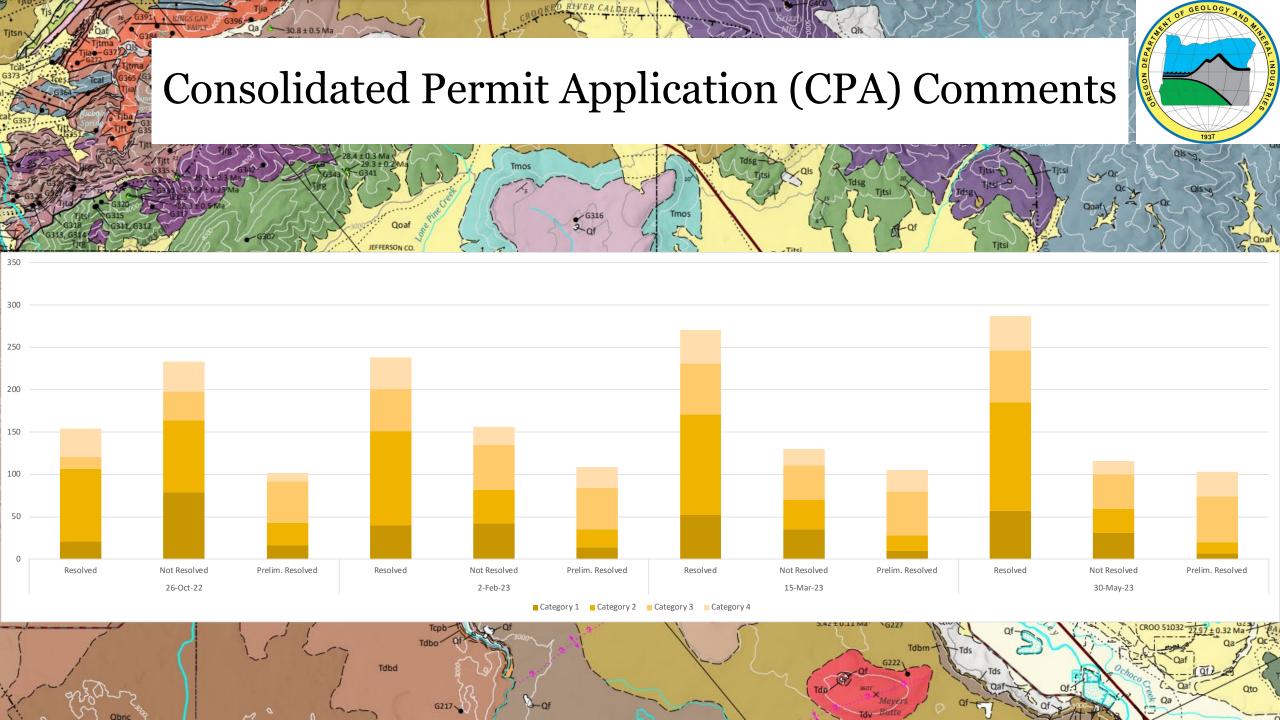


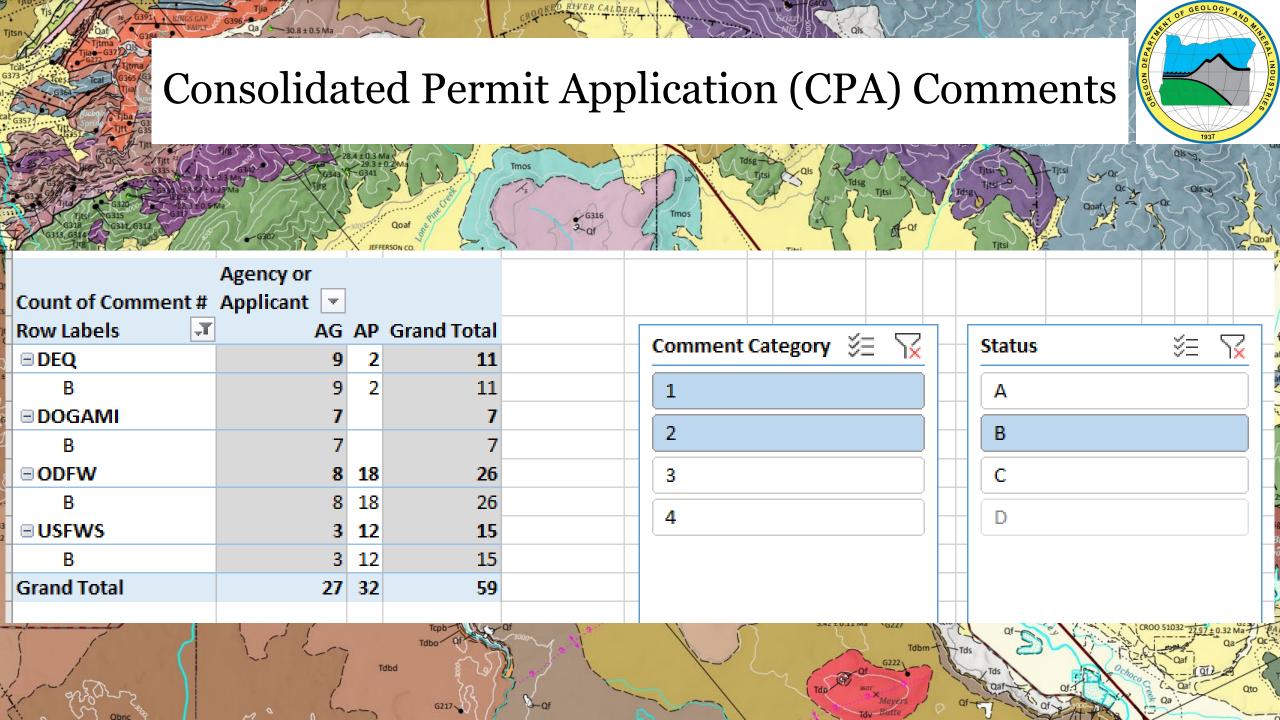


Grassy Mountain Technical Review Team (TRT) Meeting

Oregon Depart of Geology and Mineral Industries
June 01, 2023

Dayne Doucet Consolidated Mining Permit Lead

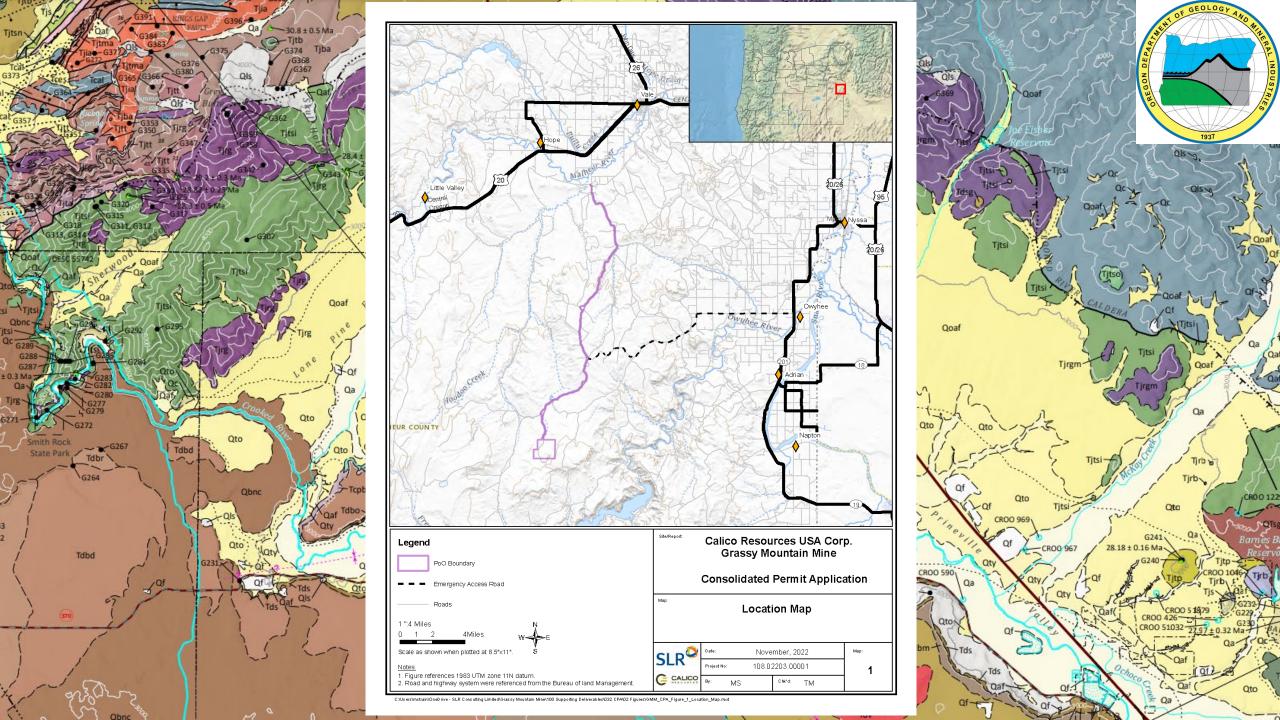


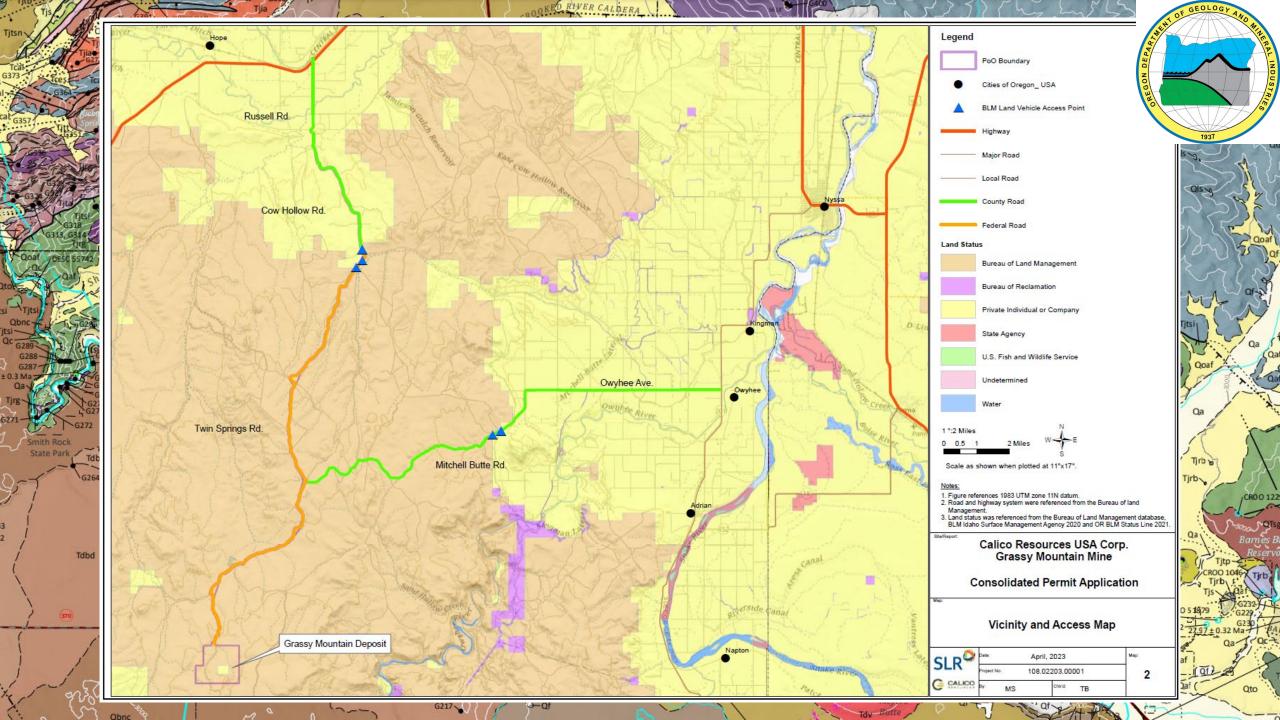






- The comments have been shared with the TRT, DOGAMI's technical consultant Stantec, and the applicant.
- Truck route
- Groundwater
- Blasting
- Wildlife
- Future Plans / Alternatives Analysis









- Total annual allocation rate for Owyhee basin is 14,204 Cubic Feet per Second (CFS).
- Calico's water right is a maximum of 2.0 CFS (0.014%).
- Anticipated impacts to groundwater from the proposed mining operation, at a maximum, will be limited to the few local springs within the study area.
- No significant effects to the free-flowing character of the Owyhee River or any of its tributary streams.
- Groundwater data will continue to be collected and monitored.





- All open ponds will be maintained in a condition that is not toxic to wildlife.
- Amphibians were surveyed according to approved protocols.
- Additional information is available in the Wildlife Protection Plan and Wildlife Mitigation Plan.
- Wildlife protection standards employed by the proposed mine will be designed to meet the objectives of zero wildlife mortality.





- It is anticipated there will be 30 days of blasting during the 2-year construction period.
- Surface blasting will be limited and conducted during the daytime, generally around mid-day.
- Blasting of the quarry is a discrete event of a few seconds and will be attenuated to 55 dB within 2 km of the source.
- The Grassy Mountain range is a natural barrier to noise.



Environmental Noise	dBA
Jet engine at 100'	140
Pain Begins	125
Pneumatic chipper at ear	120
Chain saw at 3'	110
Power mower	107
Subway train at 200'	95
Walkman on 5/10	94
Level at which sustained	80-90
exposure may result in hearing	
loss	
City Traffic	85
Telephone dial tone	80
Chamber music, in a small	75-85
auditorium	
Vacuum cleaner	75
Normal conversation	60-70
Business Office	60-65
Household refrigerator	55
Suburban area at night	40
Whisper	25
Quiet natural area with no wind	20
Threshold of hearing	0

Note: dBA = Decibels, A weighted







- Applicant does not intend to convert the underground mine operation into an open pit scenario (nor would it be approved to do so as part of the existing consolidated permit application).
- No other gold mining projects are currently proposed or anticipated.
- An additional Alternatives Analysis will be performed as part of the Environmental Evaluation.



- (1) The purpose of an environmental evaluation shall be to address specific impacts of a mining operation in order to allow affected agencies to make decisions on whether to issue or deny a permit and develop permit conditions.
- It shall provide full and fair discussion of significant environmental impacts and shall inform decision makers and the public of reasonable alternatives that would avoid or minimize adverse impacts and/or enhance the quality of the human and natural environment.
- An environmental evaluation shall focus on significant environmental issues and alternatives.



- (3) The Department shall direct staff or hire a third party contractor to prepare an environmental evaluation.
- The applicant shall pay costs of hiring a third party contractor.
- The scope of the environmental evaluation shall be determined by the technical review team following consultation with the project coordinating committee.



- The initial scope was shared with the Project Coordinating Committee (PCC) and TRT in 2018
- The scope was shared with the TRT again in 2022
- The TRT scope was modified based on comments from the TRT and finalized earlier this year.



- (4) An environmental evaluation shall be completed by Department staff or a third party contractor at least 60 days before the issuance of any draft permits.
- Upon receipt of a complete environmental evaluation, the Department shall provide public notice in accordance with OAR 632-037-0030 stating that the environmental evaluation is complete and receive written comments for a period of 14 calendar days after the notice is given.



- (5) A complete environmental evaluation shall include the following sections:
- (a) Impact Analysis;
- (b) Cumulative Impact Analysis;
- (c) Alternatives Analyses.

Alternatives Analysis OAR 632-037-0085(8)

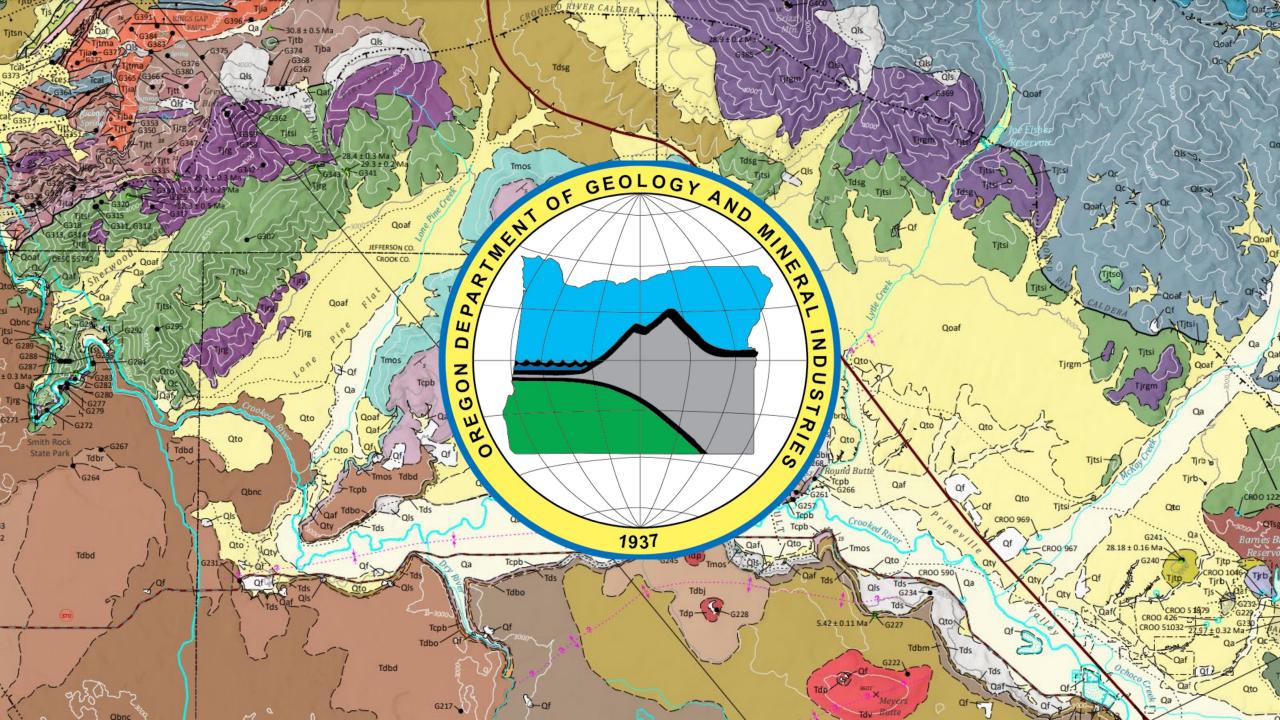


- a) An alternatives analysis shall include a review and analysis of the following:
- (A) All alternatives analyzed by the applicant or applicant's contractor in accordance with OAR 632-037-0045(6); and
- (B) Any reasonable alternatives identified by the technical review team to ensure that all alternatives within the authority of each permitting or cooperating agency are reviewed and analyzed. The alternatives identified by the technical review team may include, but not be limited to, the following:
- (i) Alternative locations for mine facilities, including heap leach pads, roads, impoundments, ponds, ore storage areas and waste disposal areas;
- (ii) Alternative designs, processes (including chemical processes), operations and scheduling for mine facilities and operations, including heap leach pads, roads, impoundments, ponds, ore storage areas and waste disposal areas;
- (iii) Alternative water supply;
- (iv) Alternative power supply; and
- (v) Alternative reclamation procedures.

Alternatives Analysis OAR 632-037-0085(8)



- b) The review and analysis required under subsection (a) of this section shall:
- (A) Explore and evaluate the environmental impacts of all reasonable alternatives, and include a brief discussion of reasons a particular alternative was eliminated by the applicant;
- (B) Include sufficient detail in the description of each alternative so that affected agencies and the public may evaluate the comparative merits of each alternative; and
- (C) Discuss the systematic procedure used to arrive at the preferred alternative, including the decision criteria used and the information considered.



Cumulative Impact Analysis OAR 632-037-0085(7)



- The minimum requirement for the geographic scope of the cumulative impact analysis is the "study area" [means those areas determined by the technical review team for which baseline data must be collected and an environmental evaluation and socioeconomic impact analysis must be developed].
- Different resources may have different study areas, so one would choose the largest of the study areas for the cumulative impact analysis. The analysis must at a minimum look at actions taken within the study area (including "reasonably foreseeable" future actions), and consider, for each category of impacted resources, the cumulative impact of those actions on the impacted resources. OAR 632-037-0085(7)(a)(C).
- The TRT may go beyond these minimum requirements. OAR 632-037-0085(7)(a) provides that the analysis "shall include but is not limited to" the minimum requirements.

Cumulative Impact Analysis OAR 632-037-0085(7)



- The TRT *must* consider "reasonably foreseeable" future mines within the study area. The TRT *may* consider reasonably foreseeable future mines outside the study area, if the TRT has a rational basis for extending the cumulative impact analysis area. For example, a future mine located outside the study area might nonetheless have cumulative impacts on wildlife depending on the habitat needs of the species.
- The TRT should also provide reasoning for what future actions are considered to be reasonably foreseeable.

