jul	705	4480
Carex geyeri	Geyer's sedge	4.2	None	None	May-Aug	3790	7200
Cypripedium californicum	California lady's-slipper	4.2	None	None	Apr-Aug(Sep)	100	9025
Cypripedium fasciculatum	clustered lady's-slipper	4.2	None	None	Mar-Aug	330	7990
Cypripedium montanum	mountain lady's-slipper	4.2	None	None	Mar-Aug	605	7300
Darlingtonia californica	California pitcherplant	4.2	None	None	Apr-Aug	0	8480
Dicentra formosa ssp. oregana	Oregon bleeding heart	4.2	None	None	Apr-May	1395	4870
Fritillaria glauca	Siskiyou fritillaria	4.2	None	None	(Apr-May)Jun-Jul	5695	8005
Hesperocyparis bakeri	Baker cypress	4.2	None	None		2690	6545
Lilium bolanderi	Bolander's lily	4.2	None	None	Jun-Jul	100	5250
Lilium rubescens	redwood lily	4.2	None	None	(Mar)Apr-Aug(Sep)	100	6265
Mitellastris caulescens	leafy-stemmed mitrewort	4.2	None	None	(Mar)Apr-Oct	15	5580
Pleuropogon refractus	nodding semaphore grass	4.2	None	None	(Feb-Mar)Apr-Aug	0	5250
Allium siskiyouense	Siskiyou onion	4.3	None	None	(Apr)May-Jul	2805	8205
Antennaria suffrutescens	evergreen everlasting	4.3	None	None	Jan-Jul	1640	5250
Arabis modesta	modest rockcress	4.3	None	None	Mar-Jul	395	2625
Arnica cernua	serpentine arnica	4.3	None	None	Apr-Jul	1640	6300
Arnica spathulata	Klamath arnica	4.3	None	None	May-Aug	2100	5905
Arnica viscosa	Mt. Shasta arnica	4.3	None	None	Aug-Sep	5595	9005
Callitropsis nootkatensis	Alaska cedar	4.3	None	None		2135	8205
Cardamine bellidifolia var. pachyphylla	fleshy toothwort	4.3	None	None	Jun-Aug	6235	9300
Carex scabriuscula	Siskiyou sedge	4.3	None	None	May-Jul	2330	7695
Doellingeria glabrata	Siskiyou aster	4.3	None	None	Jun-Sep	395	8875
Draba howellii	Howell's draba	4.3	None	None	Jun-Jul	4495	9845
Epilobium rigidum	Siskiyou Mountains willowherb	4.3	None	None	Jul-Aug	490	3935
Erigeron cervinus	Siskiyou daisy	4.3	None	None	Jun-Aug	80	6235
Eriogonum congdonii	Congdon's buckwheat	4.3	None	None	(May)Jun-Aug(Sep)	2625	7695
Eriogonum ternatum	ternate buckwheat	4.3	None	None	Jun-Aug	1000	7300
Iris thompsonii	Thompson's iris	4.3	None	None	(Mar-Apr)May-Jun(Jul-Aug)	295	1970
Lathyrus delnorticus	Del Norte pea	4.3	None	None	Jun-Jul	100	4755
Lilium pardalinum ssp. wigginsii	Wiggins' lily	4.3	None	None	Jun-Aug	1590	6560
Pedicularis howellii	Howell's lousewort	4.3	None	None	Jun-Aug	4920	6235
Ptilidium californicum	Pacific fuzzwort	4.3	None	None	May-Aug	3740	5905
Ribes marshallii	Marshall's gooseberry	4.3	None	None	Jun-Jul	3935	6890
Sedum laxum ssp. heckneri	Heckner's stonecrop	4.3	None	None	Jun-Jul	330	6890
Trifolium howellii	Howell's clover	4.3	None	None	Jun-Aug	2625	5905
Veratrum insolitum	Siskiyou false-hellebore	4.3	None	None	Jun-Aug	150	5365
Arabis mcdonaldiana	McDonald's rockcress	1B.1	CE	FE	May-Jul	445	5905
Epilobium oreganum	Oregon fireweed	1B.2	None	None	Jun-Sep	1640	7350
Iliamna latibracteata	California globe mallow	1B.2	None	None	Jun-Aug	195	6560
Lewisia cotyledon var. heckneri	Heckner's lewisia	1B.2	None	None	(Apr)May-Jul	740	6890

## EXHIBIT B



Piperia candida	white-flowered rein orchid	1B.2	None	None	(Mar-Apr)May-Sep	100	4300
Thermopsis robusta	robust false lupine	1B.2	None	None	May-Jul	490	4920
Boechera koehleri	Koehler's stipitate rockcress	1B.3	None	None	(Mar)Apr-Jul	510	5445
Castilleja schizotricha	split-hair paintbrush	1B.3	None	None	Jul-Aug	4920	7545
Draba carnosula	Mt. Eddy draba	1B.3	None	None	Jul-Aug	6350	9845
Epilobium siskiyouense	Siskiyou fireweed	1B.3	None	None	Jul-Sep	5580	8205
Eriogonum hirtellum	Klamath Mountain buckwheat	1B.3	None	None	Jul-Sep	2000	6235
Erythronium howellii	Howell's fawn lily	1B.3	None	None	Apr-May	655	3755
Phacelia leonis	Siskiyou phacelia	1B.3	None	None	Jun-Aug	3935	6560
Rosa gymnocarpa var. serpentina	Gasquet rose	1B.3	None	None	Apr-Jun(Aug)	1310	5660
Anemone multifida var. multifida	cut-leaf anemone	2B.2	None	None	Apr-Jul	5580	9025
Arabis aculeolata	Waldo rockcress	2B.2	None	None	Apr-Jun	1345	5905
Buxbaumia viridis	green shield-moss	2B.2	None	None		3200	7220
Castilleja elata	Siskiyou paintbrush	2B.2	None	None	May-Aug	0	5740
Cornus unalaschensis	bunchberry	2B.2	None	None	May-Jul	195	6300
Mertensia bella	Oregon bluebells	2B.2	None	None	May-Jul	4920	6560
Monotropa uniflora	ghost-pipe	2B.2	None	None	Jun-Aug(Sep)	35	1805
Pinguicula macroceras	horned butterwort	2B.2	None	None	Apr-Jun	130	6300
Silene hookeri	Hooker's catchfly	2B.2	None	None	(Mar)May-Jul	490	4135
Asarum marmoratum	marbled wild-ginger	2B.3	None	None	Apr-Aug	655	5905
Carex serpenticola	serpentine sedge	2B.3	None	None	Mar-May	195	3935
Epilobium luteum	yellow willowherb	2B.3	None	None	Jul-Sep	4920	7200
Erigeron bloomeri var. nudatus	Waldo daisy	2B.3	None	None	Jun-Jul	1970	7545
Erythronium hendersonii	Henderson's fawn lily	2B.3	None	None	Apr-Jul	985	5250
Juncus regelii	Regel's rush	2B.3	None	None	Aug	2495	6235
Lomatium martindalei	Coast Range lomatium	2B.3	None	None	May-Jun(Aug)	785	9845
Rubus nivalis	snow dwarf bramble	2B.3	None	None	Jun-Aug	3560	4430
Schoenoplectus subterminalis	water bulrush	2B.3	None	None	Jun-Aug(Sep)	2460	7380
Sedum divergens	Cascade stonecrop	2B.3	None	None	Jul-Sep	5250	7645

## EXHIBIT B

## Appendix C

U.S. Department of Interior  
List of threatened and endangered species





## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Yreka Fish And Wildlife Office

1829 South Oregon Street

Yreka, CA 96097-3446

Phone: (530) 842-5763 Fax: (530) 842-4517



In Reply Refer To:

Project Code: 2023-0098598

Project Name: Waddell Rock Pit Expansion

February 28, 2024

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

# OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Yreka Fish And Wildlife Office**

1829 South Oregon Street

Yreka, CA 96097-3446

(530) 842-5763

## PROJECT SUMMARY

Project Code: 2023-0098598

Project Name: Waddell Rock Pit Expansion

Project Type: Surface Extraction - Non Energy Materials

Project Description: Expansion of the Waddell Rock Pit, near Happy Camp, California. The new area will expand the rock quarry to roughly 17 acres, with newly quarried areas adjacent to the current quarry. Approval is being sought so that work can begin later this year (2023).

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.88441855,-123.43058040459852,14z>



Counties: Siskiyou County, California

## ENDANGERED SPECIES ACT SPECIES

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

NAME	STATUS
Gray Wolf <i>Canis lupus</i> Population: U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, IA, IN, IL, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NV, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, and WV; and portions of AZ, NM, OR, UT, and WA. Mexico. There is <b>final</b> critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4488">https://ecos.fws.gov/ecp/species/4488</a>	Endangered
North American Wolverine <i>Gulo gulo luscus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5123">https://ecos.fws.gov/ecp/species/5123</a>	Threatened
Pacific Marten, Coastal Distinct Population Segment <i>Martes caurina</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9081">https://ecos.fws.gov/ecp/species/9081</a>	Threatened

## BIRDS

NAME	STATUS
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4467">https://ecos.fws.gov/ecp/species/4467</a>	Threatened
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1123">https://ecos.fws.gov/ecp/species/1123</a>	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

## INSECTS

NAME	STATUS
Franklin's Bumble Bee <i>Bombus franklini</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7022">https://ecos.fws.gov/ecp/species/7022</a>	Endangered
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8246">https://ecos.fws.gov/ecp/species/8246</a>	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/498">https://ecos.fws.gov/ecp/species/498</a>	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2246">https://ecos.fws.gov/ecp/species/2246</a>	Endangered

## CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Northern Spotted Owl <i>Strix occidentalis caurina</i> <a href="https://ecos.fws.gov/ecp/species/1123#crithab">https://ecos.fws.gov/ecp/species/1123#crithab</a>	Final



## **IPAC USER CONTACT INFORMATION**

Agency: GeoServ  
Name: Jake Ewald  
Address: PO Box 831  
City: Mount Shasta  
State: CA  
Zip: 96067  
Email: je@geoscienceserv.com  
Phone: 5304088492

Appendix B  
**Slope Stability Analysis**



November 23, 2022

GeoServ, Inc. Job No. 210126

Attention: Jim Hayes

Subject: Waddell Rock Quarry Slope Stability Analysis Report

Dear Jim,

In accordance with your request and authorization of GeoServ, Inc. has completed a slope stability at Waddell Rock Quarry. The attached report contains the results of our site investigation and engineering geologic evaluation of the slope stability elements of the project site.

Based on GeoServ Inc's subsurface investigations and our geotechnical and engineering evaluation, the project is considered feasible from a geotechnical standpoint provided the recommendations contained in the attached report are incorporated into the project design and construction. If you have any questions regarding our findings or recommendations, please do not hesitate to contact this office. The opportunity to be of service is appreciated.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "James Fitzgerald", is located below the "Respectfully submitted," text.

James Fitzgerald, CEG (2436)  
GeoServ, Inc.



# Waddell Rock Quarry Slope Stability Analysis Report

Prepared for: Jim Hayes

Prepared by: GeoServ, Inc. (GSI)

Revision A review draft date: 11/23/2022



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    Slope Stability Model Methods ..... 2

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    Slope Stability..... 3

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Attachment A: Slope Stability Figures

## Introduction

This slope stability report documents the Waddell Rock Quarry slope stability analysis methods, data results, and slope stability analysis results. This analysis mapped and drafted lithotopo units using the site investigation data, anecdotal information, and historical photographs. The slope stability analysis results were used to evaluate the proposed slope geometry during and after mining operations. Professional judgement and model results were used to estimate and interpolate subsurface material types. To represent the different types of the rock slope, 2-D sections were cut and used to model slope stability for the proposed conditions conditions (Sheets 1 to 4 and Attachment A).

## Methods

### Site Investigation Data Collection Methods

A site investigation was completed to obtain information on the engineering properties of the rock, soil, groundwater, and to inform the designs and construction techniques for the rock quarry. The engineering properties of the project area rocks and soils were assessed using industry standard methods (e.g., CDC 2001, Williamson 1984, and BOR 2001). The rocks and soils were classified and assessed following the most recent ASTM methods.

The site investigation was completed in September 2022. The bedrock mapping sites were located along the proposed quarry expansion area in safe accessible locations to characterize the spatial distribution of the terrane, rock, soil, and water conditions. This investigation process was intended to assess the spatial and temporal distribution of soil or rock near the ground surface.

The bedrock mapping occurred along the bedrock outcrops that are within the proposed quarry expansion area and were completed by GSI geologists. The accessible outcrops were classified using ASTM. Rock samples were collected for Specific Gravity and Point Load Testing to help characterize the rock density and strength.

### Slope Stability Model Methods

Slope stability model parameters were measured, calculated, or estimated using the available field data following standard methods. Slide 6.0 was used to model the temporary and permanent stability of the quarry face during mining. The 2-D slope stability analysis software is comprehensive for the level of design effort and performs finite element analysis. The quarry design was analyzed based on the proposed earthworks and the geometry of cut-slopes. The following methods were used to model slope stability:

Slide 2D limit equilibrium slope stability model to complete non-circular and circular failure analyses on existing and design rock cut and fill slopes to help define critical rock slope failure mechanisms and planes (Rocscience, Inc. 2002).

- Spencer (Blake et. al. 2002), Army Corp #1, and Army Corp#2 methods to predict non-circular and circular critical failure planes and fill slope FOS.
- Plane Failure method to analyze rock slope stability (Hoek and Bray 1981).

The following criteria were used for the temporary and permanent slope stability analyses.

- Static Factor of Safety (FOS) for temporary rock cut-slopes = 1.5.

The model assumes uniform rock and soil engineering properties for the dominant rock type to include:

- Paleozoic marine, undivided (Pz)

The model assumes that the modern cut-slopes and fill-slopes are pseudo-stable (i.e., FOS = 1.0) along the existing quarry face. It also assumes that the rock slopes are presently in a pseudo-stable condition (i.e., FOS = 1.0) other than shallow rock fall (i.e., <5' into slope face).

The rock slope models factored freeze-thaw failure mechanisms by assuming conservative fracture/joint discontinuity cohesion and angle of internal friction values (Table 1). It also assumed a value 33% for pore pressure for planar and rock topple failure models and that the groundwater level is lower than ground surface and fractures/joints in the rock are free draining.

## Site Investigation Results

### Bedrock Mapping

Accessible rock outcrops were mapped as part of the site investigation (Sheet 1). The results of the bedrock mapping are consistent with the Paleozoic marine, undivided (Pz) reported in the available geologic maps.

### Slope Stability

Based upon GSP's review of the published geologic maps, aerial photographs, ground topography data, site reconnaissance, and slope stability modeling, the project area appears to be quasi stable under static conditions. The project area topography is steep due to shallow and hard Paleozoic marine rock. No evidence of active or dormant landslide slip plain surfaces were observed as part of the site investigation and no springs or seeps were observed.

Slope stability modeling results indicate that the existing slopes have a FOS of 1 for static conditions. The design slopes have a FS greater than 1.5 under static conditions Attachment A). The site investigation results were used to estimate and interpolate subsurface material types. To represent the different types of slopes within the project area, 2-D sections were cut and used to model slope stability for existing and design conditions (Sheets 1 to 4 and Attachment A).

Modeling results for static rock slope stability conditions indicate that the proposed quarry geometry are stable with FS greater than the design criteria (Attachment A). Rock slope failure sensitivity analysis indicates that percent fill pore pressure, slope angle, and slope height and the top three limiting factors.

## References

Blake, T.F., Hollingsworth, R.A., and Stewart, J.P., eds (2002), Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Landslide Hazards in California, Organized through the American Society of Civil Engineers, Los Angeles Section (ASCE-LA) – SCEC, 110 pp.

California Department of Conservation (CDC), 1999. Factors Affecting Landslides in Forested Terrain. California Division of Mines and Geology, Note 50.

Cruden, D.M., and Varnes, D.J., 1996. Landslide types and processes. Pages 36-75 in A.K. Turner and R.L. Schuster, editors. Landslides Investigation and Mitigation. National Research Council Transportation Research Board Special Report 247, National Academy Press, Washington, DC.

Hoek and Bray, 1981. Rock Slope Engineering, 3rd edition, Chapman & Hall, London.

Rocscience, Inc., 2002. Slide 2D limit equilibrium slope stability for soil and rock slopes, User's Guide.

United States Army Corps of Engineers (ACOE), 2003. Engineering and Design: Slope Stability. Manual No. 1110-2-1902.

United States Bureau of Reclamation (BOR), 2001. Engineering Geology Field Manual, Second Edition, Volume I.





GEO SERV, INC.

2731 FRYERS WAY  
MOUNT SHASTA, CA 96067  
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FAX: (530) 926-8921

WADDELL ROCK PIT SLOPE  
STABILITY ANALYSIS

INDIAN CREEK RD,  
SISKIYOU COUNTY, CA

FOR REVIEW

SHEET NAME:

GRADING  
SLOPE STABILITY  
PLAN

REVISIONS:

PROJECT NO:

ISSUE DATE:  
11/23/2022

SCALE: AS NOTED

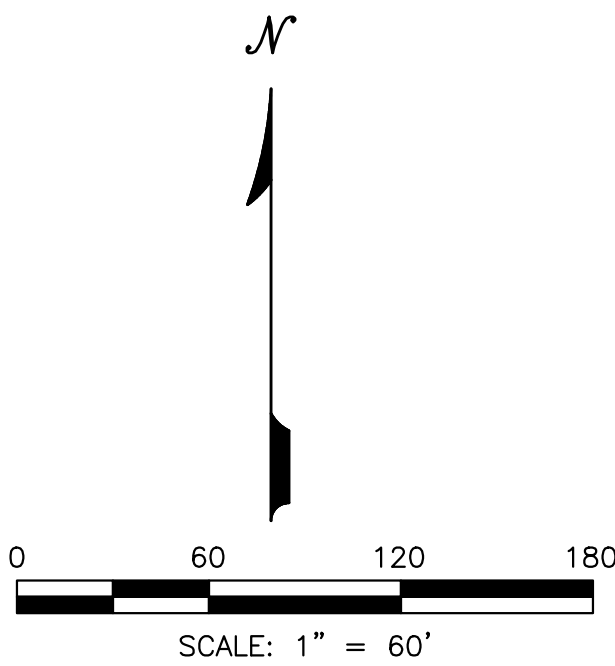
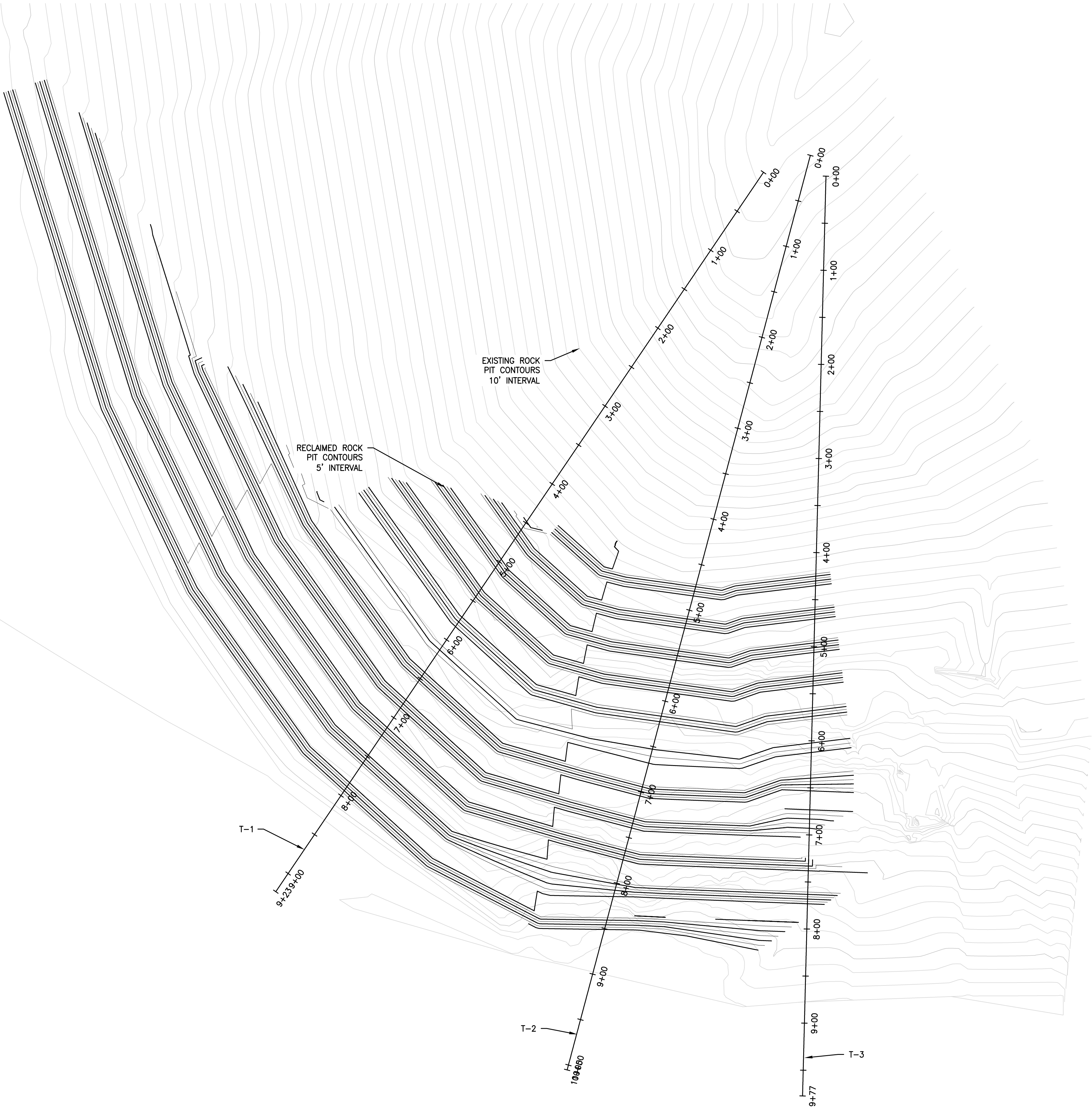
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KJF

ENGINEERED:  
JKF

CHECKED:  
JKF

FIGURE:

1





GEOSERV, INC.

2731 FRYERS WAY  
MOUNT SHASTA, CA 96067  
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WADDELL ROCK PIT SLOPE  
STABILITY ANALYSIS  
INDIAN CREEK RD,  
SISKIYOU COUNTY, CA

FOR REVIEW

SHEET NAME:

GRADING  
SLOPE STABILITY  
SECTION T-1

REVISIONS:

PROJECT NO:

ISSUE DATE:  
11/23/2022

SCALE: AS NOTED

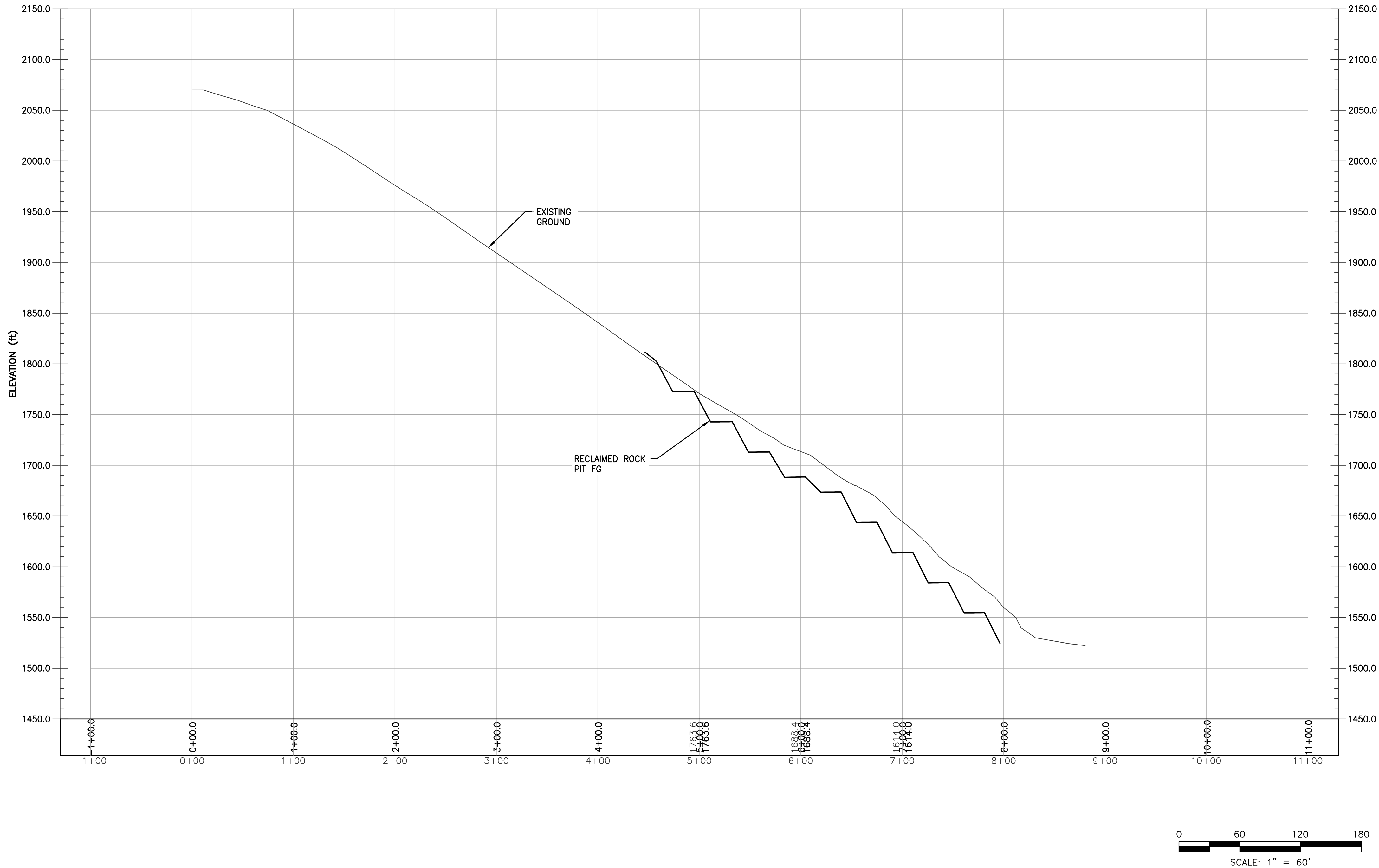
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ENGINEERED: JK F

CHECKED: JK F

FIGURE:

2





GEOSERV, INC.

2731 FRYERS WAY  
MOUNT SHASTA, CA 96067  
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WADDELL ROCK PIT SLOPE  
STABILITY ANALYSIS  
INDIAN CREEK RD,  
SISKIYOU COUNTY, CA

FOR REVIEW

SHEET NAME:

GRADING  
SLOPE STABILITY  
SECTION T-2

REVISIONS:

PROJECT NO:

ISSUE DATE:  
11/23/2022

SCALE: AS NOTED

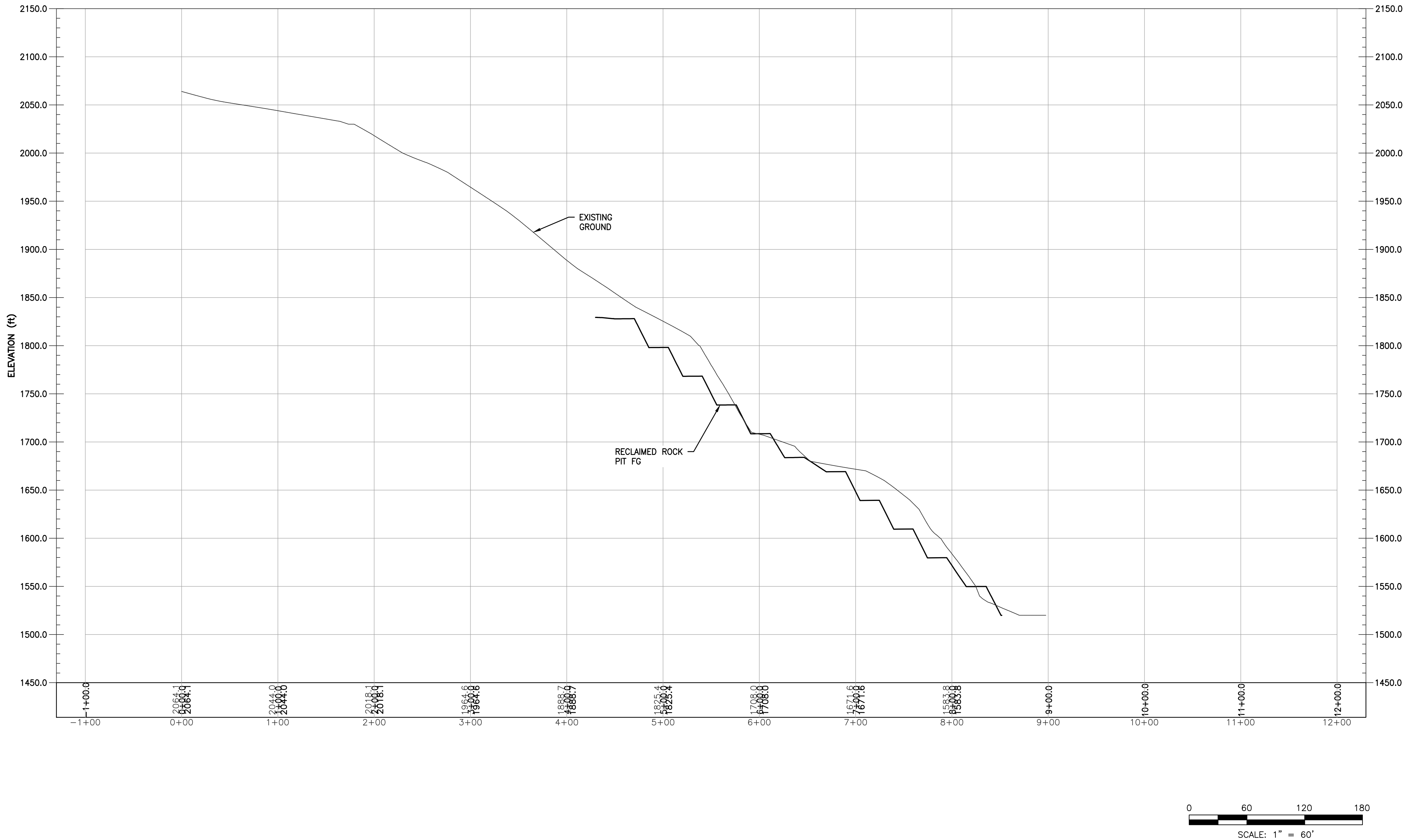
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KJF

ENGINEERED:  
JKF

CHECKED:  
JKF

FIGURE:

3





GEOSERV, INC.

2731 FRYERS WAY  
MOUNT SHASTA, CA 96067  
PH: (530) 227-8963  
FAX: (530) 926-8921

WADDELL ROCK PIT SLOPE  
STABILITY ANALYSIS  
INDIAN CREEK RD,  
SISKIYOU COUNTY, CA

FOR REVIEW

SHEET NAME:

GRADING  
SLOPE STABILITY  
SECTION T-3

REVISIONS:

PROJECT NO:

ISSUE DATE:  
11/23/2022

SCALE: AS NOTED

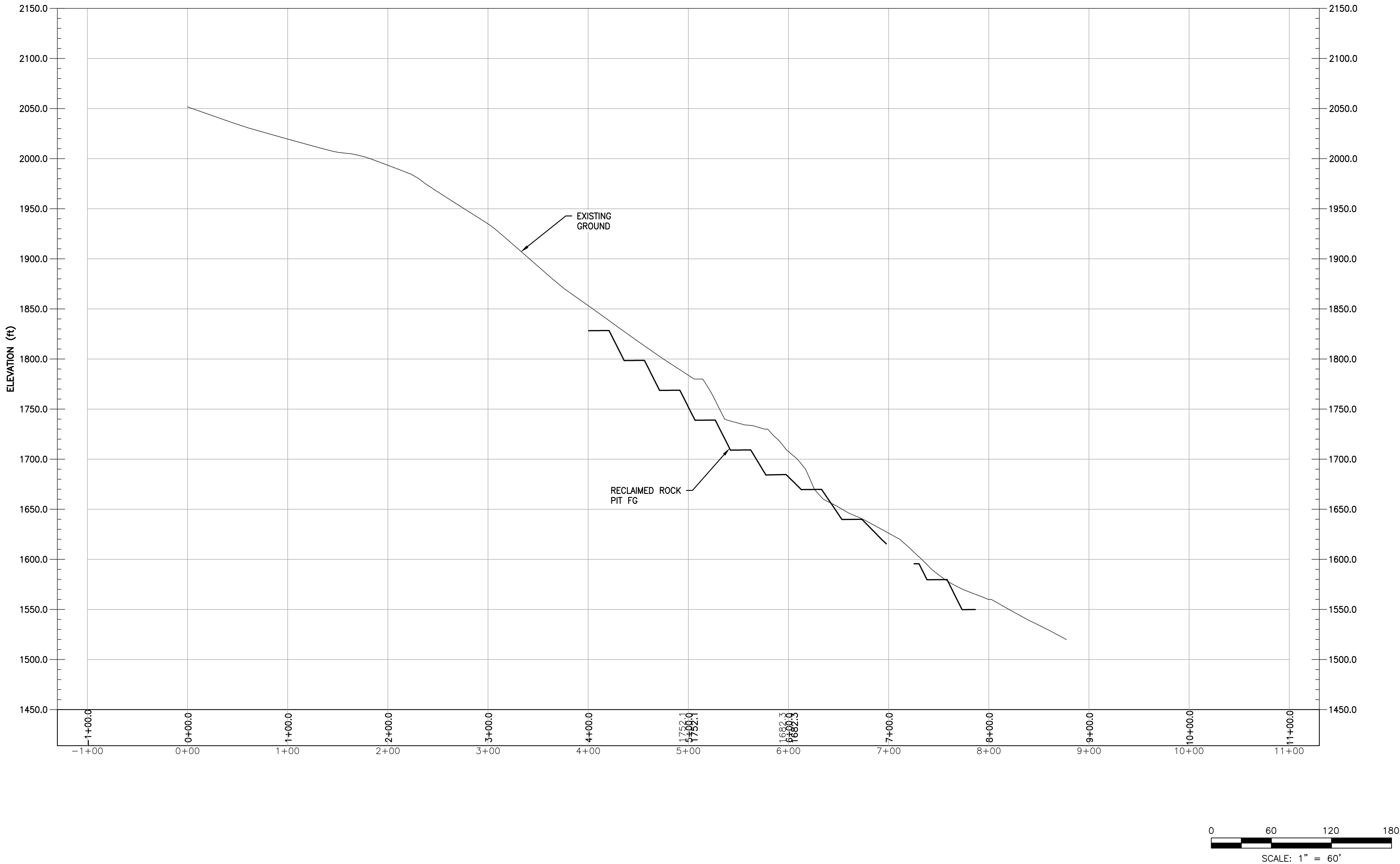
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ENGINEERED: JK F

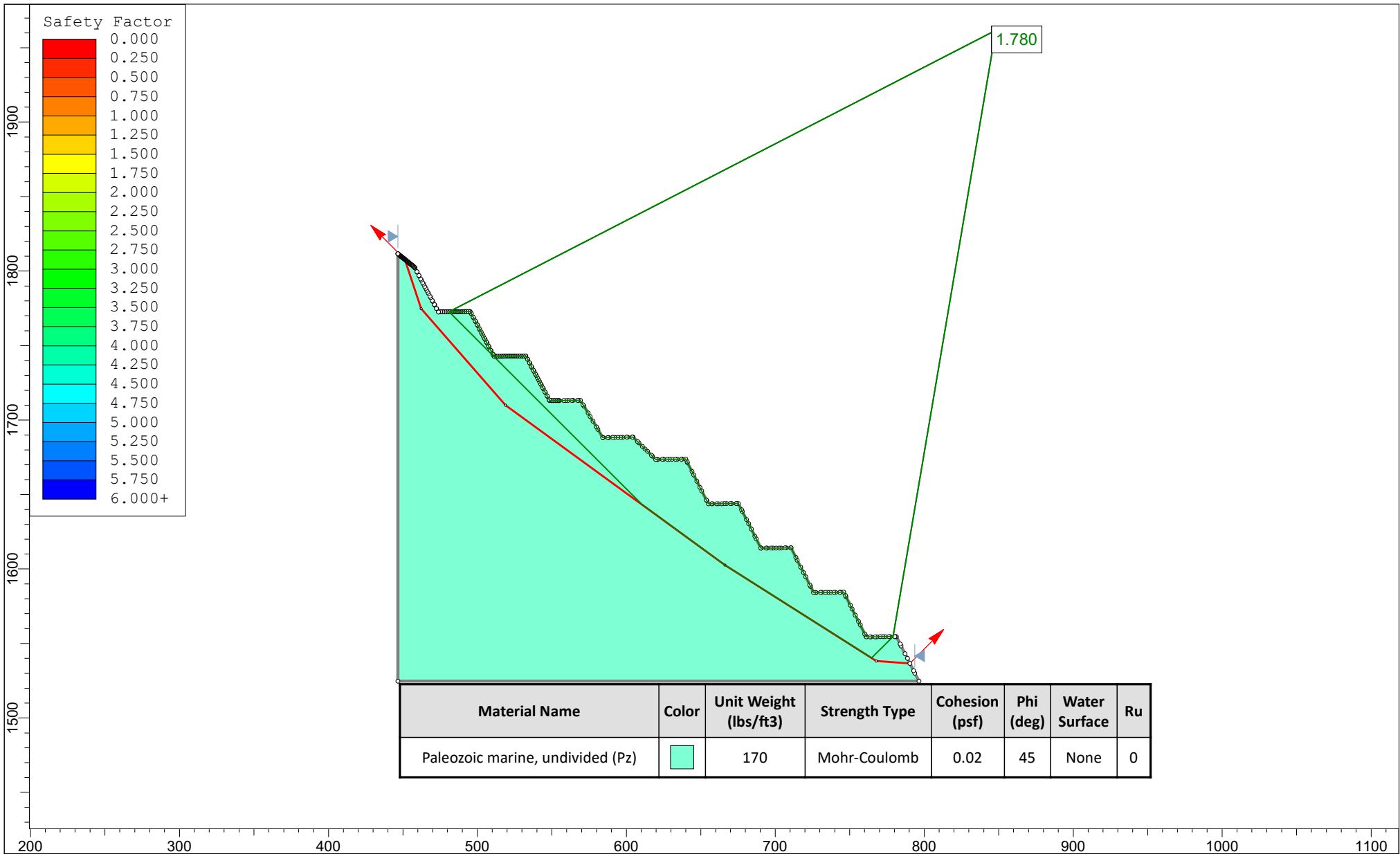
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FIGURE:

4



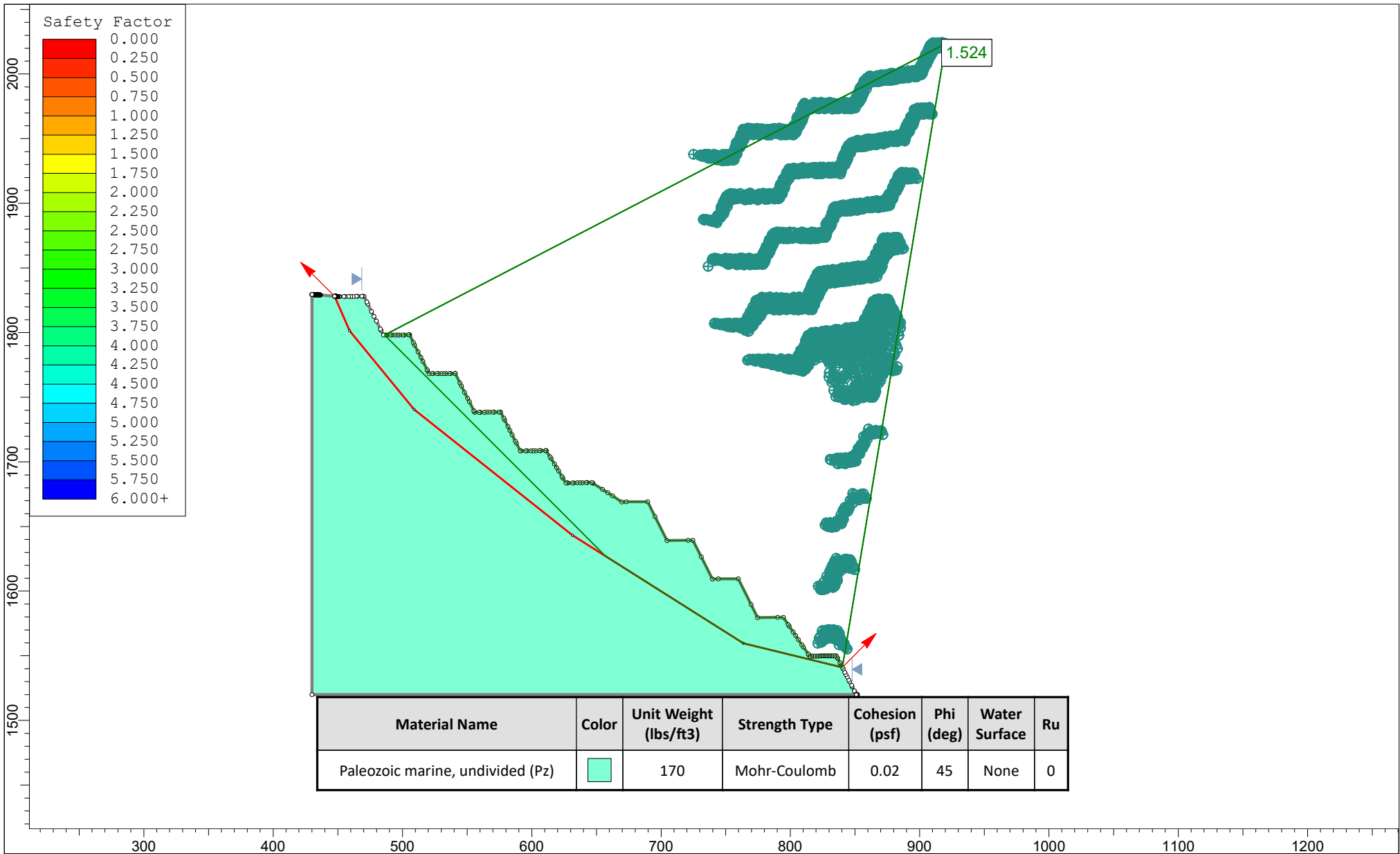
## **Attachment A**



Project		Waddell Rock Quarry T-1	
Analysis Description		Rock Block Analysis	
Drawn By	James Fitzgerald	Company	GSI
Date	11/20/2022	File Name	Waddell_Rx_Pit_Rx_Slope_Stab_T1.slim



\*\*\*\*\* Summary \*\*\*\*\*  
Slope Height = 287  
Slope Face Angle = 38  
Upper Slope Angle = 25  
Cohesion = 0  
Friction Angle = 40  
Discontinuity Angle = 27  
Unit Weight of Rock = 175  
Unit Weight of Water = 64  
Crest Location = 367.34  
Discontinuity Length = 3004.75  
Weight of Rock Block = 23385981.6  
  
Stability Factor = 1.647

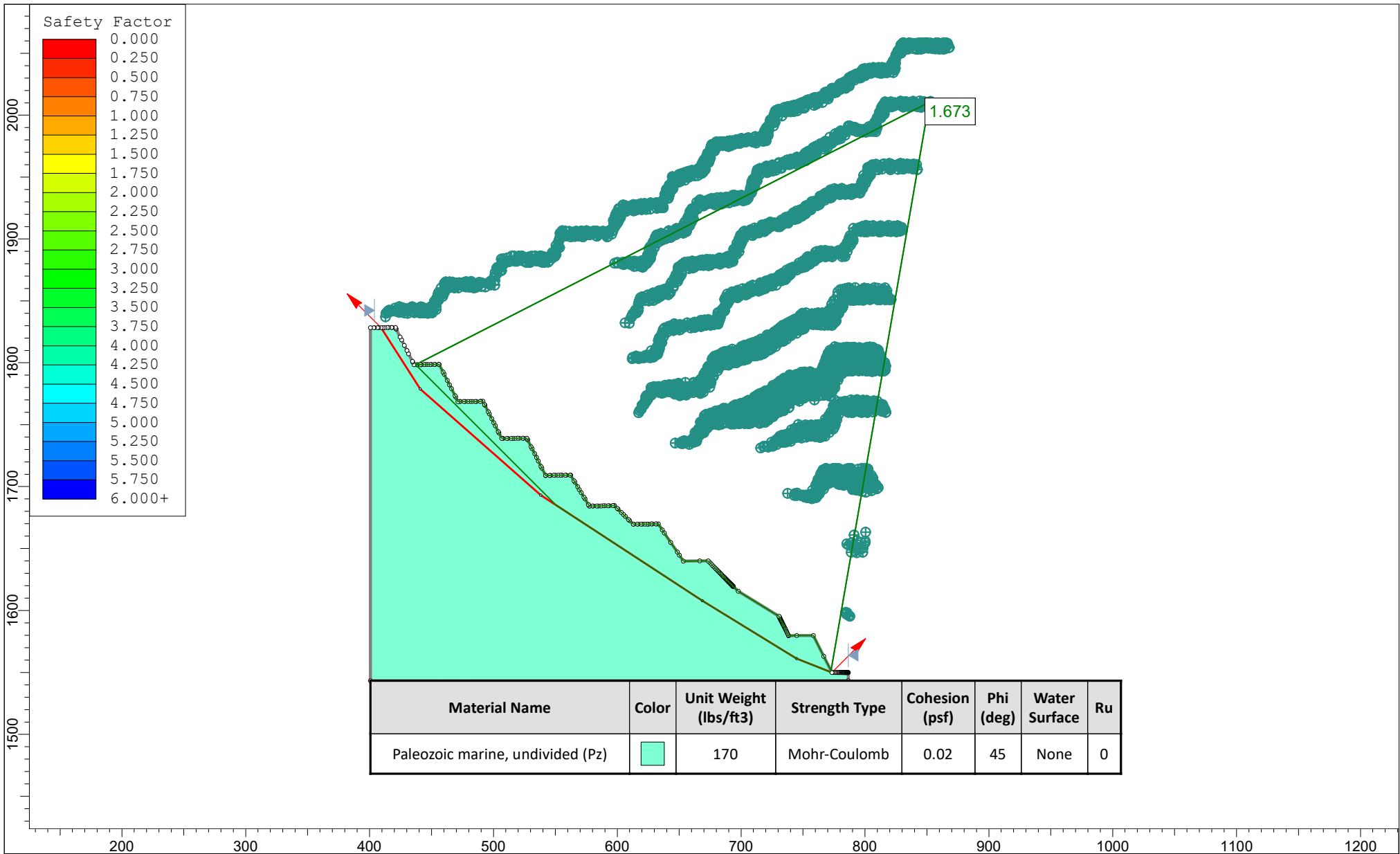


Project		Waddell Rock Quarry T-2	
Analysis Description		Rock Block Analysis	
Drawn By	James Fitzgerald	Company	GSI
Date	11/20/2022	File Name	Waddell_Rx_Pit_Rx_Slope_Stab_T2.slim





\*\*\*\*\* Summary \*\*\*\*\*  
Slope Height = 310  
Slope Face Angle = 36  
Upper Slope Angle = 25  
Cohesion = 0  
Friction Angle = 40  
Discontinuity Angle = 27  
Unit Weight of Rock = 175  
Unit Weight of Water = 64  
Crest Location = 426.68  
Discontinuity Length = 2883.52  
Weight of Rock Block = 20816427.2  
  
Stability Factor = 1.647



Project		Waddell Rock Quarry T-3	
Analysis Description		Rock Block Analysis	
Drawn By	James Fitzgerald	Company	GSI
Date	11/20/2022	File Name	Waddell_Rx_Pit_Rx_Slope_Stab_T3.slim



\*\*\*\*\* Summary \*\*\*\*\*  
Slope Height = 285  
Slope Face Angle = 36  
Upper Slope Angle = 25  
Cohesion = 0  
Friction Angle = 40  
Discontinuity Angle = 27  
Unit Weight of Rock = 175  
Unit Weight of Water = 64  
Crest Location = 392.27  
Discontinuity Length = 2650.98  
Weight of Rock Block = 17594321.6  
  
Stability Factor = 1.647

Appendix C  
**Archaeological Survey and Findings Report**

**EXHIBIT B**

# **ARCHAEOLOGICAL SURVEY AND FINDINGS REPORT**

**Prepared for:**

Hayes and Sons Inc. (Waddell Rock Pit / Reclamation Amendment and Name Change)

**Author:**

Vann Cultural Resource Management  
David M. Vann

February 17, 2023

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• Vicinity of Undertaking Map	
• General Location Map	
• Project Location Map	
• Coverage Map	

Waddell Rock Pit and Name Change

## INTRODUCTION

### Project Background:

*The proposed project is a request to amend (RP-01-01-1m) the existing reclamation plan. The applicant proposes to change the Mine name from Waddell Pit to South Fork Rock Quarry, expand the mine site from 4-acres to 16.6 acres, extend termination of mining date to approximately October 1, 2052, remove any gravel skimming in or along streams and other required updates to the existing reclamation plan.*

***All areas that make up this project are within the boundaries of the original plan for this rock pit. No new areas outside of original boundaries will be impacted.***

Vann Cultural Management was contacted by Jim Hayes of Hayes and Sons Inc. and asked to conduct archaeological investigations on the property.

**Scope of Work:** California law requires that completion of projects follow guidelines and principles outlined in the California Environmental Quality Act (CEQA). The following specific tasks were performed in order to comply with state regulations.

- Conduct a records search through the Northeast Information Center at CSU-Chico to determine if there have been any sites previously recorded within or in the vicinity of the project area. The goals of the record search are to determine (1) the extent of previous surveys in the area (2) the locations of known archaeological sites and the distribution of them within or near the Area of Potential Effect (APE). Completion of this step ensures that all potential areas of archaeological sensitivity are located and documented. **Note: This step was performed by the Siskiyou County Planning Department.**
- Conduct a pedestrian survey of the APE to determine if any undocumented archaeological resources exist and to properly record them if they do.
- When the pedestrian survey is completed, a final report will be written documenting the findings. The final report will identify effects the undertaking will have on cultural resources within the APE and will recommend appropriate mitigation measures to protect significant resources during implementation of the project.

The remainder of this report documents the findings and results of the records search and subsequent survey completed for this undertaking. It includes recommendations for treatment of any cultural properties located during field reconnaissance that could potentially be affected during the project. All of the fieldwork procedures followed guidelines set forth by the State Historic Preservation Office (SHPO) and are in conformity with accepted professional guidelines.

### Location of the Undertaking:

The project is located in the western ½ of Siskiyou County, California. It is located approximately 8 miles northwest of Happy Camp, CA. More specifically it is located in T17N, R7E, portions of sections 5 and 8 H.M.

Waddell Rock Pit and Name Change

## PRE-FIELD WORK RESEARCH

**Northeast California Information Center Records Search:** The records at the Northeast Information Center (CSU-Chico) were examined. The search resulted in no previously recorded American Indian or historic sites within the project or within the vicinity.

### Additional Sources Consulted:

1. The National Register of Historic Places.
2. The California Register of Historic Resources.
3. The California Historical Landmarks.
4. Existing published and unpublished documents relating to the prehistory, ethnography, and historic developments in the vicinity.
5. The following were contacted by email on February 3, 2023 (no response as of 2/21/23)

**Native American Heritage Commission (Contacted by County of Siskiyou)**

**Russell Attebery, Chairperson, Karuk Tribe\***

**Alex R. Watts-Tobin, Archaeologist and THPO, Karuk Tribe**

**[Tahnaya.miller@klamathtribes.com](mailto:Tahnaya.miller@klamathtribes.com)**

**Harold Bennett, Quartz Valley Indian Community**

**Janice Crowe, Shasta Indian Nation**

**Sami Jo Difuntorum, THPO, Shasta Indian Nation**

**Wintu Tribe of Northern California**

**Mark Miyoshi, THPO, Winnemem Wintu Tribe**

**Caleen Sisk, Tribal Chief and Spiritual Leader, Winnemem Wintu Tribe**

**Agnes Gonzalez, Pit River Tribe of California**

**Garth Sunberg, Cer-Ae Heights Indian Community of the Trinidad Rancheria**

These resources are consulted in order to more effectively determine what site types and distribution of them may be encountered during fieldwork within the project area.

The proposed project is subject to compliance regulations stipulated by CEQA. CEQA stipulates that both public and private projects with financing or approval from a public agency must assess the effects of the project on cultural resources (Public Resources Code Section 21082, 21083.2 and 21084.1 and California Code of Regulations 15064.5).

Cultural resources are defined as buildings, sites, humanly modified landscapes, TCPs, structures, or objects that may have historical, architectural, cultural, or scientific importance. CEQA states that if a project will have a significant effect on important cultural resources, then alternative plans or mitigation measures need to be developed. However, only significant cultural resources need to be considered in the mitigation plans. CEQA defines significant historical resources as “resources listed or eligible for listing in the California Register of Historical Resources (CRHR)” (Public Resources Code Section 5024.1). A property may be considered ‘historically significant’ if it meets the following criteria for listing on the CRHR:

1. It is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. It is associated with the lives of persons important to California’s past;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or



## Waddell Rock Pit and Name Change

4. It has yielded or is likely to yield information important in prehistory or history [Public Resources Code (PRC) Section 5024.1].

## RESULTS OF PRE-FIELD RESEARCH

**Prehistory:** Very little is known about the early prehistory of western Siskiyou County, and inferences are based on information from other parts of Northern California and Southern Oregon. Based on this it appears that western Siskiyou County could show some similarities with the North Coast Ranges tradition.

A tentative prehistoric cultural sequence has been established for the Sonoma, Lake, and Mendocino County portion of the North Coast Ranges and may also apply to the Klamath Mountains. The sequence is based primarily on materials recovered from the Borax Lake area (Harrington 1948; Treganza 1950; Meighan 1955; Meighan and Haynes 1970; Fredrickson 1973 and 1974).

The earliest inhabitants of the North Coast Ranges may be represented by large, fluted projectile points which resemble Folsom points (Harrington 1948: 62, 64-66, 70). The Folsom point is widely distributed and dates to about 8500-600 B.C. These points were probably mounted on spears and darts and used to kill large game. Little else is known about the people who made these points (McDonald 1979:37).

*“Apparently their dwellings were such as to leave few traces in the ground. Only open-air settlements have been recognized though they may occasionally have resorted to shelter beneath rock overhangs or in caves. The absence of deep deposits at the dwelling places points to temporary or brief recurrent occupancy. Sociopolitical inferences are hazardous, but the economics of a simple hunting life must have demanded groups of limited size. Perhaps a few families related by kinship hunted and traveled together. As yet, no skeletal remains of the hunter themselves have been identified therefore, nothing can be said regarding their physical type or mortuary practices (Wallace 1978:25).”*

The second phase of the occupation is called the Borax Lake and is represented by wide-stemmed points, called Borax Lake points (Harrington 1948:82), mullers and milling stones. The Borax Lake Pattern dates to about 5000-2000 B.C. Based on the presence of mullers and milling stones from this period it is theorized that a new emphasis was placed on seed foods and that a decrease in the reliance of large game occurred. Sites dating to this phase have been found on or near ridge tops in or near meadows and close to springs. Since the sites are about 6000' elevation they do not appear to be suitable for winter occupation and sites in other location are also expected. Based on their findings in the Gasquet-Orleans Road area, Chartkoff, Davis and Donahue (1978:G-5) feel that in the Klamath Mountains a generalized hunting and gathering way of life may have brought individual families or hunters into high-elevation valleys and ridge tops, and that temporary summer occupations resulted.

The Mendocino Complex is next and dated to about 1000 B.C. to A.D.O. It is characterized by smaller projectile points, lacks the Borax Lake point type and includes mortars and pestles. From this period on, cultures seem to develop in an increasingly localized manner making inferences based on adjacent areas less reliable. Chartkoff, Davis, and Donahue (1979:G-5 to G-6) hypothesize that the period from 2000 B.C. to A.D. 500 was one of increasing adaptation to riverine resources. Local people began to become more seasonally transitional, occupying winter base camps along the river and smaller, functional sites during other seasons for hunting and collection purposes. From about A.D. 500-1500, use of the riverine resources became increasingly effective. Base camps became larger, sedentary, and more socially complex. From A.D. 1500-1850, the exploitation of the anadromous fishery had been perfected. River villages became permanent, the use of the highland areas declined to be replaced by spiritual use.

## Waddell Rock Pit and Name Change

The overall pattern of the North Coast Ranges appears to be that of significant changes in subsistence practices: first from reliance on large game to a more balanced use of a variety of smaller game and plants, then to an increased reliance on acorns and anadromous fish. It is thought that the characteristics of this period are the result in changes from the Antathermal to the Altithermal and then to the Medithermal. The drier climate of the Altithermal was not favorable to the pursuit of big game by the Folsom hunters and led to the exploitation of a larger range of foods as the big game species became extinct, while the cooler and moister climate of the Medithermal may once again have allowed greater specialization (McDonald 1979:39).

**Ethnography:** The Karuk are identified mostly by their language, which belongs to the Hokan family, but has no close relatives. Their culture is noted to resemble that of their down river neighbors the Yurok.

The Karuk inhabited the area between Bluff Creek and Seiad Valley. A Bilingual group occupied the area between Happy Camp and Seiad, speaking both Karuk and Shasta. They are thought to have been considered marginal to the Karuk. Villages were located on Indian Creek and up the Salmon River with the most populous areas near Orleans, at the mouth of the Salmon River, and at Clear Creek.

The Karuk were oriented to the resources along the rivers. They especially took advantage of the major salmon runs in the spring and fall (Kroeber and Barrett 1960). Rapids were the favored fishing locations since their channels limited the movement of the fish to predictable areas. Platforms were built at the edge of the river and were privately owned, but could be rented for a part of the catch. Fish were generally caught in a net lowered on an A-frame. Sometimes a smaller "plunge net" was used in the rapids (Bright 1978: figure 2). Harpoons were utilized, and eels were caught with dip nets and gaffs. Much of the fish caught during these runs were dried and stored to be consumed during when the catch was at a minimum.

Acorns and deer were also a major part of the Karuk diet. The acorns from the tan oak were favored. Families camped in the fall, living in houses of fir bark and gathering acorns from the ground. The tannic acid was removed by cracking and drying the acorns rubbing them to remove the skin, grinding them into flour with a stone on a flat slab, and then leaching the flour in a sand pit. This produced dough that was mixed with water and boiled in a basket with heated rocks to make a soup or mush. Sometimes the acorns were buried in wet ground for a year or more then boiled in the hull and cracked with the teeth for eating. Deer were hunted in the fir forests on the mountain slopes. Deer-head masks were often used as decoys. Dogs were used to drive the deer into snares set along their trails. Elk, bear, rodents, and other small mammals and birds were also hunted (McDonald 1979: 41).

The importance of river resources is evidenced in the patterns of Karuk village distribution. Ninety percent of the villages were located within a ¼ mile of the rivers. The Chartkoffs (1975:176) reported that villages tended to be located at the mouths of major tributaries because here the portions of the salmon run was diverted, decreasing the fishing potential upstream. The availability of flat land was a premium and this influenced village distribution as 95% of the villages were located on ground with 10% slope or less (Chartkoff and Chartkoff 1972). Villages contained one to ten living houses and one or more sweat houses. There was one family per living house. The women and children were the main occupants of the living houses, with the men visiting during meal time. The men spent most of the time in the sweat houses which were not open to women except for the initiation of a female shaman. Both house types were rectangular, of rough planks, semi-subterranean, with a stone-paved porch outside. Gathering firewood for the sweathouse

## Waddell Rock Pit and Name Change

had religious implications. Limbs were supposed to be taken from the uphill and downhill side of Douglas fir trees, accompanied by ritual weeping and prayers for luck in hunting and gambling, which were the main means of acquiring wealth (McDonald 1979:41).

The Karuk depended on stone, wood, plant fiber, and bone to maintain their way of life. Wooden planks for housing were split from logs with horn wedges and stone mauls, and then worked with stone adzes. Boats were made from hollowed out redwood logs purchased from the Yurok. Obsidian was flaked with an antler

and hafted to wooden handles and used to butcher game. Large obsidian blades were considered wealth item and displayed at ceremonies. Bows were made from yew wood and arrows from syringia wood, with obsidian heads used in war. Other tools included elk horn spoons for men, mussel shell spoons for women, bone awls for hide sewing, wooden fire drills, and tobacco pipe consisting of a straight wooden tube and soapstone bowl.

Ceremonies were very important to the Karuk. The principal ceremonies are usually referred to as World Fixing or World Renewal rituals and are held at the villages of Inam, Katimin, Amaikiam, and Panamnik. They are linked concept and timing into a sequence which must be completed in order to revitalize the world and prevent famine, disease, and disaster. They are also roughly correlated to the spring and fall runs of Chinook salmon. The ceremonies include a sacred element consisting of a journey following a prescribed route and recitation of a formula by a priest. Public dancing was an element of the ceremonies as well. The Jumping Dance, Deerskin Dance, War Dance, and Boat Dance were performed depending on the location. Localization of the dances was an important characteristic. Dances are performed in specific villages, and are associated with specific locations within the village. This implies that ceremonial locations will be of great cultural sensitivity, as the ceremony is viewed as essential to maintaining the world order.

In addition to renewing the physical condition of the world the ceremonies played an important roll in regulating the Karuk social relationships. The right to perform rituals and sponsor dances is distributed so as to link kin groups and villages into cooperating units. Also, to avoid spoiling a dance all conflicts had to be resolved beforehand by those attending.

Karuk culture was characterized by considerable local autonomy. Individual villages were the principal political unit (Curtis 1924:60). Rich men were the leaders within the village because of the prestige of their wealth. Linkages were created by kinship. If individuals from different villages began to feud, relatives would become involved and not the entire village.

It is evident tat the karuk were heavily involved in trade with their neighbors. They probably first encountered the Hudson Bay Trappers and then later the miners in much greater numbers. In 1882, after clashes between the miners and the Karuk's near Orleans, virtually all of the Karuk villages were burned as far north as the Salmon River.

In 1887, the General Allotment Act provided that certain Indians could settle on the public domain and obtain title. An amendment in 1910 extended the act to lands in the National Forests more valuable for agriculture or grazing than for timber.

## Waddell Rock Pit and Name Change

pre-Gold Rush Karuk population has been estimated a 2700 (Cook 1956:98). By 1930 that number was said to be about 755, of which 16.4% were said to be full-blood. In 1972, the Bureau of Indian Affairs reported that 3,781 individuals were identified as having at least some Karuk ancestry (Bright 1978:189).

Based on the results of previous survey work done within the general area of the undertaking, the expected range of American Indian site types included the following:

- Surface scatters of lithic artifacts and debitage associated with dark “midden” deposits indicating possible village encampments, some of which may have been occupied year-round. Typically, such sites would be located close to water sources, particularly where streams merge with one another.
- Surface scatters consisting of lithic artifacts and debitage not associated with dark “midden” soil. These areas may have been utilized for shorter, seasonal subsistence practices.
- Bedrock milling stations, including both mortar holes and pestles associated with acorn gathering.
- Rock alignments and other surface features, which could be accompanied by accumulated midden and portable artifacts.
- Isolated finds of American Indian artifacts and flakes not significant enough to be formally recorded as a “site”.

It is not likely that *all* of these types of sites would be encountered within the present project area, but rather these are the types of sites that potentially could be encountered during fieldwork based on information from results of previous surveys.

**Historic Development:** There is historic evidence of early fur trapping in Siskiyou County *circa* 1820s and 1830s (Handbook of North American Indians, vol. 8: 212). Most of these instances were brief, however.

By late 1849 mining had begun along the Klamath and Salmon Rivers, but not until around 1850 that Siskiyou County started to see an influx of Whites to the area. In 1850 a number of prospectors crossed the mountains from the North Fork of the Trinity River and hit the South Fork of the Salmon River. They made their way down to the Forks and discovering rich gold deposits there began to work their way up the North Fork. A prospecting expedition, starting at the mouth, worked its way up the Klamath as far as Happy Camp, but was turned back by Indians there.

Soon after miners entered Indian Creek they established Indian Town, a small mining camp located north of Deadman Point. By 1856 the town had a hotel, butcher shop, saloon, and bakery. It was also called Indian Creek City. Chinese made up much of the population. Most of them were working at the Classic Hill mine located near by. Indian Town was abandoned by 1890 (Hill 1997).

In 1856 estimates say there were approximately 400-500 miners in the Indian Creek watershed. Hydraulic mines located here include the Classic Hill mine, Huey mine and County mine.

Happy Camp located at the mouth of Indian Creek was established in 1851. A post office was established in 1858 and by 1860 four stores, a hotel and butcher shop had been established. In 1880 Happy Camp had a population of 397.

Most areas around Siskiyou County were mined during the mid to late 19<sup>th</sup> century and into the early part of the 20<sup>th</sup> century. The area also saw those individuals seeking a more stable lifestyle and farming and ranching became popular in the area as well. The descendants of many of these early pioneers to the area are still here and living on the land that was purchased by their ancestors.

## Waddell Rock Pit and Name Change

Based on the results of previous survey work done within the general and immediate area of the undertaking, the expected range of Historic site types included the following:

- Artifacts associated with homesteading/ranching/mining in the area.
- Structure locations with associated artifacts.

## SURVEY METHODS AND FINDINGS

**Survey Strategy:** It is the goal of the surveyor to give complete coverage the entire project area. Sometimes however this is not possible. Reasons for this may include: steep terrain; thick brush; current land use (e.g., rock pit, processing). Much of the property is located on steep terrain (see TOPO map) as well as within flood plain with thick brush coverage. All areas that were able to be safely surveyed were. The pit and surrounding area have seen continuous occupation/use since at least the 1950s.

Survey transects were completed in a random zig-zag fashion on the flat areas of the property. This method ensures that historic and American Indian resources will not be missed.

**Field Work:**

Archaeologist David Vann completed fieldwork for this project.

**Natural Setting:**

**Geology** – The project area is located within the Galice Formation of Western Jurassic Belt. There are also areas of alluvium along the creeks as well as an area of landslide deposits.

**Hydrology** – The main fork of Indian creek is located adjacent to the property.

**Flora** – White Oak, black oak, live oak, Douglas Fir, incense cedar, madrone, poison oak, fern, Oregon grape, black berry, wild raspberry, seasonal grasses.

**Fauna** – Deer, rabbit, Western Grey Squirrel, Ground Squirrel, skunk, coyote, black bear, various birds, and frogs.

**Natural Environment** – Primarily covered in timber and oak stands with few open areas.

**Current Land Use** – vacant land, rock pit

**Current Land Condition** – Quarry site/mining

**American Indian Resources Identified Within the Project Area:**

No American Indian resources were noted or recorded as a result of reconnaissance for this project.

**Historic Resources Identified Within the Project Area:**

No new historic sites were noted or recorded as a result of reconnaissance.

Waddell Rock Pit and Name Change

## **FINAL PROJECT RECOMMENDATIONS**

**A comprehensive and thorough effort has been made to identify all Heritage Resources located within the APE for this undertaking and the results of this survey have been incorporated into the proposed project's design. The areas that will be impacted are located on extremely steep terrain. Based on this and the low probability of encountering cultural resources I believe that no impacts will occur to cultural resources. I recommend that the project proceed as planned.**

*This report is based on an inventory-level surface survey only. There is always the possibility that significant sub-surface cultural resources could be encountered below ground level. If this happens work should be suspended and archaeological consultation should be sought immediately.*

Waddell Rock Pit and Name Change

### References

Jensen, Perter M.

- 1997 Cultural Resource Survey Report for Carter Reclamation and Quarry Project, Siskiyou County, California. Report on file, Northeast Information Center, CSU, Chico

Rock, Jim

- 2003 Cultural Resource Survey Report for Baker Parcel split, Siskiyou County, California. Report on file, Northeast Information Center, CSU, Chico.

Wagner, D. L., and Sausedo, C. J., compilers.

- 1987 Geologic Map of California, Weed Quadrangle. Sacramento, California: Department of Conservation, Division of Mines and Geology, State of California Resources Agency.

McDonald, James A.

- 1987 Cultural Resource Overview, Klamath National Forest, California.  
Note: Karuk ethnography and pre-history taken from McDonald.

Vann, David

- 2003 Waddell Property Survey, Siskiyou County, California, Report on file, Northeast Information Center, CSU, Chico

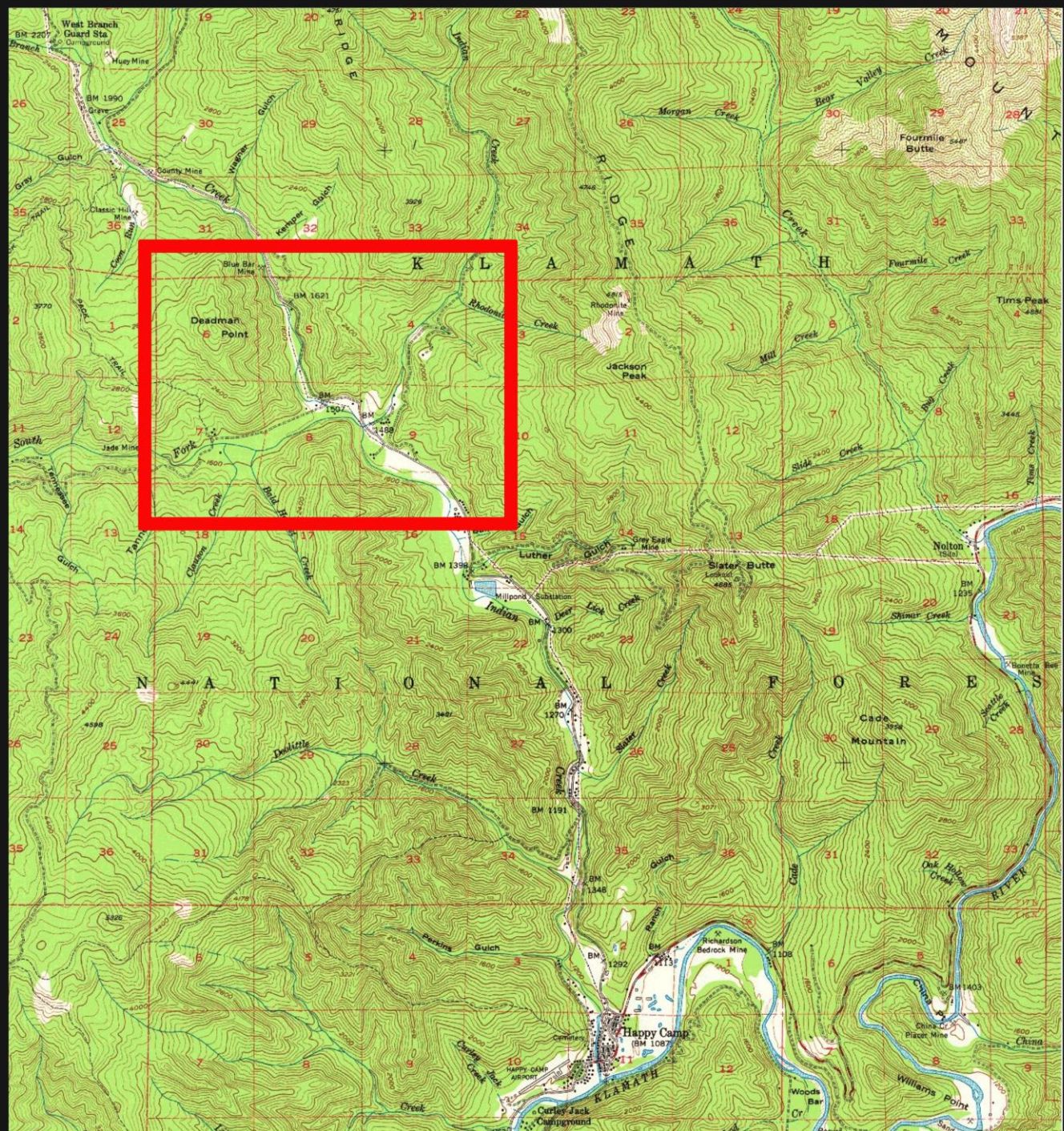
Waddell Rock Pit and Name Change





# LOCATION OF UNDERTAKING

2023-1



T17N, R7E sections 5 and 8



General Location of the Undertaking



base maps are 15'  
Happy Camp 1956  
Humboldt Meridian

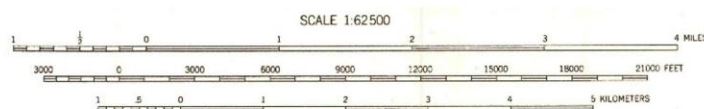


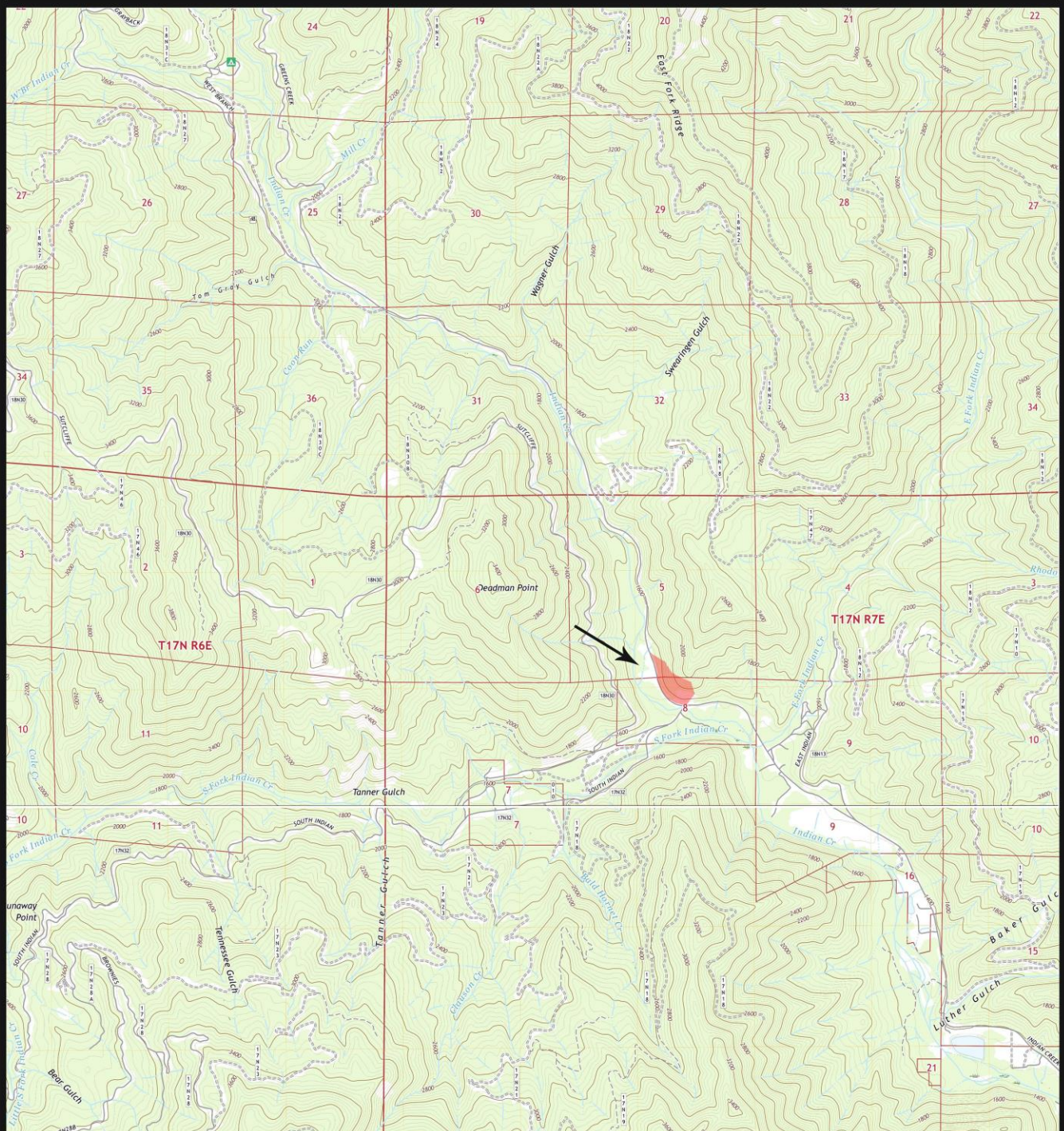
EXHIBIT B  
DATUM IS MEAN SEA LEVEL





# PROJECT MAP

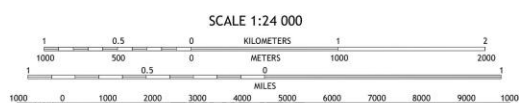
2023-1



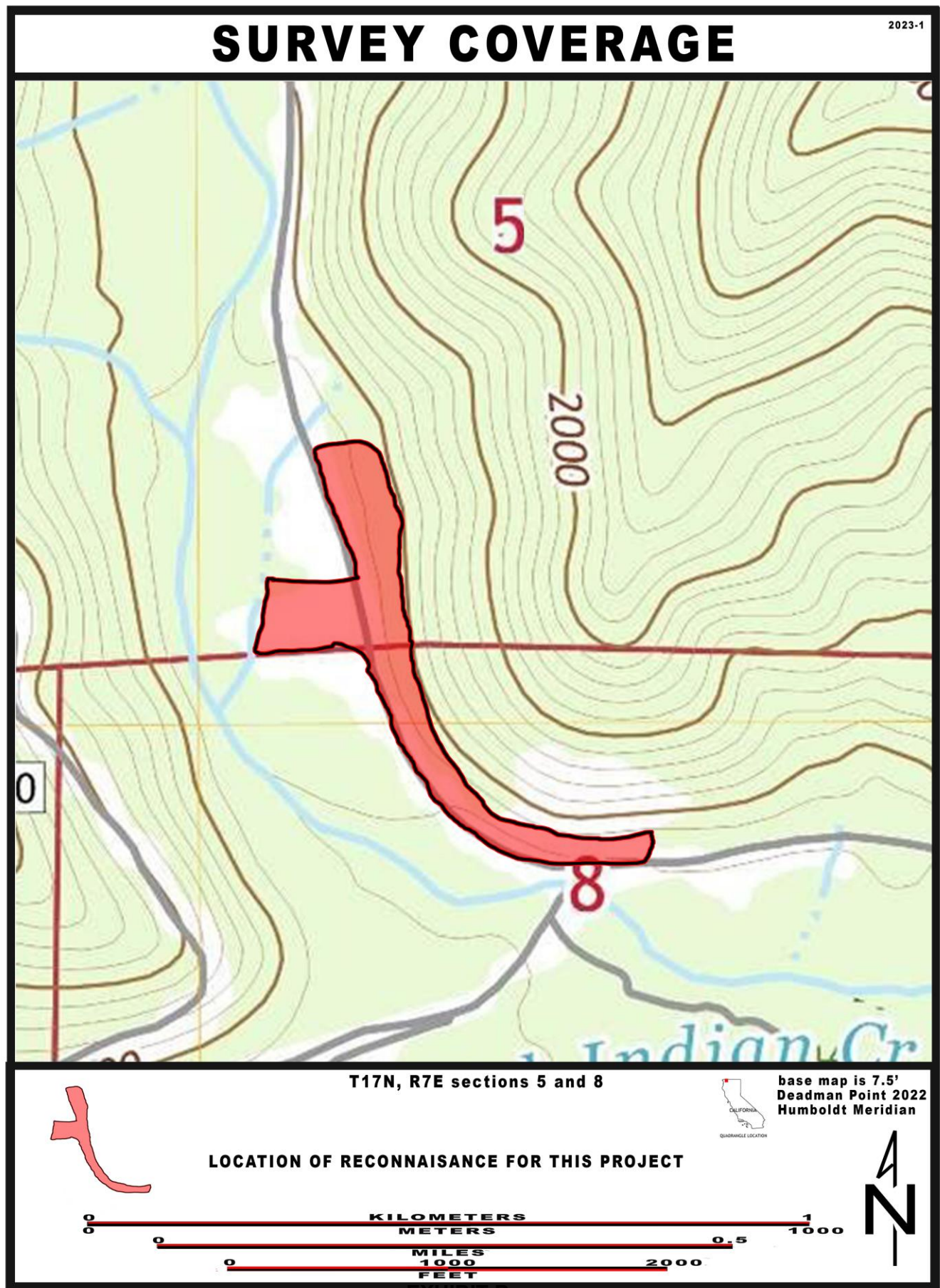
T17N, R7E sections 5 and 8

**APPROXIMATE PROJECT BOUNDARY**

base maps are 7.5'  
Happy Camp 2022  
Deadman Point 2022  
Humboldt Meridian

**EXHIBIT B**





## **Notice of Public Hearing**

**Notice is Hereby Given** that the Siskiyou County Planning Commission will hold a Public Hearing on **Wednesday, June 18, 2025, at 9:00 a.m.**, or as soon thereafter as the matter may be heard, in the Siskiyou County Meeting Chambers, 311 Fourth Street, Second Floor, Yreka, California, on the project described below.

Remote listening of this meeting will be available via teleconference. The information necessary to listen via teleconference will be set forth on the meeting Agenda the Friday before the meeting. Should you wish to comment on this project, you may submit a written comment or attend in person.

### **Waddell Pit Reclamation Plan and Use Permit Amendment (RP-01-01-1M / UP-19-74-1M)**

**Project Location and Description:** The Project site is located in an unincorporated part of Siskiyou County approximately 8 miles north of the community of Happy Camp, along Indian Creek Road. The APNs associated with this project are 009-340-350, 009-330-230 & 009-330-240. The project is proposing to amend the existing Use Permit and Reclamation Plan to expand the quarry excavation area and allow continued mining activities at the site for an additional 30 years. The proposed project would allow for the continued removal, crushing and stockpiling of aggregate onsite. Mining operations would continue Monday through Friday with no night, weekend, or holiday operations. Hours of operation will be 7:00 a.m. to 5:00 p.m. Blasting will continue to occur every two to three years, in the late winter or early spring between 7:00 a.m. and 5:00 p.m. on weekdays. The operations at this site will vary based on the need of the aggregate product produced at the site. It is estimated that approximately 250 truckloads of material will be transported from the site with an average of five loads per week.

A Mitigated Negative Declaration (MND) has been prepared for this project. A 'mitigated negative declaration' means any negative declaration prepared for a project when the initial study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment (CEQA Guidelines § 21064.5).

Project documents, which include the project application, circulated CEQA documents and any other non-draft documents, are on file at the Planning Division of the Siskiyou County Community Development Department, 806 South Main Street, Yreka, California, 96097, and are available for public review upon contacting the staff planner. A staff report and all attachments will be available for public review three working days prior to the Planning Commission meeting either at the Planning Division office or online on the Siskiyou County Planning Commission's meeting page:

<https://www.siskiyoucounty.gov/planningcommission/page/planning-commission-meeting-13>

All items presented to the Planning Commission during a public hearing, including but not limited to, letters, e-mail, petitions, photos, or maps, become a permanent part of the record and must be submitted to the Clerk of the Commission. It is advised that the presenter bring 12 copies of anything presented to the Commission and that the presenter create copies in advance for their own records.

All public records related to an open session item on the Agenda which are not exempt from disclosure pursuant to the California Public Records Act that are distributed to a majority of the legislative body will be available for public inspection at 806 S. Main Street, Yreka, CA 96097, at the time that the public records are distributed or made available to a majority of the members of the legislative body.

Any concerns or issues relating to the application must be raised during the public review period or at the public hearing. Public comments can be submitted via mail or hand delivery to the Planning Division (806 S. Main Street, Yreka, CA 96097) or email to [planning@co.siskiyou.ca.us](mailto:planning@co.siskiyou.ca.us). Please include your name and physical address. Comments must be received by the County by 5:00 p.m. the day before the public hearing. If you challenge either the proposed project or the project's environmental document in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to Planning prior to or at the public hearing.

For more information regarding the proposed project or the public hearing, please contact Bernadette Cizin at (530) 841-2151 or [bpcizin@co.siskiyou.ca.us](mailto:bpcizin@co.siskiyou.ca.us).

Hailey Lang, Secretary  
Siskiyou County Planning Commission



# COUNTY OF SISKIYOU

COMMUNITY DEVELOPMENT DEPARTMENT  
Building ♦ Environmental Health ♦ Planning  
806 South Main Street · Yreka, California 96097  
Phone: (530) 841-2100 · Fax: (530) 841-4076  
[Community Development Department](#)

RICHARD J. DEAN  
DIRECTOR

AARON STUTZ, MD  
PUBLIC HEALTH OFFICER

## Notice of Intent To Adopt an Initial Study (IS) / Mitigated Negative Declaration (MND) Waddell Reclamation Plan Amendment and Use Permit Amendment Project (RP-01-00-1M and UP-19-74-1M)

**Notice is Hereby Given** that the Siskiyou County Planning Division invites public review and comment on an Initial Study (IS) / Mitigated Negative Declaration (MND) prepared for the Waddell Reclamation Plan Amendment and Use Permit Amendment Project (RP-01-00-1M and UP-19-74-1M). **The public review period begins on May 1, 2025, and ends on June 2, 2025.** The MND and all attachments are available for review on the Siskiyou County Planning Division website: <https://www.siskiyoucounty.gov/planning/page/public-documents>.

Written comments concerning the project and the environmental documents will be accepted until 5:00 p.m. on May 9, 2025, at Siskiyou County Community Development Planning Division, 806 South Main Street, Yreka, California, 96097, and via email at [planning@co.siskiyou.ca.us](mailto:planning@co.siskiyou.ca.us). The documents are available for review at the Siskiyou County Community Development Department, Yreka, California, 96097, as well as posted on the Siskiyou County Planning Division website: <https://www.siskiyoucounty.gov/planning/page/public-documents>.

**Project Location and Description:** The Project site is located in an unincorporated part of Siskiyou County approximately 8 miles north of the community of Happy Camp along Indian Creek Road. The APNs associated with this project are 009-340-350, 009-330-230 & 009-330-240. The project is proposing to amend the existing Use Permit and Reclamation Plan to expand the quarry excavation area and allow continued mining activities at the site for an additional 30 years. The proposed project would allow for the continued removal, crushing and stockpiling of aggregate onsite. Mining operations would continue Monday through Friday with no night, weekend, or holiday operations. Hours of operation will be 7:00 a.m. to 5:00 p.m. Blasting will continue to occur every two to three years, in the late winter or early spring between 7:00 a.m. and 5:00 p.m. on weekdays. The operations at this site will vary based on the need of the aggregate product produced at the site. It is estimated that approximately 250 truckloads of material will be transported from the site with an average of five loads per week.

The project will be scheduled for a public hearing before the Siskiyou County Planning Commission on Wednesday, June 18, 2025, at 9:00 a.m. at the Siskiyou County Meeting Chambers, 311 Fourth Street, Yreka, California. If you challenge either the proposed project or the project's environmental document in court, you may be limited to raising only those issues raised during the public review period or in written testimony delivered to Siskiyou County Community Development Planning Division prior to the public hearing, or in oral or written testimony submitted during the public hearing. If substantial evidence has been presented demonstrating a more appropriate environmental determination than the one that has been recommended, the decision-making body may require and/or approve an alternative environmental determination pursuant to the requirements of the California Environmental Quality Act.

For more information regarding the proposed project or the public hearing, please contact Bernadette Cizin at (530) 841-2151 or at [bpcizin@co.siskiyou.ca.us](mailto:bpcizin@co.siskiyou.ca.us).

Hailey Lang, Secretary  
Siskiyou County Planning Commission



SISKIYOU COUNTY PLANNING COMMISSION

# Land Use Permit

PERMISSION IS HEREBY GRANTED TO: John J. Maddell and F. L. Somers Co. Inc.

ADDRESS: P. O. Box 723, Happy Camp, California

FOR THE PURPOSE OF: Remove and process gravel and rock

Assessors Parcels 9-330-160, 9-330-110, 9-340-100

ON PROPERTY LOCATED IN SECTION 5 & 8, TOWNSHIP 17N. NORTH, RANGE 7 East

SUBJECT TO THE FOLLOWING BEFORE THE USE COMMENCES: 1. Channel and streams shall not be altered. 2. Comply with Fish and Game requirements; a. There will be a 50 foot minimum buffer zone back from the cut bank along Indian Creek. b. No development or excavation will be done below 300 feet of the settling basin area. c. The upper portion of the project will be diked to prevent high water from flowing through the project. 3. Comply with Air

THIS PERMIT IS AUTOMATICALLY TERMINATED AND ALL RIGHTS THEREUNDER RESCINDED WHEN NOT USED FOR THE ABOVE PURPOSE FOR [REDACTED] ONE (1) YEAR

March 5, 1975

DATE \_\_\_\_\_

Gene H. Kincaid  
GENE H. KINCAID

SISKIYOU COUNTY PLANNING COMMISSION

Pollution Control regulations. 4. Comply with Health Department regulations. 5. Comply with Water Quality Control regulations. 6. Installation of safety signs along Indian Creek. 7. Securing of an encroachment permit. 8. No settling ponds or stagnant water to remain during seasonal periods of non-operations. 9. All blasting will be done in a manner that complies with all county, state and federal laws on blasting procedures. 10. Bond is to be posted, the amount is to be determined by the Department of Public Works. 11. Provide a copy of documentation providing that a minimum of \$300,000 worth of liability by the company for the project.



DATE STAMP

RECEIVED

OCT 24 2001

SISKIYOU COUNTY  
PLANNING DEPARTMENT

COUNTY OF SISKIYOU  
RECLAMATION PLAN

[PLEASE TYPE OR PRINT NEATLY IN BLACK INK]

[If a particular item is not applicable, please indicate by stating N/A. If more room is necessary, please reference additional sheets.]

I. **GENERAL OWNERSHIP/OPERATOR INFORMATION:**

A. **MINE NAME:** Kenny McCulley Quarry/Jim Waddell, Happy Camp (Waddell land, James A. Waddell Representative)

Location of mine: 8000 Indian Creek Rd., Happy Camp, CA 96039

(Include Siskiyou County street address if applicable)

The Kenny McCulley Rock Quarry is located on the east side of Indian Creek Road (7C01) eight miles North of the town of Happy Camp, CA; more specifically described as being in the NE ¼ NW ¼, Sec. 8, T 17 N, R 7 E, HM. The rock crusher and stockpile site, as past and present; proposed to be continued in it use, is in the SE ¼ SW ¼, Sec. 5, T17N, R7E, HM, ¼ mile NW of the Quarry site.

Attach a map that identifies how to access the mine site from the nearest highway. ☒

APN's Siskiyou County parcel 9-340-290 & 9-330-160

Section(s) 5 & 8, Township 17 N, Range 7 E, Meridian Humboldt

B. **MINE OPERATOR(S):** McCulley Logging Co.

Mailing address: 8330 Indian Creek Road, P. O. Box 360, Happy Camp, CA 96039

Telephone Number: 530-493-2652 Fax 493-2230

C. **LANDOWNER(S):** Joseph Waddell, Robert Waddell, Thomas Waddell, Kerry Waddell

Vickie Walden, and James Waddell\*(Rep. & Quarry-parcel owner pending property split)  
(Property owners or owners of surface rights, [list all owners])

Mailing address: ~~1331 G. Ee Tucka Tucka Tee, Yreka, CA 96097-9591~~

7615 FEATHER CT, ANTELOPE, CA 95843-2444

Telephone Number: ~~(530) 642-3038~~, James Waddell 916/338-7063  
~~744444~~

D. **PROJECT REPRESENTATIVE:** Kenny McCulley

Mailing address: 8330 Indian Creek Road, P. O. Box 360, Happy Camp, CA 96039

Telephone Number: 530-493-2652 Fax (530) 493-2230

E. **OWNER OF MINERAL RIGHTS:** Same as Landowners in C above

Mailing address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

## II. GENERAL LEAD AGENCY INFORMATION

A. **Lead agency:** Siskiyou County Planning Department  
P.O. Box 1085  
Yreka, CA 96097

(530) 842-8200

Staff Contact: Staff Planner \*(\$1,330 of Filing fees are included here)

B. **SMARA Sections 2770 and 2773.1** require mine operators to obtain a lead agency approved **Financial Assurance** to ensure reclamation occurs pursuant to the Reclamation Plan. Attach a copy of the proposed Financial Assurance.

☒ Check here if you attached a copy of the proposed Financial Assurance.

## III. GENERAL MINING OPERATION INFORMATION

A. **Mined mineral commodity(ies):** Quarry Rock and gravel of varied sizes  
[In tons or cubic yards per year]

B. **Estimated Annual Production:** 5,000 to 30,000 Cu Yds per year as ordered  
[In tons or cubic yards per year]

C. **Estimated Total Production:** 100,000 Cu Yds over a 15-year period  
[In tons or cubic yards per year]

D. **Number of Acres to be Disturbed by the Surface Mining Operations:** 4 acres  
as exists currently, no quarry expansion is planned at this time.

E. **Total Number of Acres to be Reclaimed:** Include seeding crusher site- 4 acres

F. **Maximum Anticipated Depth of Mining:** Existing quarry shall have benches lowered in excavation approximately 30 feet, quarry size is now about 550 x 350 feet (or 4 ac.) in size.

1522' Elevation at 7C01

G. **Start Up Date [Indicate whether actual or proposed]:** Upon acceptable update of the Reclamation Plan and financial Assurance to the lead agency to continue quarry use as in the past.

H. **Site Maps:** Attach a map or maps of lands that will be affected by mining operations. The map scale should be 1" = 100' to 1" = 500' so that the following may be identified easily:

1. Existing site conditions - Attachment section includes topographic map, cross sections, and a reference map to illustrate features such as County road locations, private road locations, Indian Creek, bridge, power lines, current aerial photographs, and photographs of quarry site from all cardinal directions.
2. Mining operation features – Topographic maps, cross section views of current quarry condition, and quarry configuration at the end of the planning period. Flat land on the same ownership ¼ mile NW of quarry, previously used for rock crusher site will again be used temporarily. A 1.5 acre portion of this flat is currently being used by the Siskiyou County Road Department for stockpile and some rock crushing.
3. Final site configuration – Attached is the proposed survey cross sections and topographic maps that will result after excavation is completed according to plans.
4. Project location (showing the nearest readily identifiable road, intersection or other landmark). A vicinity map is included that shows; a) County Road that is the western boundary of the quarry, b) the County road up South Fork of Indian Creek, c) power lines, d) phone lines, e) & the 8 mile distance to Happy Camp.

5. A reduced copy of exhibit maps (11" x 17" maximum) is requested to prepare transparencies for overhead projection. This will facilitate presentation at the Planning Commission meeting. A reduced copy of the above described cross section maps and topographic maps are included here in the 8 1/2" x 11" or if needed in 11" X 17" maximum size.

**I. Attach a topographic map showing the configuration of the site before and after reclamation.**

☒ Check box is map is attached.

**J. Describe the environmental setting of the mine site, include a general description of vegetation and list at least four plants currently on site that may be suitable for reclamation.**

Occasional pit-run rock quarried 1960-Present for F. L. Sommers Co., County Road Dept. USFS, Sierra Pacific Ind., Southwest Forest Ind./Stone Forest Ind., etc.. and Waddell Family. Environmental Impact Report completed by F. L. Sommers Co. 1974 for Rock Quarry.

Metamorphic rock, shallow soils, scattered live oak and conifer with scattered bushes on mountain slopes. 4 acres (+/-) acres of existing quarry size. McCulley quarry is surrounded by mixed conifer general forest zone of the Klamath National Forest USFS in western Siskiyou County 8 miles north of Happy Camp, CA. This site is in the middle of the Homestead of the Waddell family (James Waddell, Rep.). The soils on-site are Deadwood-Clalam association on mountain slopes 40% to 90% with inclusions of 15% rock outcrop in the Deadwood type, and areas of deeper soils (40"-60") on mountain slopes and colluvial footsteps of the Clalam type. Broadcast seeding of the 1 acre crusher/stockpile site is planned for with native species of vetch, Bluegrass, Mahonia/Oregon Grape, and Deerbrush with some left as ranch use.

Forest vegetation varies at the quarry site from bare rock outcrops to sparse forest of Live oaks, Douglas fir, Dogwood, and Madrone; with a sparse under growth of Deerbrush, Hazelnut, Poison oak, and widely scattered clumps of Bluegrass and vetch. Indian Creek Road is the west-southwestern boundary of the quarry site and has light traffic in the winter and light traffic in other seasons.

The 1988 Timber Harvest Plan had the property reviewed for historical, archaeological and cultural sites by the University of California-Davis and none were found. Notification of 1988 THP Project was sent to the Karuk Tribe of California, (of which the Waddell family people are all Members), and no concerns of archaeology were raised by the Tribe.

There are three parcels of land inside the ownership of the project and are so indicated on the vicinity map.

A one-half acre parcel exists approximately 800 feet SW of the quarry adjacent to and on the north side of the South Fork Indian Creek Road; and belongs to Muriel Ward. She is supportive of this project).

A two and one-half acre parcel exists approximately 300 feet south of the quarry and has a single family residence (about 1/8 mile away) that is currently unoccupied.

There are two 1.0- 1.1 acre parcels with single family residences located at 8235 Indian & 8315 Creek Road, adjacent north of the project land and approximately 400-500 feet north of the temporary stockpile area of this project. These parcels and are currently being rented to people who work in gold mining and do not oppose the rock crushing operation.

There are two parcels of 3+ and 5+ acres adjacent east of the northern-most portions of the Waddell land and are 1,000 feet north of the temporary stockpile area. These parcels belong to Ike McCulley and Kenny McCulley respectively; and are being used as single family residences, mechanic shop, and heavy equipment parking. The McCulley families will be operators and participants in the activities of the proposed quarry excavation and rock crushing; and they fully support this project.

There are two other single family residences on the Waddell family land, 1/4 mile and 3/4 mile east of the quarry and belong to and are occupied by Tom Waddell and Vickie Walden, two of the owners of the Waddell family land who fully support this project.

**K. Address the presence/absence of sensitive species, sensitive habitats [wetlands].**

Sources: US Forest Service-Indian Creek Watershed Analysis; Ed Head THP Watershed Assessment, US Fish & Wildlife Service Flood Repair Application Assessment, and associated Biological Evaluations on Timber Harvest Plans. Spotted Owl, Marbled Murrelet, Peregrine falcon, Bald Eagle, Goshawk, Coho Salmon, Siskiyou Mountain Salamander, Chinook salmon and Klamath Province Steelhead: all exist regionally.

Chinook salmon and Klamath Province Steelhead are seasonally found adjacent to the McCulley quarry.

Preston Peak Rock cress, Klamath Mtn Buckwheat, Howell's & Heckner's lewisia, and Howell's lousewort exist in region. None of these listed species are found on or near project site excepting the fish in Indian Creek.

Cottonwoods and Alders along Indian Creek have received some flooding effects.

Klamath Province Steelhead have occurred on and in the vicinity of the Waddell land throughout the Waddell Homestead's life; homesteaded in 1900. Measures to reduce sediment transport, avoid decreases of riparian vegetation, and avoid decreasing of streamside shading are to be put in effect. No activity of the Waddell Rock Quarry is believed to develop adverse effects to the life of Steelhead, salmon or trout, habitat, nor any known Coho habitat as it is believed that Coho do not occur within many miles of the site.

At the stockpile site, a strip of willows, Oregon ash, and cottonwood trees screen the view to the rock crusher from the county road.

Spotted owls have been reported to have habitat requirements that are characterized by large and dense stands of conifer forests that have obvious decadence for nesting. They also require some open forests and clearings for roosting and foraging. The project land has marginal habitat for foraging and no habitat for roosting or nesting. No occurrences of Spotted owls have been recorded anywhere near the McCulley/Waddell Project land during the USFS Indian Creek Watershed Analysis or later.

Marbled Murrelet habitat is considered to be mature to over-mature coniferous stands or younger stands that are interspersed with large trees that can provide nesting opportunities. Nest trees are reported to range from 35 inches to over 100 inches in diameter and average 83 inches in USFS reports.

The McCulley quarry project is in the outer fringe of the 35 miles nesting habitat zone as measured from the Pacific Ocean. USFS population surveys for Murrelets have recorded two reported occurrences in the South Fork of Indian Creek drainage system. However none are closer than 5 miles of the McCulley quarry site.

Peregrine falcons nest on cliffs, feed primarily on birds and prefer foraging in riparian forest habitat along lakes and rivers. The USFS reports one nest site in the Indian Creek Watershed. It is in an area of Late Seral Reserve and is about 5 air miles from the McCulley quarry site. Population surveys of unoccupied suitable widely scattered nesting cliffs in the Indian Creek drainage are conducted each year by the USFS.

Bald eagles nest in the vicinity of lakes and rivers in large trees in open, uneven-aged mature to old forests. One nesting pair is known in an area east of Happy Camp and along the Klamath River. This nest location is approximately 8 miles from the Kenny McCulley rock quarry project site and out of the same drainage system. No other occurrences are recorded near the McCulley quarry site.

Northern Goshawks use mature and old conifer forests with relatively dense canopy closures, moderate to light understory vegetation, and flat to gently sloping terrain. USFS reports rare occasions of Goshawk sightings in Indian Creek locale not near the project, and have identified an area referred to as a goshawk territory, however no nest sites have been found. The characteristics of the quarry do not fit the described goshawk habitat.

The USFS has conducted population surveys for the Siskiyou Mountain Salamanders, Southern Seep Salamanders, and Del Norte Salamanders and report no occurrences in the vicinity of this project. Habitat is not present on site.

Coho Salmon usually spend at least one growing season in freshwater and two seasons in the ocean before they return to spawn. Juvenile fish favor slower water habitats that have about 50% pools or small pools, and some amounts of large woody debris. Coho Salmon species were listed as Endangered Species in the Klamath River-Northern California/Southern Oregon Evolutionary Significant Unit. A federal judge in Oregon overturned this listing as it is impossible to determine any biological difference between "Native" Coho and "Hatchery" Coho. Coho are not in danger of disappearing because in areas farther north the species is in excellent numbers.

Rally's Stores had a sale on Coho salmon.

Indian Creek salmon and Steelhead are included in one of the three "West Coast" ESU (Evolutionary Significant Units) of anadromous fish that have been debated as a potential threatened species under the Endangered Species Act. Sightings of adult Coho salmon in Indian Creek are not well documented, although juvenile Coho salmon were reportedly sighted, by USFS biology-trainee persons, during a brief survey of the lower two miles of Indian Creek in June 1996.

Historically, runs of Coho salmon were poorly reported and only slightly studied. Some information that is being reported is merely assumptions made by agencies. Coho runs today return primarily to lower Klamath tributaries. At present, hatchery production from Iron Gate and Trinity hatcheries (with eggs that are imported) are considered the source of most Klamath River Coho with natural spawning believed to be a relatively minor component.

Coho salmon were listed in the northwest, under Oregon's recovery plan, but now have been de-listed by federal judge action in overturning this listing for reasons of Native & Hatchery Coho all being biologically identical. This includes OR/CA Klamath Province ESU.

The Indian Creek water quality is high and turbidity is low except during periods of heavy rain or rain and snow melt events. The Waddell rock quarry project will not disturb riparian and streamside vegetation either in conditions of soil stabilizing root structures or in overhead shading. All efforts will be made to minimize fine sediment development and road run-off by managing the condition and use of roads and drainage facilities.

- Open Pit** \_\_\_\_\_ ✓  
**Single Bench** \_\_\_\_\_
- Quarry:**
- Hill Top** \_\_\_\_\_  
**Multibench** \_\_\_\_\_ ✓  
**Side Hill** \_\_\_\_\_ ✓  
**Dragline** \_\_\_\_\_  
**Low Level** \_\_\_\_\_  
**Shovel** \_\_\_\_\_  
**Underground** \_\_\_\_\_  
**Gravel Bar Skimming** \_\_\_\_\_ \*
- Gravel/Sand Pit** \_\_\_\_\_  
**Drill and Blast** \_\_\_\_\_ ✓
- Clay Pit** \_\_\_\_\_  
**Truck to processing plant** \_\_\_\_\_ ✓  
**Borrow Pit** \_\_\_\_\_  
**Tailings Pond** \_\_\_\_\_  
**Slurry Pump** \_\_\_\_\_  
**Waste Dump** \_\_\_\_\_  
**Rail** \_\_\_\_\_  
**Other** \_\_\_\_\_

Developed-Not yet in operation    Temporarily deactivated    ☒    Stockpile in mine

- Crushing and screening of quarry rock, no waste from processing. All Gradations will be utilized including salvage and storing of top-soil material. No product washing is planned without further amendment to this document. Natural precipitation will be allowed to sink into the Waddell and not allowed to enter Indian Creek.**

- Occasional use of 3,000-5,000 gallons per day for dust abatement. No washing of rock gravel material is planned, therefore no waste discharge of water.

**IV DETAILED DESCRIPTION OF RECLAMATION ACTIVITIES** [Attach additional sheets if Needed] [PURSUANT to PUBLIC RESOURCES CODE SECTION 2772]

**A. Describe the proposed use of the site once mining ceases and reclamation is completed:**

Reclamation of the quarry will consist of top-soil spreading on the benches and upper portion of the quarry floor, seeding with native species of grasses, shrubs and trees.

The quarry site will be used as open space and wildlife habitat allowing free growth of Bracken fern, Deer brush, Live Oak, Douglas fir, wild rose, Oregon grape, Bluegrass and wild vetch. The rock crusher site and rock stockpile site will be used as in the past as flat land and open space for varied homestead uses and wildlife uses. All roads will be retained and drainage facilities will be maintained.

**B. Attach evidence that all owners of a possessory interest in the land to be mined have been notified of the proposed end use (e.g. copies of notices sent to landowner and mineral owner).**

☒ Check box if evidence is attached. (Enclosed here)

**C. Provide a time schedule for the reclamation of each area disturbed by mining. If Applicable, indicate reclamation and/or project phases on your map.**

Spread top-soil from storage site onto benches of quarry site, seed with seed mixture and plant Douglas fir, Bluegrass, vetch, & Longleaf mahonia/Oregon Grape.- April to June 2017.

**D. Discuss how the implementation of this Reclamation Plan will affect future mining in the area (e.g. reclamation will not preclude future mining at this site since reclamation calls for open space).**

Implementation of this Reclamation Plan will not deplete the supply of rock material or will not preclude other extraction operations in the future; nor will it have any adverse effect on other future mining locally.

**E. Describe how the proposed reclamation of the mine site will affect public safety giving consideration to the degree and type of existing and probable future public exposure to the site:**

All land surrounding the quarry site is private property without offered public access. It is steep, rocky, and difficult to traverse. Final configuration of quarry site, topsoil placement, and seeding with natural vegetation will not adversely affect public safety considering that this will not be open for general public access.

**F. Briefly discuss how contaminants will be controlled and mine waste will be disposed (e.g. fuel storage.) Note: If cyanide is used for on-site processing, PRC Section 21151.7 requires the preparation of an environmental impact report under the California Environmental Quality Act.**

No cyanide will be used. No fuel storage planned on site.

**V. RECLAMATION STANDARDS**

**A. Pursuant to SMARA Section 2773, my reclamation activities will comply with the following standards provided in the California Code of Regulations (CCR), Title 14, Article 9, Section 3700-3710. (Check applicable box below.)**

1. ☒ Topsoil salvage, maintenance, and redistribution – if the end use calls for Revegetation or cultivation of disturbed lands, I agree to conduct topsoil salvage, maintenance, and redistribution activities in conformance with CCR Section 3711. Explain the reclamation procedures you will use to meet the standard cited above:

Spread top-soil material onto quarry areas level enough for equipment to depths of 1"- 3" and seed with selected vegetative seed mixture; Bluegrass, Native Vetch, and planted with Longleaf mahonia/Oregon Grape, and Douglas fir. Top soil is readily available in the eastern side of the quarry.

Existing rock outcrops and cut slopes of excavated areas are bare rock where sparse natural reestablishment of clumps of Bluegrass, scattered individuals of Douglas fir, Longleaf mahonia/Oregon Grape, Deerbrush (Ceonothus), Live oak and poison oak is expected in sparse and scattered occurrence as originally existed.

Some broadcast seeding with bluegrass and vetch is planned for the bare rock slopes of the quarry and is planned for the flat land at the crusher site and stockpile area. The crusher/stockpile area will continue to be used by Waddell family and Kenny McCulley as flat land, open space, and wildlife land. Broadcast seeding with the above described grass seed mixture for the lower portion of the quarry floor without adding topsoil because it will continue to be used by vehicles and added top soil would only be trampled and add to sediment transportation.

2. ☐ ☒ Revegetation – Revegetation will be a part of my approved Reclamation Plan I agree to conduct my revegetation activities in conformance with CCR Section 3705. Unless non-native species such as forage grasses or ornamentals will be used, specify at least four native species that occur on site or in the vicinity of the project and will be used for revegetation.  
Bluegrass, Native Vetch, Douglas fir, and Longleaf mahonia/Oregon Grape.

3. ☐ ☒ Check this box if the end use precludes revegetation or the cultivation of disturbed lands.

Minimal broadcast seeding efforts will be done on bare rock cut slopes where attempting to add top soil is unreasonable and undesirable.  
Natural spread of plant seeds will occur from seeded quarry benches to a degree similar to original bare rock outcroppings' scant vegetation.

4. ☐ Check this box if revegetation is not consistent with the approved end use.

5. ☐ ☒ Proposed revegetation plan:

Spread top-soil material onto quarry areas level enough for equipment to depths of 3"-4" and seed with selected vegetative seed mixture; Bluegrass, Native Vetch, Mahonia/Oregon Grape, and Douglas fir.

Existing rockoutcrops and cut slopes of excavated area are bare rock where sparse natural regrowth of clumps of Bluegrass, scattered individuals of Douglas fir, mahonia/Oregon Grape, Deerbrush (Ceonothus), Live oak and poison oak is expected. No test plot is planned because all these species are presently growing on and adjacent to the project site so it is known that they do survive and grow well at this locale. All native species of seeds and seedlings will be purchased that will match soil acidity, soil type, and elevation of growth of the project site.

6. Proposed revegetation mix:

The proposed plan is to plant grass seeds in a mix of 50% Bluegrass, 50% Natural Vetch in categories of at least 90% Pure Live Seed and will be seeded in amounts of at least 7.5 lbs./acre. The seedlings of Longleaf mahonia/Oregon Grape and Douglas fir will be planted in amounts of 50 plants/acre each.

The seed mix will be broadcast and then mixed into the top ½ inch layer of top soil by raking or machine raking. The Douglas fir and Mahonia/Oregon Grape will be hand planted in the fall of the calendar year following the placement of top soil, and will be planted at a rate of 50 trees per acre each.

7. Success of revegetation will be judged upon the effectiveness of the vegetation for the approved end use and by comparing quantified vegetation cover, density, and number of species of the reclaimed mined lands to local areas of naturally occurring vegetation or pre-mining conditions (baseline).

	Baseline	Performance Standard
Density (Note 1)	N/A for annual grasses	
Cover (Note 2)	15%	20%+ Expected
		-with top soil placement



Species Bluegrass, vetch, mahonia/Oregon Grape, and Douglas fir.  
Richness (Note 3) 0.02/100 sq ft 0.22/100 sq ft \*  
\*Tally of perennial plants includes Douglas Fir and Mahonia/Oregon Grape  
at a rate of occurrence of 100 per acre survival.

Note 1: No. of individual perennial plants rooted per 100 sq. ft.

Note 2: Vertical projection of perennial plants onto ground expressed as %  
(e.g. if the sun was directly over a specified area, what percentage of that area would be shaded by the trees, plants, etc.)

Note 3: No. of perennial species per 100 sq. ft.

B. Proposed end uses – Check applicable box below:

1. ☒ If the mining operation will not be conducted on Prime Agriculture lands, and the site's end use will not be agricultural, check this box.
2. ☐ If the mining operation will be conducted on Prime Agricultural land, but the site's end use will not be agricultural, check this box.
3. ☐ Prime agricultural land reclamation – The mining operation will be conducted on Prime Agricultural lands, and the site's end use will be agricultural. This, I agree to reclaim Prime Agricultural lands in conformance with CCR Section 3707. (Explain the reclamation procedures you will use to meet the standard cited above.)

✓ Reclamation success of agricultural lands will be judged on the following performance standard.

Baseline

Performance Standard

Productivity N / A

NOTE: Performance standard should be based on productivity (e.g. bushels per acre, tons per acre)

4. ☐ Other agricultural land reclamation – The mining operation will be conducted on Non-Prime Agricultural lands where the site's end use will be agricultural. Thus, I agree to reclaim Non-Prime Agricultural Lands in conformance with CCR Section 3708. (Explain the reclamation procedures you will use to meet the standard cited above)

✓ Reclamation success of non-prime agricultural lands will be judged on the following performance standard.

Baseline

Performance Standard

Productivity N/A

NOTE: Performance standard should be base on productivity ((e.g. bushels per acre, tons per acre)

5. ☒ If the mining operation will be conducted on Non-Prime Agricultural lands, but the end use will not be agricultural, check this box.

- C. ☒ Wildlife Protection – I agree that all wildlife and wildlife habitat will be protected in accordance with CCR Section 3703 [Check box]. Provide a description of how the above protection will be accomplished.

All efforts shall be done to protect, or eliminate disturbance to, any wildlife in the operation areas. Scant existing vegetation and widely scattered conifer trees limit current habitat. Hundred thousands acres of general forest surround this site. Insignificant impact is expected since there will be very little change from the site's original condition.

D. Check applicable box.

- ☒ Backfilling, regrading, slope stability, and recountouring – I agree that all backfilling regrading, slope stability, and recountouring will conform to CCR Section 3704.

Explain the reclamation procedures you will use to meet the standard cited above.

Only grading of stockpile site is needed at the crusher site. Top soil placement and suitable recountouring to accept the vegetative establishment at the quarry site.



- ☐ Check this box if final reclaimed fill slopes, including permanent piles or dumps of mine waste rock and overburden, will not exceed 2:1 (Horizontal: Vertical). Explanation:
- ☐ Check this box if final reclaimed fill slopes, including permanent piles or dumps of mine waste rock and overburden will be : (Indicate slope ratio) which is steeper than 2:1 (Horizontal: Vertical). Attach a site-specific geologic and engineering analysis that demonstrates that the proposed final slope will have a minimum slope-stability factor or safety that is suitable for the proposed end use, and that the proposed final slopes can be successfully revegetated.  
Explanation: \_\_\_\_\_
- ✓ Please provide a geologic cross section of cut and fill slopes at locations at maximum slope height. Please identify cross section locations on the site map.
- E. ☒ Drainage, diversion structures, waterways, and erosion control – I agree that all drainage structures, waterways, and erosion control facilities will conform to CCR Section 3706. [Check Box] Explain the reclamation procedures you will use to meet the standard cited above.
- Final configuration of quarry will adequately and properly drain precipitation water. The floor of the quarry will have a 1%-4% down grade from back to front. One cross pipe may be needed to cross 7C01 to drain quarry site more effectively, this will be done in cooperation with Siskiyou County Road Department.
- ✓ Identify all drainage, diversion structures, waterways and erosion control facilities on the site map.
- F. ☐ Building, structure and equipment removal – I agree to reclaim any building, structures, and equipment areas in conformance with CCR Section 3709. [Check Box] Explain the reclamation procedures you will use to meet the standard cited above.
- No building or storage structures are planned.
- ✓ Identify on the site map the location(s) where all equipment, supplies, and other materials will be stored.
- ✓ Identify which buildings, structures and equipment will be used: (1) dismantled and removed off site; and/or (2) remain on site as consistent with the end use.
- G. ☐ Closure of surface openings – I agree to close all surface openings in accordance with CCR Section 3712 [Check Box] Explain the reclamation procedures you will use to meet the standard cited above.
- NA
- ✓ Identify all surface openings on site map.
- H. Check applicable box.
- ☒ Stream protection, including surface and groundwater. I agree streams, including surface and groundwater will be protected in accordance with CCR Section 3710. Explain the reclamation procedures you will use to meet the standard cited above.  
No disturbance of streams, riparian vegetation, or pools will be done, and road conditions will be managed so as to minimize fine sediment transportation. Only rain-water will be addressed. No rock-washing will be done and rain-water run-off water will not enter Indian Creek. Rock quarry water will be allowed to a cross-pipe and to sink into the Waddell land east of Indian Creek.
  - ☐ Check this box if the mining operation is conducted in a stream or other waterway and attach cross sections, or aerial photographs, identifying streambed elevations.  
No excavation will occur in streams and gravel skimming on land outside of stream water flow will not be done until such CA DFG 1603 permit is acquired and included as an addendum.  
✓ Changes in channel elevations and bank erosion shall be evaluated annually. Extraction quantities and annual cross sections and/or aerial photographs Should be submitted with the annual report required by PRC Section 2207.
  - ☒ Check this box if the mining operation is not conducted in a steam or other waterway.

VI MONITORING

Pursuant to CCR Section 2773(a), the success of reclamation will be monitored for three years, or until performance standards are met, provided that, during the last two years, there has been no human intervention, including, for example, irrigation, fertilization, or weeding. Remedial measures will be implemented as necessary to achieve the performance standards.

Mine Operator Kenny McCulley and land owner Jim Waddell will monitor the vegetative reclamation conditions several times annually for at least three years following their establishment to ensure that performance standards are met. Additional seeding shall be done in the event that new growth is less than adequate.

It is believed that continued monitoring will occur with the cooperation between the Waddell family and the Karuk Tribe of California for the benefit of water quality, water temperature, and general wildlife habitat.

VII STATEMENT OF RESPONSIBILITIES

I, the undersigned, hereby agree to accept full responsibility for reclamation of all mined lands as described and submitted herein and in conformance with the applicable requirements of Articles 1 and 9 (commencing with Sections 3500 et. seq., and 3700 et. seq., respectively) of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations, the Surface Mining and Reclamation Act commencing with the Section 2701 et. seq., and with any modifications requested by the administering agency as conditions of approval.

Signed this 24<sup>th</sup> day of October, 2010.  
James A. Waddell  
Notarized Signature(s) of Landowners

James A. Waddell, 1331 C. Ee Tucka Tucka Tee, Yreka, CA 96064

Signed by the following members of ownership of the Sedros/Waddell land on portions of Sections 5 & 8 of T17N, R7E, HM, MM 8.00 Indian Creek Road, Happy Camp, CA, for the use of the rock quarry on the proposed parcel of James A. Waddell by Kenny McCulley and James A. Waddell for authorization and permission by the signing people. James A. Waddell and Kenny McCulley assume all responsibility for such conduct of activities and hold these other signing people free and harmless of liability from any actions of James A. Waddell and Kenny McCulley on the Rock Quarry operations.

Joseph L. Waddell	_____	Date	_____
Vickie M. Walden	_____	Date	_____
Robert W. Waddell	_____	Date	_____
Thomas E. Waddell	_____	Date	_____
Kerry W. Waddell	_____	Date	_____

PLACE NOTARY CERTIFICATE HERE

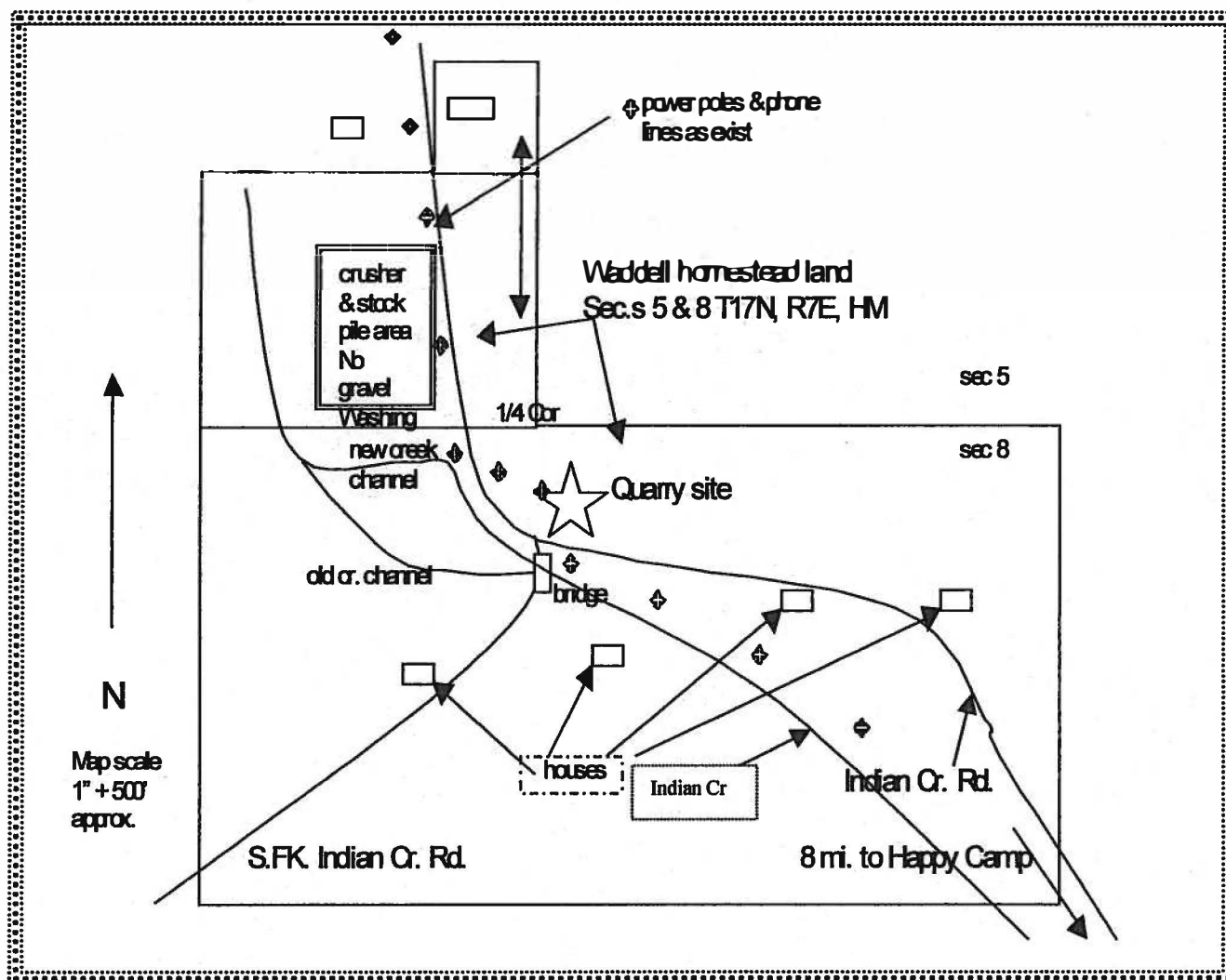
\*Signatures and Notary Certificates are included here. JW

## CHECKLIST OF ATTACHMENTS

- ☒ Map that identifies how to access the mine site from the highway.
- ☒ Topographic map of lands that will be affected by mining operations.
- ☒ Copy of the proposed Financial Assurance.
- ☒ Evidence that all owners of a possessory interest in the land to be mined have been Notified of the end land use.
- ☒ Topographic map showing the configuration of the site before and after reclamation.
- ☒ Other reports or documents. Please describe. Recent aerial photograph of the rock quarry site and its immediate vicinity.

## VICINITY MAP

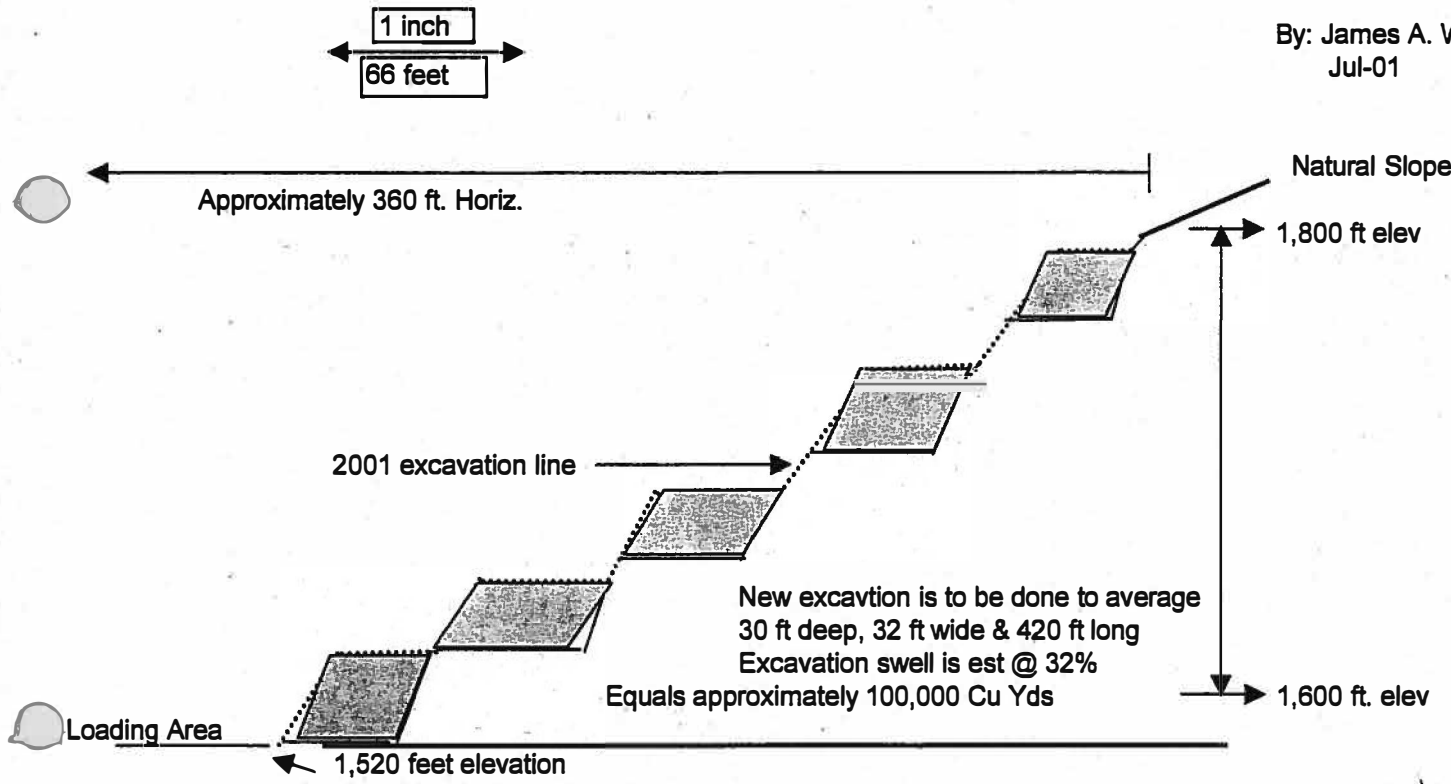
### Kenny McCulley Rock Quarry Reclamation Plan Application Happy Camp, CA 2000



**Kenny McCulley/Waddell Rock Quarry, 8000 Indian Creek Road, Rep. James A. Waddell, Owner.**  
Happy Camp, CA 96039. T17N, R7E, HM, Sec's 5 & 8. Ownership: Joseph L. Waddell, et. al. (6 owners)  
Established circa 1960 By Joe Waddell, Deceased, Now owned by Waddell Family  
One Inch Equal approximately 66 feet.

By: James A. Waddell  
Jul-01

McCulley Rec Plan  
1/3/12

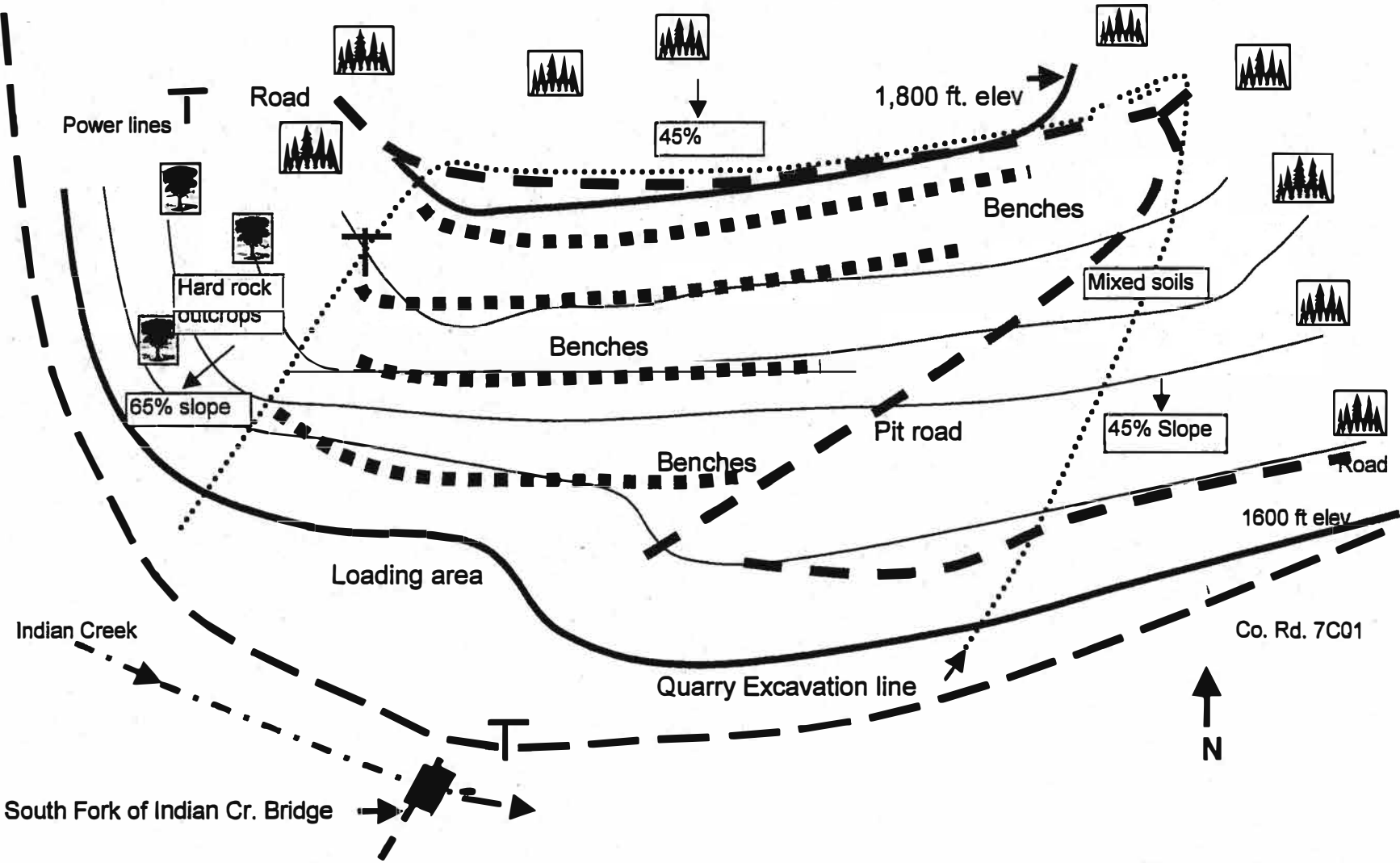


\*Loading area is level with the County Rd. 7C01, and is at Mile Marker 8.0

**Kenny McCulley/Waddell Rock Quarry, 8000 Indian Creek Road, Rep. James A. Waddell, Owner.**  
Happy Camp, CA 96039. T17N, R7E, HM, Sec's 5 & 8. Ownership: Joseph L. Waddell, et. al.  
Established circa 1960 By Joe Waddell, Deceased, Now owned by Waddell Family (6 Owners)  
One Inch Equal approximately 100 feet. Contour lines equal approximately 40 feet in elevation.

Nearby to the north is 1/4 corner between sec.s 5 & 8

Ridge Line



McCulley Rec plan  
Pg 13

**RECLAMATION PLAN AGREEMENT  
for  
(RP-01-01)**

THIS AGREEMENT, made and entered in this 9 day of ~~November~~ 2002, by and between the COUNTY OF SISKIYOU, Board of Supervisors, hereinafter called the "COUNTY", and JOSEPH WADDELL, ROBERT WADDELL, THOMAS WADDELL, KERRY WADDELL, VICKIE WALDEN AND JAMES WADDELL, whose address is 7615 FEATHER COURT, ANTELOPE, CA 95843-2444 hereinafter called the "OWNER", and MC CULLEY LOGGING CO., whose address is 8330 INDIAN CREEK ROAD, P.O. BOX 360, HAPPY CAMP, CA96039, hereinafter called the "OPERATOR".

*WITNESSETH:*

1. **OWNER/OPERATOR**, for and in consideration of the approval by the COUNTY of a Reclamation Plan (RP-01-01) for a processing/batch plant and gravel skimming operation on property known as Assessor's Parcels 009-330-160 and 009-340-290, hereby agrees, at the **OWNER/OPERATOR'S** own costs and expense, to furnish all labor, material and equipment necessary to implement and perform, within the time limits set forth by said Reclamation Plan, in a good and workmanlike manner the following work, to wit:

Conditions:

- A. All reclamation work shall be in accordance with the approved plot plan, project description, and all conditions cited herein.
- B. All mining activity shall conclude and reclamation work commence in earnest 15 years from the date of approval (October 2, 2017).
- C. All disturbed areas shall be treated as necessary to minimize fugitive dust. This requirement shall be to the satisfaction of the County Air Pollution Control Officer.
- D. Topsoil removed from the mining area shall be conserved and stockpiled, as prescribed in the Reclamation Plan.
- E. On-site fuels storage is prohibited. All equipment fueling and maintenance shall be performed by service truck.
- F. The quarry floor (material handling area) shall be graded to be lower than the adjacent county road and be back-sloped toward the quarry face to detain drainage on-site. The lower end of the pit floor (adjacent to the road) shall be left higher than the handling area, either with undisturbed base material or via use of an earthen berm, to allow stormwater runoff to pool before leaving the site. A minimum of two sets of sediment barriers shall be installed and maintained along the drainage between the pit floor and culvert under the county road to further ensure sediment is retained on-site. These efforts shall be subject to review and approval, and any modifications deemed necessary, by the Public Works and Planning Departments prior to the rainy season each year (Mitigation Measure 1).
- G. Benches shall be constructed with a minimum 20-foot width spaced at a maximum of 30-foot elevation contours. The benches shall be insloped (toward the quarry face) to retard rockslide inertia (Mitigation Measure 2).
- H. The mine operator shall observe a schedule of daily risk management including grooming of cut slopes to remove material that may be prone to sliding. Slopes shall be limited to ½:1 where stable bedrock is encountered, 2:1 elsewhere (Mitigation Measure 3).
- I. All reclamation work performed shall be subject to review and approval by the County Flood Engineer and California Department of Fish and Game. No work shall be done which impedes, redirects, or otherwise alters the natural flow of flood waters. Nor shall any reclamation activity discharge sediment or other material into surface or ground waters (Mitigation Measure 4).
- J. An encroachment permit shall be procured for any operation within the county road right-of-way. All operations shall be performed in compliance with permit conditions or limitations, including and not limited to the use of warning signage and/or flaggers.

- A copy of the permit shall be provided to the Planning Department prior to reclamation plan issuance (Mitigation Measure 5).
- K. Any activity within the riparian corridor of Indian Creek shall be subject to review and approval of the California Department of Fish and Game. The operator shall secure an agreement (Sec. 1603) prior to any such activity. A copy of the agreement shall be provided to the Planning Department (Mitigation Measure 6).
  - L. If hazardous materials, including fuels, are stored at the site in quantities greater than 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas, or if any hazardous waste is produced, the operator shall file an Hazardous Materials Business Plan with the County Health Department. The Plan shall be prepared and updated satisfactory to the Health Department (Mitigation Measure 7). Any discharge of hazardous materials is prohibited.
  - M. All activity associated with mine reclamation shall remain compliant with PRC 4290 to the satisfaction of the California Department of Forestry and Fire Protection (Mitigation Measure 8).
  - N. Heavy equipment shall not operate within 15 feet of any electrical conductors and no excavation shall occur within 25 feet of any power pole.
  - O. Prior to Reclamation Plan issuance, a National Pollution Discharge Elimination System (NDPES) General Permit shall be procured from the California Regional Water Quality Control Board.
  - P. Prior to Reclamation Permit issuance, the property owner(s) and quarry operator shall execute a Reclamation Plan Agreement with the Siskiyou County Planning Department. Reclamation Plan requirements shall include the performance requirements listed herein, mitigation measures, proof of sufficient liability insurance, and a financial surety in the amount of \$4,365.
2. The **COUNTY** shall not, nor shall any officer or employee thereof, be liable or responsible for any accident, loss or damage happening or occurring to the work specified in this Agreement prior to the completion and approval of same, nor shall the **COUNTY**, nor shall any officer or employee thereof, be liable for any persons or property injured by reason of the nature of said work, or by reason of the acts or omissions of the **OWNER**, his agents or employees, in performance of said work, but all agrees to protect and hold harmless the **COUNTY**, its officers and employees from any and all claims, demands, causes of action, liability or loss of any kind or nature because of, or arising out of, the acts or omissions of the **OWNER/OPERATOR**, his agents and employees in the performance of said work, but all of said liabilities shall be assumed by the **OWNER/OPERATOR**. The **OWNER/OPERATOR** further agrees to protect and hold harmless the **COUNTY**, its officers and employees from any and all claims, demands, causes of action, liability or loss of any kind or nature because of, or arising out of, the acts of omissions of the **OWNER/OPERATOR**, his agents and employees in the performance of said Agreement.
3. Before work is performed, pursuant to the Reclamation Plan on which this Agreement is based, the **OWNER/OPERATOR** shall obtain and maintain in full force and effect for the period covered by this contract the following types of insurance in the amounts indicated:
- (a) General Liability: \$500,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate is used, either the general aggregate limit shall apply separately to this project/location or the general limit shall be twice the required occurrence limit.
  - (b) Workers Compensation and Employers Liability: Worker's compensation limits as required by the Labor Code of the State of California and Employers liability limits of \$1,000,000 per accident.

The following additional insured endorsement must be attached to the policy and said additional insured endorsement must be provided to the **COUNTY** in addition to the Certificate of Insurance:

The **COUNTY**, its officers, employees and agents, shall be named as additional insured under the policy. The **OWNER/OPERATOR's** insurance coverage shall be primary insurance regarding the **COUNTY** and its officers, officials,

employees. Any insurance or self-insurance maintained by **COUNTY** or its officers, officials or employees shall be excess of the **OWNER/OPERATOR's** insurance and shall not contribute with **OWNER/OPERATOR's** insurance. The addition of the **COUNTY** as a named insured shall be limited to matters arising out of or connected with said processing/batch plant and gravel skimming operation.

4. In order to secure to the **COUNTY** the full and faithful performance of the reclamation pursuant to this Agreement, the **OWNER/OPERATOR** shall deposit a performance bond or other security acceptable to the **COUNTY** in the amount of \$4,365 providing for the faithful performance of the Reclamation Plan (RP-01-01) and this Agreement. Said bonds or other security shall be written by a company authorized to do business in California and acceptable to the **COUNTY**.
5. Insurance is to be placed with insurers authorized to do business in the State of California and possess at least a Best's A:X rating or be with a company acceptable to the **COUNTY**. Prior to commencing services pursuant to this Agreement, **OWNER/OPERATOR** shall furnish **COUNTY** with Certificates of Insurance and with endorsements evidencing coverage required by this Agreement. All certificates and endorsement shall be received and, at the **COUNTY's** sole discretion, approved by the **COUNTY** before any other term or condition of this Agreement is performed by **OWNER/OPERATOR**. **COUNTY** reserves the right to require complete, certified copies of all required insurance policies at any time.
6. All bonds or other security and insurance herein required to be purchased shall include, on the face thereon, a notice that any cancellation or expiration shall be specifically noted to the Siskiyou County Planning Department, attention Planning Director, P.O. Box 1085, Yreka, California 96097, at least 30 days prior to the termination date.

It is further agreed that before the **OWNER/OPERATOR** is entitled to proceed, pursuant to the entitlement, the insurance and bonds required by this entitlement and Agreement shall be deposited with the Planning Director and accepted by the Planning Director as satisfactory and in compliance with the requirements of the entitlement and this Agreement.

IN WITNESS WHEREOF, the **OWNERS** have affixed their signatures this 9 day of November, 2002.

\_\_\_\_\_  
Joseph Waddell

\_\_\_\_\_  
Thomas Waddell

\_\_\_\_\_  
Vickie Walden

\_\_\_\_\_  
Robert Waddell

Kerry W. Waddell  
Kerry Waddell

James A. Waddell  
James Waddell

IN WITNESS WHEREOF, the **OPERATORS** have fixed his signatures this 9 day of November, 2002.

\_\_\_\_\_  
Kenneth McCulley  
McCulley Logging Co.

APPROVED BY:

COUNTY OF SISKIYOU  
State of California

By: \_\_\_\_\_

Richard D. Barnum  
Planning Director

\_\_\_\_\_  
Date




employees. Any insurance or self-insurance maintained by **COUNTY** or its officers, officials or employees shall be excess of the **OWNER/OPERATOR's** insurance and shall not contribute with **OWNER/OPERATOR's** insurance. The addition of the **COUNTY** as a named insured shall be limited to matters arising out of or connected with said processing/batch plant and gravel skimming operation.

4. In order to secure to the **COUNTY** the full and faithful performance of the reclamation pursuant to this Agreement, the **OWNER/OPERATOR** shall deposit a performance bond or other security acceptable to the **COUNTY** in the amount of \$4,365 providing for the faithful performance of the Reclamation Plan (RP-01-01) and this Agreement. Said bonds or other security shall be written by a company authorized to do business in California and acceptable to the **COUNTY**.
5. Insurance is to be placed with insurers authorized to do business in the State of California and possess at least a Best's A:X rating or be with a company acceptable to the **COUNTY**. Prior to commencing services pursuant to this Agreement, **OWNER/OPERATOR** shall furnish **COUNTY** with Certificates of Insurance and with endorsements evidencing coverage required by this Agreement. All certificates and endorsement shall be received and, at the **COUNTY's** sole discretion, approved by the **COUNTY** before any other term or condition of this Agreement is performed by **OWNER/OPERATOR**. **COUNTY** reserves the right to require complete, certified copies of all required insurance policies at any time.
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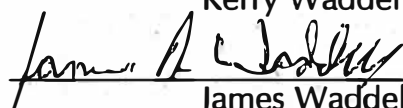
It is further agreed that before the **OWNER/OPERATOR** is entitled to proceed, pursuant to the entitlement, the insurance and bonds required by this entitlement and Agreement shall be deposited with the Planning Director and accepted by the Planning Director as satisfactory and in compliance with the requirements of the entitlement and this Agreement.

IN WITNESS WHEREOF, the **OWNERS** have affixed their signatures this 9 day of November, 2002.

\_\_\_\_\_  
Joseph Waddell

  
Robert Waddell

\_\_\_\_\_  
Thomas Waddell

\_\_\_\_\_  
Kerry Waddell  
  
James Waddell

\_\_\_\_\_  
Vickie Walden

IN WITNESS WHEREOF, the **OPERATORS** have fixed his signatures this 9 day of November, 2002.

\_\_\_\_\_  
Kenneth McCulley  
McCulley Logging Co.

APPROVED BY:

COUNTY OF SISKIYOU  
State of California

By: \_\_\_\_\_  
Richard D. Barnum  
Planning Director

\_\_\_\_\_  
Date



September 1, 2022

Bernadette Cizin  
Assistant Planner  
Siskiyou County Community Development  
806 S. Main Street, Yreka, CA 96097

Sent via email to: [bpcizin@co.siskiyou.ca.us](mailto:bpcizin@co.siskiyou.ca.us)

**PROPOSED RECLAMATION PLAN AMENDMENT  
WADDELL MINE (CA MINE ID #47-0062)**

Dear Bernadette Cizin:

The Department of Conservation's Division of Mine Reclamation (DMR) received a complete reclamation plan amendment (RPA) submittal for the proposed Waddell Mine on July 7, 2022, from Siskiyou County (County). The County is the lead agency under the Surface Mining and Reclamation Act of 1975 (SMARA; Public Resources Code [PRC] Section 2710 et seq.). The documents were submitted for the Division's review pursuant to PRC Section 2772.1.)

SMARA statutes (PRC Division 2, Chapter 9, Section 2710 et seq.) and associated regulations require that specific items be addressed or included in RPs and their amendments. As the entity with principal responsibility for approving the RPA, the County should ensure that the proposed RP meets the minimum requirements of SMARA. Prior to approving the RPA, please consider the following comments pursuant to PRC Section 2772.1(b).

**Geology and Geotechnical Considerations**  
(Refer to CCR Sections PRC 2772 and CCR 3704)

**Comment #1:** The RPA proposes a 0.5:1 maximum slope (Horizontal: Vertical) for the cut slopes (cross sections in Sheet 3). However, it lacks a supporting detailed geologic description of site geologic materials to determine whether the final high walls and quarry faces with 0.5:1 cut slopes shall have a minimum slope stability factor of safety that is suitable for the proposed end use.

According to PRC 2772 (c)(5)(D):

Bernadette Cizin

September 1, 2022

Waddell Mine (#91-47-0062)

*"The reclamation plan shall include....a reclamation plan map or maps that shall include.... Detailed geologic description of the area of the surface mining operation."*

Furthermore, CCR 3704(f) states as follows:

*"Cut slopes, including final highwalls and quarry faces, shall have a minimum slope stability factor of safety that is suitable for the proposed end use and conform with the surrounding topography and/or approved end use."*

The RPA does not provide detailed geologic description with physical properties, discontinuities, and stability of the rocks. Although the existing RP, dated October 2, 2002, refers to 0.5:1 cut slopes on "stable bedrock" (Mitigation Measures #3 of Conditions of Approval), the proposed RPA lacks a supporting detailed geologic description to support the stability of the proposed final slopes. Additionally, the proposed mined area is adjacent to the right of way along the Indian Creek Road/Grayback Road, a County Road/Forest Route and public safety concern.

The Division recommends the lead agency require the reclamation plan to include necessary tasks to fulfill the requirements under PRC 2772(c)(5)(D) and CCR 3704(f).

If you have questions regarding this letter, contact Shahnewaz (Shah) Mohammad at (916)-858-9736.

Sincerely,

DocuSigned by:

*Shahnewaz Mohammad*

5EE729B2AB274F3...

Shahnewaz Mohammad

Geologist

Engineering and Geology Unit

DocuSigned by:

*Ian Stevenson*

1DD13B2E3CD54B6...

For: Ian MacLeod

Manager

Environmental Services Unit

DocuSigned by:

*Ian Stevenson*

1DD13B2E3CD54B6...

Ian Stevenson, P.G.

Manager

Engineering and Geology Unit

DocuSigned by:

*Shahnewaz Mohammad*

5EE729B2AB274F3...

For: Claire Meehan

Environmental Scientist

Environmental Services Unit

Bernadette Cizin

September 1, 2022

Waddell Mine (#91-47-0062)

ec: Rick Dean, Siskiyou County: [rdean@co.siskiyou.ca.us](mailto:rdean@co.siskiyou.ca.us)  
Jim Hayes, Designated Agent: [hayesjjc@att.net](mailto:hayesjjc@att.net)

**From:** [Pisano, Nicholas@CALFIRE](mailto:Pisano.Nicholas@CALFIRE)  
**To:** [Dianne Johnson](mailto:Dianne.Johnson)  
**Cc:** [Dietz, Keith@CALFIRE](mailto:Dietz.Keith@CALFIRE)  
**Subject:** RE: RP0101-1M 15 DAY REVIEW PACKAGE  
**Date:** Saturday, July 9, 2022 1:32:47 PM

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Dianne,

It doesn't appear that the property is to include any structures or development. Per PRC 4290 subsection 1270.02(f) : EXEMPTION: Roads used solely for agricultural, mining, or the management and harvesting of wood products.

PRC 4290 will not apply to this project. Public Resource Code Section 4427, tools required for equipment in forest covered land will apply to any equipment being operated on site.

Thanks,

Nicholas Pisano  
CAL FIRE-SKU  
PREVENTION 2621  
530-598-2621

---

**From:** Dianne Johnson <dmjohnson@co.siskiyou.ca.us>  
**Sent:** Friday, July 8, 2022 9:15 AM  
**To:** Thomas Deany <tdeany@co.siskiyou.ca.us>; Terry E. Smith <tesmith@co.siskiyou.ca.us>; Jeremy Lipke <jlipke@co.siskiyou.ca.us>; NorthCoast <NorthCoast@Waterboards.ca.gov>; Pisano, Nicholas@CALFIRE <Nicholas.Pisano@fire.ca.gov>; Henderson, Amy@Wildlife <Amy.Henderson@wildlife.ca.gov>; Craig Kay <ckay@co.siskiyou.ca.us>; Eric Olson <eolson@co.siskiyou.ca.us>; Jeff Clausen <jclausen@co.siskiyou.ca.us>; Jennifer Taylor <jtaylor@co.siskiyou.ca.us>; Kayla Harris <kharris@co.siskiyou.ca.us>  
**Cc:** hayesjjc@att.net; hayesjjc22@att.net  
**Subject:** RP0101-1M 15 DAY REVIEW PACKAGE

**Warning:** this message is from an external user and should be treated with caution.

Good morning,

Attached is the 15 day review for application RP-01-01-1m. Please note, all responses to the application must be received by July 22, 2022.

Thank you,

*Dianne Johnson*  
Planning Permit Technician  
Siskiyou County Community Development  
806 S. Main Street, Yreka, CA 96097

**From:** [Eric Olson](#)  
**To:** [Dianne Johnson](#); [Thomas Deany](#); [Terry E. Smith](#); [Jeremy Lipke](#); [northcoast@waterboards.ca.gov](#); [Nicholas.Pisano@fire.ca.gov](#); [Henderson, Amy@Wildlife](#); [Craig Kay](#); [Jeff Clausen](#); [Jennifer Taylor](#); [Kayla Harris](#)  
**Cc:** [hayesjic@att.net](#); [hayesjic22@att.net](#)  
**Subject:** RE: RP0101-1M 15 DAY REVIEW PACKAGE  
**Date:** Thursday, July 21, 2022 3:41:19 PM

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Dianne,

The Siskiyou County Air Pollution Control District (District) responses to application RP-01-01-1m are as follows, per the information provided to date:

Surface mining and rock crushing operations located within Siskiyou County including the powered equipment used therein shall comply with applicable federal, state, and local air pollution rules and regulations.

Within the Planning Division Environmental Questionnaire provided by the applicant, Section IV, Air Quality, all questions are answered “no” regarding project air emissions. Therefore the District has insufficient information to provide precisely what shall be required for air quality compliance.

Lacking more specific information about the project the following requirements apply and may not be limited to:

- An application for a District Permit to Construct shall be submitted and provide the information necessary to determine what air pollution control equipment and methods are required for air quality regulation compliance.
- Off road diesel powered equipment shall be currently registered with the California Air Resources Board (CARB) DOORS program.
- Portable diesel powered equipment greater than 50-horsepower shall either be currently registered with CARB PERP or apply for a District Permit.
- Stationary diesel powered equipment shall apply for a District Permit.
- A Dust Control Plan shall be submitted and followed when authorized by the District.

Please contact the District if you have any questions.

Respectfully,

Eric Olson  
Air Pollution Specialist II  
Siskiyou County APCD  
Yreka, CA 96097  
530-841-4031

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**From:** Dianne Johnson <[dmjohnson@co.siskiyou.ca.us](mailto:dmjohnson@co.siskiyou.ca.us)>

**Sent:** Friday, July 8, 2022 9:15 AM

**To:** Thomas Deany <[tdeany@co.siskiyou.ca.us](mailto:tdeany@co.siskiyou.ca.us)>; Terry E. Smith <[tesmith@co.siskiyou.ca.us](mailto:tesmith@co.siskiyou.ca.us)>; Jeremy Lipke <[jlipke@co.siskiyou.ca.us](mailto:jlipke@co.siskiyou.ca.us)>; [northcoast@waterboards.ca.gov](mailto:northcoast@waterboards.ca.gov); [Nicholas.Pisano@fire.ca.gov](mailto:Nicholas.Pisano@fire.ca.gov); [Henderson, Amy@Wildlife](mailto:Henderson, Amy@Wildlife) <[Amy.Henderson@wildlife.ca.gov](mailto:Amy.Henderson@wildlife.ca.gov)>; [Craig Kay](mailto:Craig Kay) <[ckay@co.siskiyou.ca.us](mailto:ckay@co.siskiyou.ca.us)>; Eric Olson <[eolson@co.siskiyou.ca.us](mailto:eolson@co.siskiyou.ca.us)>; [Jeff Clausen](mailto:Jeff Clausen) <[jclausen@co.siskiyou.ca.us](mailto:jclausen@co.siskiyou.ca.us)>; [Jennifer Taylor](mailto:Jennifer Taylor) <[jtaylor@co.siskiyou.ca.us](mailto:jtaylor@co.siskiyou.ca.us)>; [Kayla Harris](mailto:Kayla Harris) <[kharris@co.siskiyou.ca.us](mailto:kharris@co.siskiyou.ca.us)>

**Cc:** hayesjjc@att.net; hayesjjc22@att.net  
**Subject:** RP0101-1M 15 DAY REVIEW PACKAGE

Good morning,

Attached is the 15 day review for application RP-01-01-1m. Please note, all responses to the application must be received by July 22, 2022.

Thank you,

*Dianne Johnson*

Planning Permit Technician

Siskiyou County Community Development

806 S. Main Street, Yreka, CA 96097

530-841-2148

**From:** [Dianne Johnson](#)  
**To:** [Bernadette Cizin](#)  
**Subject:** FW: Early Consultation Comments for Waddell Pit (RP-01-01-1m)  
**Date:** Wednesday, November 30, 2022 2:07:30 PM

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**From:** lacona, Erika@Wildlife <Erika.lacona@Wildlife.ca.gov>  
**Sent:** Wednesday, September 14, 2022 5:11 PM  
**To:** Dianne Johnson <dmjohnson@co.siskiyou.ca.us>  
**Subject:** Early Consultation Comments for Waddell Pit (RP-01-01-1m)

Dear Diane Johnson,

The California Department of Fish and Wildlife (Department) has reviewed the consultation request for Waddell Pit (RP-01-01-1m). As a trustee for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and their habitat. As a responsible agency, the Department administers the California Endangered Species Act (CESA) and other provisions of the Fish and Game Code (FGC) that conserve the State's fish and wildlife public trust resources. The Department offers the following comments and recommendations on this Project in our role as a trustee and responsible agency pursuant to the California Environmental Quality Act (CEQA), California Public Resources Code section 21000 et seq. The following are informal comments intended to assist the Lead Agency in making informed decisions early in the Project development and review process.

#### Biological Surveys

The proposed Project will occur in habitat suitable for a variety of special-status wildlife species therefore, the Department recommends biological surveys occur prior to any new construction or site modification to avoid impacts to natural resources that may occur on the site. A basic biological assessment would include botanical, wildlife, and habitat surveys (conducted at the appropriate time of the year) to determine whether focused or protocol-level surveys are warranted. The Department recommends all plant and wildlife species identified in the California Natural Diversity Database (CNDDDB) and other biological resource databases (U.S. Fish and Wildlife Service, California Native Plant Society, or other pertinent references) be analyzed for the potential to occur within the Project area.

The CNDDDB is a positive sighting database. It does not predict where something may be found. The Department maps occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present. The next step is to conduct surveys to document what is actually present today and submit the information on special status species to the Department and CNDDDB. All surveys should be conducted prior to approval of the Project and survey results shall be e-mailed to the Department at the [R1CEQARedding@wildlife.ca.gov](mailto:R1CEQARedding@wildlife.ca.gov).

The following should be included in the biological assessment:

1. Date/time/weather conditions during the survey(s).
2. A description of the natural environment.
3. A list of common and special status plant and wildlife species as well as habitats present onsite at the time of the survey(s).
4. Rare/local/unusual species and habitats present during the survey(s).
5. A thorough assessment of rare plants and sensitive natural communities should be



conducted following the Department's March 2018 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>).

6. If habitat is present for special status plants or wildlife, focused species-specific surveys should be conducted at the appropriate time of year and/or time of day when the species are active or otherwise identifiable. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service. Links to some survey procedures are provided on the Department's website (<https://wildlife.ca.gov/Conservation>). All surveys should be conducted prior to approval of the Project and survey results provided in the subsequent environmental document.
7. If any special-status species are found during surveys, the Department requests that CNDDDB forms be filled out online and submitted. Instructions for providing data to the CNDDDB can be found at: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>.
8. Impacts to and maintenance of wildlife corridor/movement areas and other key seasonal use areas should be fully evaluated and provided.
9. A discussion of impacts associated with increased lighting, noise, human activity, impacts of free-roaming domestic animals including dogs and cats, changes in drainage patterns, changes in water volume, velocity, quantity, and quality, soil erosion, and/or sedimentation in streams and watercourses on or near the Project site.
10. As shown in the Project application, this Project is surrounded by a high fire severity zone. A discussion on fuels management, and how it would affect biological resources, should be discussed, and analyzed.
11. Mitigation measures for adverse Project-related impacts to sensitive plants, wildlife, and habitats should be developed and thoroughly discussed. Mitigation measures should first emphasize avoidance and reduction of Project impacts. For unavoidable impacts, the feasibility of on-site habitat restoration or enhancement should be discussed. If on-site mitigation is not feasible, off-site mitigation through habitat creation, enhancement, acquisition and preservation in perpetuity should be addressed.
12. As the Project site has the potential to support aquatic, riparian, or wetland habitat, a delineation of lakes, streams, and associated riparian habitats potentially affected by the Project should be provided for agency and public review. This report should include a preliminary jurisdictional delineation including wetlands identification pursuant to the U. S. Fish and Wildlife Service wetland definition as adopted by the Department. Please note that some wetland and riparian habitats subject to the Department's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers. The jurisdictional delineation should also include mapping of ephemeral, intermittent, and perennial stream courses potentially impacted by the Project. In addition to "federally protected wetlands" (see CEQA Appendix G (IV)(c)), the Department considers impacts to any wetlands (as defined by the Department) as potentially significant.

#### Botanical Surveys

Botanical surveys should be conducted across the entire Project site during the appropriate blooming time prior to the approval of this Project. Botanical surveys should follow the Department's March 20, 2018, *Protocols for Surveying and Evaluating Impacts to Special Status*

*Native Plant Populations and Sensitive Natural Communities*, available here:

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959>. Surveys for this Project were conducted in December and February, well outside the blooming period for the special-status species identified as potentially occurring onsite.

If no special status plant species are found during the botanical survey no other measures will be required. However, if drought conditions exist, additional pre-construction surveys for special status plant species may be warranted. If special status plant species are found during the botanical surveys, the plants should be marked by a qualified biologist familiar with the species. If the area can be avoided, exclusionary fencing will be placed around the plants and no pedestrian or vehicular entry shall be allowed. Botanical survey results shall be emailed to the Department at [R1CEQARedding@wildlife.ca.gov](mailto:R1CEQARedding@wildlife.ca.gov).

### Nesting Birds

The project area is suitable for a variety of nesting birds and raptors. During construction, nesting migratory birds and raptors, if present, could be directly or indirectly impacted by construction and vegetation removal activities. Direct effects could include mortality resulting from construction equipment operating in an area containing an active nest with eggs or chicks. Indirect effects could include nest abandonment by adults in response to loud noise levels or human encroachment, or a reduction in the amount of food available to young birds due to changes in feeding behavior by adults. Implementation of nest season surveys discussed below would help to ensure that impacts to migratory birds and raptors are less than significant.

To avoid impacts to nesting birds and/or raptors protected under FGC sections 3503 and 3503.5 and the federal Migratory Bird Treaty Act, one of the following shall be implemented:

- a. Vegetation removal and other ground-disturbance activities associated with construction shall occur between September 1 and January 31, when birds are not nesting; or
- b. If vegetation removal or ground disturbance activities occur during the nesting season, a pre-construction nesting bird survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the Project area.

Surveys shall begin prior to sunrise and continue until vegetation and nests have been sufficiently observed. The survey shall consider acoustic impacts and line-of sight disturbances occurring as a result of the Project to determine a sufficient survey radius to maximize observations of nesting birds. A nesting bird survey report should be prepared and at a minimum, the report should include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.).

If an active nest is located during the preconstruction surveys, a non-disturbance buffer shall be established around the nest by a qualified biologist in consultation with the Department and U.S. Fish and Wildlife Service to comply with FGC sections 3503 and 3503.5 and the Migratory Bird Treaty Act. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists.

The nesting bird survey report shall be submitted to the Department upon completion via email to [R1CEQARedding@wildlife.ca.gov](mailto:R1CEQARedding@wildlife.ca.gov). The survey shall be conducted no more than one week prior to the

initiation of construction. If construction activities are delayed or suspended for more than one week after the pre-construction nesting bird survey, the site shall be resurveyed.

#### Indian Creek

Indian Creek traverses the western portion of the property line. To protect water quality and riparian habitat within and throughout Indian Creek, the Department recommends the placement of a no-disturbance buffer along the creek. In general, for a stream like Indian Creek, which supports special status wildlife species that are reliant on the stream ecosystem, the Department recommends a minimum 50-foot buffer. This buffer should be measures from the top of bank, or outside edge of riparian vegetation dripline, whichever is greater, and the size of the buffer increased if biological surveys indicate the need for additional protection. The no-disturbance buffer zone should be designated on the recorded Parcel Map to ensure future site improvement do not encroach into the buffer zone. No-disturbance buffers are an important tool for protecting water quality and protecting species and habitat from runoff, sedimentation, erosion and impacts from increased light and noise associated with development.

#### Lake or Streambed Alteration Agreement

Project activities that “substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake” are subject to Notification pursuant to Section 1602 et seq. of the Fish and Game Code. Notification requirements, include construction and/or replacement of stormwater features that discharge on or over the streambank and modification of associated riparian resources growing on the bank. To obtain information about the 1600 Notification process, please access our website at:

<https://www.wildlife.ca.gov/Conservation/LSA>.

#### California Endangered Species Act

Please be advised that a CESA permit must be obtained if the project has the potential to result in “take” of plants or animals listed under CESA, either during construction or over the life of the project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will result in the take of a CESA-listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required to obtain a CESA Permit.

Information on how to attain a CESA permit is available here:

<https://wildlife.ca.gov/Conservation/CESA/Permitting>.

Please e-mail with any questions. I am also available via Microsoft Teams.

Kind Regards,  
Erika

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Erika Iacona  
Environmental Scientist  
Interior Habitat Conservation Planning  
California Department of Fish and Wildlife  
601 Locust Street  
Redding, CA 96001

**SISKIYOU COUNTY COMMUNITY DEVELOPMENT DEPARTMENT  
LAND DEVELOPMENT REVIEW**

**OWNER** WADDELL PIT/HAYES & SONS INC

**FILE #** 009-340-350  
009-330-230, -240

**LOCATION** 8000 INDIAN CREEK RD **T** 17N , **R** 7E , **SEC. 5&8** **PD#** HAPPY CAMP RP-01-01-1M

**REQUIREMENTS:**

Sewage Disposal Test/Information:

- ( ) None Required: Connection to Approved Sewage System  
( ) Engineered Percolation Tests –  
Parcels # \_\_\_\_\_  
( ) Wet Weather Testing  
( ) Engineered Sewage Disposal System  
( ) Other \_\_\_\_\_

Water Supply Tests/Information:

- ( ) None Required: Connection to Approved Water System  
( ) Well Logs (Existing Wells) ( ) Well Logs for Adjoining Property  
( ) Drilled Well – Parcels # \_\_\_\_\_ ( ) Spring Source-Verification  
( ) Pump Test (Static Level) \_\_\_\_\_ Hours  
( ) Bacteriological Analysis ( ) Chemical Analysis ( ) Physical Analysis  
( ) Other \_\_\_\_\_

Project Information:

- ( ) Location Map ( ) Mark Project Area ( ) Contour Map  
( ) Food Establishment Plans ( ) Swim Pool/Spa Plans  
( ) Waste Information (Non-Sewage)  
( ) Other \_\_\_\_\_

Comments/Conditions:

Environmental Health has no objections to the proposed use permit.  
Parcel has approved area for onsite sewage disposal located outside of the mining areas.  
Provide bottled water and (1) chemical toilet and hand washing station for every (15) employees.

The storage of hazardous materials exceeding 55 gallons of a liquid, 500 pounds of solid, or 200 cubic feet of a compressed gas requires the submittal of a Hazardous Materials Business Plan. A facility may be subject to annual hazardous materials inspections and applicable laws and regulations regarding hazardous materials handling and storage. Any amount of hazardous waste generated in association with an existing or proposed business is subject to a Business Plan and approval from the County Health Department.  
The discharge of hazardous waste on-site is prohibited.

**REHS**  **DATE** 5/22/25

**ENVIRONMENTAL HEALTH ACTION**

(√) Application Accepted ( ) Application Rejected as Incomplete (see comments)

(√) Approved ( ) Recommended for Denial  
( ) Approved with conditions (see comments)

**REHS**  **DATE** 5/22/25

Date sent to Planning: