

January 16, 2009

City of Grass Valley, IMM Project
c/o Thomas Last, Planning Director
125 East Main St.
Grass Valley, CA 95945-6588

Dear Mr Last,

Following are my comments on the Idaho-Maryland Mine (IMM) Draft Environmental Impact Report. Thank you for extending the comment deadline. I have been a professional wildlife biologist in California for 19 years (more than 25 years total), with a good deal of local and regional experience with the species being considered in this document as well as with CEQA and the state and federal endangered-species acts. My resume is attached.

Comments on section 4.3 Biological Resources

Bio-1. Page 4.3-17

- a. First paragraph below bullets: Two technical reports are mentioned: ESA 2006a, a wildlife report, and ESA 2006b, a plant report. These are listed in References along with ESA 2007, a wetland delineation report. Only the wetland delineation report is provided in Appendix C – Biological Resources. The wildlife and plant reports should have been included as well.
- b. The last sentence on this page states that Table 4.3-3 provides the project's potential to impact each species listed. This would have been useful, but Table 4.3-3 actually shows impact acreages for jurisdictional wetlands. A table showing impacts to species should be added, or this reference removed.

Bio-2. Page 4.3-18, Table 4.3-2

- a. The DEIR should show consideration of all special-status species that could occur in the area or provide reasons that they are not likely to occur. Wildlife species that could occur within this geographic area and should have been considered are: hardhead, little willow flycatcher, loggerhead shrike, California spotted owl, long-eared owl, yellow warbler, olive-sided flycatcher, yellow-breasted chat, Townsend's big-eared bat, and pallid bat. All but the flycatcher are state species of special concern.
- b. Under **Potential to Occur in the Study Area** for California red-legged frog:
 - i. Potential for occurrence is probably low, not medium. There is only one known occurrence in Nevada County and the distribution of this frog in the Sierra is extremely patchy. That said, new populations continue to be discovered, which could happen at the Idaho-Maryland and New Brunswick sites. Potential for occurrence should be taken seriously but is more likely to be low than medium at present.
 - ii. Characterization of "wet meadows and ephemeral pools" in the study area as "dispersal" habitat is misleading. Dispersal is movement. Defining these areas dispersal habitat implies that animals simply use them as they move away from natal or breeding areas. In fact, if California red-legged frogs breed in or near the study area, any nearby wet areas and uplands should be considered potential for long-term occupation, not just dispersal movements. The table should be updated accordingly.
- c. Regarding habitat, the foothill yellow-legged frog actually breeds in sunny streams, although shade may be present in places and at times of the day. All the egg masses and tadpoles I have seen have

been in bright sun with little or no shade at any time of day. Notwithstanding alterations to flow from NID diversions, climate change, chytrid, and other local changes, these two creeks are classic FYLF habitats in Sierra foothills and were probably once teeming with them. Table 4.3-2 should be updated to better characterize habitat.

- d. Regarding potential presence of the foothill yellow-legged frog, individuals often move downstream into larger rivers to breed and then move back upstream into tributaries once breeding is over. South Fork Wolf Creek within the project area may not provide suitable breeding habitat, but it could definitely support juveniles and nonbreeding adults. Wolf Creek is more likely to provide suitable breeding habitat, whether inside or outside of the study area, and could certainly support nonbreeding juveniles and adults. Table 4.3-2 should be updated to more accurately reflect potential for occurrence, which is at least medium. This frog is as likely to occur in the project area as the pond turtle and is actually far more likely to occur than the red-legged frog.
- e. The table incorrectly identifies the project area as being outside the range of the state threatened California black rail. This bird is known to occur locally. A current search of the CNDDDB shows records for both the Grass Valley and Wolf quads. See also *Journal of Field Ornithology* 79(4):381–390 for details on black rail occurrence in the Sierra Nevada foothills. This bird could potentially occur in suitable wetlands on Idaho-Maryland and New Brunswick sites and Table 4.3-2 should be updated to reflect this.
- f. The California black rail is also a state fully protected species, which has implications for take and mitigation. Table 4.3-2 should be updated to reflect this additional status.
- g. Along with raptors, all migratory birds should be included in this table. They are all protected by the Migratory Bird Treaty Act and by Fish and Game Code. Surveys for all breeding birds should be included with raptor surveys, whether an incidental take permit is required or not. Several state and federal agencies currently require MBTA surveys.
- h. Pacific fisher – the table says the study area is outside the range of the Pacific fisher, but it is not according to WHR and Zeilinski et al 1995 (CFG 81(3):104-112). There may be no current records in this area and the IMM site does not provide suitable habitat, but it is within the historic range of the species and is included on the USFWS species list for the adjacent Nevada City quad. Whether it occurs here or not, the project site is technically within the accepted range. Recall that a wolverine was recently documented in Nevada County, *a species that was believed and reported to be extinct in the state*. For species protection, it is safest to be overly inclusive.

Bio-3. Page 4.3-23, Figure 4.3-6: It appears that a 2007 CNDDDB map was used in an October 2008 document. The CNDDDB is updated monthly and environmental documents are required to use current information. Use of old CNDDDB data may be why the DEIR does not recognize the potential presence of the California black rail in the study area.

Bio-4. Page 4.3-25

- a. First full paragraph, second sentence: “Habitat for this species [California red-legged frog] consists of deep (2.5-3 feet) slow moving streams and ponds ...” More accurately, this should say “Breeding habitat for this species consists of deep (2.5-3 feet) slow ...” because these frogs, either as nonbreeding juveniles or as adults during the nonbreeding season, occupy (not just disperse through) a variety of other habitats near breeding areas, including creeks, seeps, springs, wet meadows, ephemeral pools, and uplands without water.
- b. The following is taken from *Factors to Consider in Efforts to Compensate for Development Impacts on the Habitat of Declining Reptile and Amphibian Species* by Robert Stebbins, author of the Stebbins field guides and professor emeritus UC Berkeley: “Many amphibians, such as the California red-legged frog, breed at aquatic sites during the wet season, and then move to terrestrial sites during the dry season. The two areas can be over a mile apart. Because of this dual existence, and the amphibians’ use of often long-established historic migratory pathways, satisfactory local solutions to human disturbances can be very difficult or impossible to achieve.”
- c. From the same paper: “Little will be gained by efforts to compensate for losses at breeding sites unless the species’ use of the *terrestrial* environments is also understood. This requires knowledge of foraging and sheltering sites and actual routes traveled during migration.” In other words, terrestrial habitats are as important as breeding habitats.
- d. Second full paragraph. The fifth sentence refers to “suitable juvenile dispersal sites” and the sixth sentence refers to “suitable upland dispersal habitat.” See my comments just above and under Bio-2.

regarding calling these areas dispersal habitat. These two paragraphs should be reworded to better characterize red-legged frog habitats in the study area.

- Bio-5. Page 4.3-26: This paragraph should include the Migratory Bird Treaty Act and its requirements, and should refer to all migratory birds (there are few exceptions in California), not just raptors.
- Bio-6. Page 4.3-30, **Protection of Nesting Birds**: The Migratory Bird Treaty Act (MBTA) and Fish and Game Code prohibit take of all nesting birds (with few exceptions). They may not require issuance of an incidental take permit but they do require protection, and preconstruction surveys for all nesting birds should be required, not just for raptors. This paragraph should be modified to reflect these requirements.
- Bio-7. Page 4.3-37, Mitigation Measure 4.3-1b: BMPs included in the DEIR should be full and complete, not representative and general. In the absence of full and complete BMPs, performance standards (not just a generalized goal of avoiding and minimizing disturbance) should be clearly established.

The following website presents an opinion from an appellate-court decision that can be used as case law for requirements for deferral in an EIR of surveys and monitoring plans to a future time:

<http://www.badlandsjournal.com/month/2007/04> (scroll down to *Appellate Court overturns Merced Superior Court CEQA Decision: Jaxon Mine must do new EIR*). The full text of the published opinion is relevant to all aspects of the IMM DEIR, but specific to biology, note the following statements taken from section III D:

- ✓ “CEQA Guidelines, section 15126.4, subdivision (a)(1)(B), specifies as follows: ‘Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.’
- ✓ “...to allow land management plans to be developed later fails to adequately inform the public and decisionmakers, prior to project approval, of the nature and efficacy of the proposed mitigation measures that will be undertaken. (See *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307.)
- ✓ “Although a generalized goal of maintaining the integrity of vernal pool habitats is stated ... no specific criteria or standard of performance is committed to in the EIR. Nor does the EIR present several alternative mitigation measures, in which a selection of one or more of the described options is to be made after further study. Rather, after first presuming that special-status species will be present in or near the vernal pools, the EIR leaves the reader in the dark about what land management steps will be taken, or what specific criteria or performance standard will be met, if this presumption is confirmed by the later protocol studies. The success or failure of mitigation efforts in regard to impacts on such vernal pool species may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR. The fact that the future management plans would be prepared only after consultation with wildlife agencies does not cure these basic errors under CEQA, since no adequate criteria or standards are set forth.”
- ✓ “Deferral of the specifics of mitigation is permissible where the local entity commits itself to mitigation and lists the alternatives to be considered, analyzed and possibly incorporated in the mitigation plan. [Citation.] On the other hand, an agency goes too far when it simply requires a project applicant to obtain a biological report and then comply with any recommendations that may be made in the report.”
- ✓ And: “Accordingly, we conclude that the analysis of mitigation measures with respect to special-status species in the vernal pool areas was inadequate, since it improperly deferred formulation of land management aspects of such mitigation measures.”

- Bio-8. Page 4.3-37
- a. Mitigation Measure 4.3-1b: The paragraph beginning “BMPs will reduce ...” talks about determining effectiveness of BMPs through visual means, where applicable, or by actual water sampling in cases where “the verification of containment reduction or elimination (e.g., inadvertent petroleum release) is required....”
 - i. The term “above normal” should be clearly defined. In theory, “above normal” is anything beyond pre-project conditions. That could be difficult or impossible to establish visually.

- ii. Water-quality issues are already potentially significant (temperature, DO, and construction-related sedimentation), so that verification of the effectiveness of BMPs through observation of “above-normal sediment release,” which would be apparent only in the most egregious BMP failure and/or only at the moment it occurred, or water sampling only in the case of a “containment” problem, is not adequate. BMPs that did not prevent “above-normal” sediment release, which might not be detected except at the moment it occurred, and that did not contain a toxic spill will have failed.
- b. First bullet, third sentence, “Performance and adequacy of the measures shall be determined visually by site construction management and verified by the City as appropriate.”
 - i. Who specifically is “site construction management”?
 - ii. Who at the City would be qualified to verify BMPs?
 - iii. How often would performance and adequacy be determined? This needs to be quantified.
 - iv. Construction should be monitored by an independent entity, and water samples should be analyzed by an independent lab – neither should be left to construction personnel or the City.
 - v. What remedial actions would be taken if measures did not perform or were not adequate, and what would constitute failure to perform and inadequacy?
- c. Second bullet: “Dirt and debris shall be swept from paved areas” – and what will be done with it? It must be removed to reduce accumulation of silt, mud, or other debris.
- d. Third bullet: What does “as soon as possible” mean for establishment of vegetative cover? September 15th “at a minimum” could be a considerable time after disturbance.
- e. What are the specific performance criteria for BMPs?

Bio-9. Page 4.3-37, Mitigation Measure 4.3-1b: BMPS should include the following standard restrictions:

- a. Except as required for site-specific and permitted construction, maintenance, or reclamation using all required BMPs, the following activities shall be prohibited at all times within 100 feet of a seep, spring, pond, stream, marsh, or associated habitats:
 - i. vehicle access, except on existing access and maintenance roads
 - ii. dumping, stockpiling, or burying of any material
 - iii. mixing of pesticides, herbicides, or other potentially toxic chemicals
 - iv. open containers of petroleum products.
- b. All equipment shall be stored, fueled, and maintained in a vehicle-staging area at least 300 feet from any seep, spring, pond, stream, marsh, or associated habitats. Vehicles shall be inspected daily for fluid leaks before leaving the staging area.
- c. All maintenance activities shall be routed around wet areas and other sensitive resources, except as required for site-specific construction, maintenance, and reclamation, and only then as allowed by specific plans and permits with implementation of all required BMPs.
- d. All equipment used below the ordinary high-water mark shall be free of exterior contamination.
- e. Seed mixtures applied for erosion control and restoration shall be certified as free of noxious weed seed and shall be composed of native species or sterile nonnative species.
- f. Trees providing shade to water bodies shall not be trimmed, removed, or damaged in any way.
- g. Trees that must be removed shall be felled to avoid damaging riparian habitat. They shall be felled out of and away from water bodies or wet or saturated areas.
- h. There shall be no tree removal that could cause streambank erosion or result in increased water temperatures.

Bio-10. Page 4.3-38, Mitigation Measure 4.3-1c: See case-law comments in Bio-7 above.

- a. This measure should include either specific performance criteria for compensatory mitigation (not just a estimated range of mitigation ratios) or specific mitigation measures. The “... thresholds for success, monitoring and reporting requirements, and site specific plans to compensate for wetland losses” should be provided in the DEIR, not deferred to the future mitigation/monitoring plan, even if exact acreages are not yet known.
- b. Is there a local Corps-approved mitigation bank? If so, provide its location. If not, off-site mitigation should not be considered an alternative. Moving Grass Valley wetlands outside of the local area is not suitable mitigation when the goal is onsite mitigation.

Bio-11. Page 4.3-38, Impact 4.3-2: For protection of aquatic species and their habitats, the restrictions below are lately being required by the US Fish and Wildlife Service and should be incorporated into BMPs or there should be a new mitigation measure for this impact.

- a. Filter fences and mesh shall be of a tightly woven natural-fiber netting or similar material (eg, coconut coir matting) that will not entrap reptiles and amphibians.
- b. Erosion-control blankets shall not be used because of their tendency to biodegrade slowly and trap reptiles and amphibians.
- c. No monofilament plastics shall be used for erosion control near aquatic features.
- d. All fiber rolls and hay bales used for erosion control shall be certified as free of noxious weed seed.

Bio-12. Page 4.3-39

- a. Second paragraph under Water Quality. The first sentence states that a detailed analysis and discussion of water quality impacts to Wolf Creek and South Fork Wolf Creek from long-term dewatering operations is provided in Impact 4.7-1. It is actually found in Impact 4.7-2.
- b. Third paragraph under Water Quality. The first sentence states that the NPDES Baseline Monitoring Plan is detailed in Impact 4.7-1. It is not actually *detailed* anywhere, but it is mentioned in Impact 4.7-2.
- c. Farther down in this paragraph, at mention of monitoring intervals, Impact 4.7-1 should again be changed to Impact 4.7-2.

Bio-13. Page 4.3-40, Mitigation Measure 4.3-2a

- a. Why is DO measured weekly only during half the year? Would aquatic invertebrates survive lowered DO levels in the other half of the year?
- b. Is weekly adequate? Could DO plummet in the short term, adversely affect or kill aquatic life, and then return to normal within a one-week period?
- c. How will DO levels that fall below required levels be corrected? This measure should contain provisions, as does Mitigation Measure 4.3-2b, for actions that will be taken if required DO levels are not met.

Bio-14. Page 4.3-42:

- a. First sentence, top of page: Mitigation Measure 4.3-3d is for horned lizards. This mitigation measure should be changed to 4.3-2d.
- b. Mitigation Measure 4.3-2d: This measure should specifically refer to and incorporate Mitigation Measure 4.3-1b, and 4.3-1b should specifically incorporate the provisions recommended in Bio-7 through Bio-9 above.
- c. Impact 4.3-3: As discussed above, both foothill yellow-legged frog and California black rail should be added to the list of species analyzed in this section and named in this impact, and “raptors” should be renamed “migratory birds.”
- d. Final paragraph, line 7: “... the number of species with high or medium potential to occur in the study area was reduced to the six species listed in Table 4.3-3 in bold font.”
 - i. The special-status wildlife table is 4.3-2, not 4.3-3.
 - ii. In Table 4.3-2, only five species (not six) are bolded: California red-legged frog, pond turtle, horned lizard, raptors, and Pine Hill flannelbush. Valley elderberry longhorn beetle was not bolded.
 - iii. Foothill yellow-legged frog and California black rail should also be bolded and added to this list, for a total of eight species.

Bio-15. Page 4.3-43, valley elderberry longhorn beetle (VELB):

- a. The discussion of Impact 4.3-1 (starting on page 4.3-35) clearly describes that three permits will be required for impacts to jurisdictional wetlands and waters, and then Mitigation Measure 4.3-1c provides that the final decision for mitigation ratios will be presented in regulatory permits. A similar discussion needs to be provided for Impact 4.3-3, and similar caveats need to be presented in mitigation measures for state and federally listed species. Formal state and federal consultation will be required for VELB, California red-legged frog, and California black rail and it should be clear that final mitigation measures will be provided in take permits/authorizations for all three species. The DEIR should also present all possible mitigation measures, not just representative measures and encapsulations of conservation guidelines, clarifying that final mitigation will be finalized through consultation.
- b. Top of page, first sentence: “Field surveys performed on the Idaho-Maryland site ...” What kind of surveys were conducted, when, where, by whom, and what were the results?

- c. Mitigation Measure 4.3-3a. The second sentence states, “The applicant shall ensure that elderberry shrubs within 100 feet of the proposed project shall conform to the following guidelines ...” This statement should be rewritten. The applicant must ensure that the *project* (not the shrubs) conforms to guidelines for elderberry shrubs within 100 feet.
- d. As indicated in the DEIR, this project meets the criteria for permitting under the 1996 Programmatic Formal Consultation for VELB. This programmatic consultation requires appropriate mitigation that follows guidelines developed by the US Fish and Wildlife Service (most currently found in USFWS 1999a). The guidelines presented in the DEIR are, however, a modification of those found in USFWS 1999a and are incomplete in a few important respects, especially since DEIR mitigation does not clearly state that formal consultation will be required. The DEIR should present the Service’s conservation guidelines as is, or incorporate them by reference and clearly state that either they, or guidelines presented in the incidental take statement, if different, shall be followed. As discussed above regarding case law, the DEIR needs to include either specific performance criteria or all potential mitigation measures.

Bio-16. Page 4.3-44

- a. First full paragraph below c: In addition to red-legged frog and pond turtle, this paragraph should include the foothill yellow-legged frog.
- b. First full paragraph below c, last sentence: “The project would not impact habitat on the New Brunswick site.” As stated, this statement is not true for the following reasons and does not match conclusions presented earlier in section 4.3:
 - i. The New Brunswick site lies adjacent to a large pond that could potentially support breeding California red-legged frogs and pond turtles. While there may be no direct impacts to that pond, all natural habitats within 300 feet of it are considered by the US Fish and Wildlife Service to provide potential upland habitat for California red-legged frogs.
 - ii. While South Fork Wolf Creek does not provide breeding habitat for red-legged frogs and is unlikely to provide breeding habitat for yellow-legged frogs, it provides suitable nonbreeding habitat for both species. If either species breeds in the general area, this creek could be expected to be occupied by nonbreeding individuals or during the nonbreeding season.
 - iii. South Fork Wolf Creek does not provide ideal conditions for pond turtles, which require open, sunny basking habitat adjacent to deep water or other *immediate* escape cover. But it could provide temporary cover for dispersing or moving turtles. Impacts to this creek could adversely affect pond turtles.

Bio-17. Page 4.3-45, Mitigation Measure 4.3-3b

- a. This measure must make it clear that formal (section 7) consultation with the US Fish and Wildlife Service will be required and that mitigation measures presented in the incidental take statement shall be followed. The ultimate mitigation for this species could be different from what is presented in the DEIR, especially in the details.
- b. The first full sentence on this page states, “If protocol level surveys for red-legged frog are performed, and no California red-legged frogs are found during surveys, only part A of the mitigation measure below shall apply.” ESA cannot make this determination. More often than not, the US Fish and Wildlife requires further mitigation even if protocol surveys are negative. Only the US Fish and Wildlife Service can absolve the project proponent of mitigation. This statement should be eliminated from the DEIR.
- c. Part A: This part should be revised to read that surveys shall follow the 2005 guidelines *or whatever guidelines are most current*.
- d. Part B: This measure is not clear.
 - i. First, a distinction should be made between areas providing potential CRLF habitat and those not providing habitat. Construction in wet areas, in or near potential breeding habitat (with distances specified), or in potentially suitable uplands around wet areas and breeding sites constitutes potential take and would be mitigated differently than construction not in such potential habitats.
 - ii. Second, it should be clarified that exclusion fencing could also entrap CRLFs so that the fence would need to be monitored daily by an approved biologist to remove animals trapped inside.
 - iii. Third, it should be clearly stated that fencing would be designed not just in consultation with an approved biologist but according to specifications provided during consultation with FWS.

Bio-18. Page 4.3-47: On this page, avoidance/minimization/mitigation requirements for the California black rail should follow mitigation for the California horned lizard (based on the order presented in Table 4.3-2) and should include the following elements:

- a. An explicit requirement for formal (section 2081) consultation with California Department of Fish and Game
- b. Protocol surveys with a clear and explicit requirement that surveys be conducted by a *qualified* black rail biologist. Black rail habitat in the Sierra Nevada foothills can look substantially different from black rail habitat in Bay Area marshes (pers obs). A biologist not familiar with these characteristics could overlook potentially occupied habitats on the Idaho-Maryland and New Brunswick project sites.
- c. Other mitigation requirements and/or clear performance criteria, again with the caveat that final mitigation will be determined in consultation with CDFG and provided in a management take authorization.

Bio-19. Page 4.3-48, Mitigation Measure 4.3-3e:

- a. Measures should be expanded to include all migratory birds.
- b. Item 2 should explain that nondisturbance buffer zones (within which there shall be no disturbance) would be established around active nests during specific time periods. The size of buffer zones would depend on the species and would be established by CDFG for raptors and by a qualified biologist for other birds.
- c. Item 4 specifies monitoring but does not explain that disturbance within a buffer zone would be prohibited.

Comments on section 4.7 Hydrology

Bio-20. Page 4.7-29: The final sentence of Mitigation Measure 4.7-2 appears to be missing some language that could be relevant. The existing sentence says, "... and the required upgrades to the currently or design changes." What is this sentence supposed to say?

Bio-21. Page 4.7-44, Mitigation Measure 4.7-4b: The language that abutments, footings, access ways, and facilities will be placed "well outside" riparian areas is vague. How far outside? Why was this language not included in mitigation measures for Impact 4.3-1?

Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Anne Wallace". The signature is written in a cursive, flowing style.

Anne Wallace
Certified Wildlife Biologist
cc CLAIM-GV