**From:** Sally Bartindale [upacreke@yahoo.com] **Sent:** Tuesday, January 20, 2009 2:31 PM

**To:** Tom Last

**Subject:** Idaho-Maryland Mine Draft EIR Comments

Tom Last

Planning Director City of Grass Valley Grass Valley, CA 95945

Mr. Last,

Attached are my comments to the Idaho-Maryland Mine Draft EIR. If feasible, please acknowledge receipt of these comments.

#### Section 4.3

# Potential Impacts to Benthic Macroinvertebrates and other aquatic organisms

I have not found any mention of potential impacts specifically to benthic macroinvertebrates (BMI) found in South Fork Wolf Creek (SFWC) and Wolf Creek (WC) from groundwater and mine waste discharge. These discharges will cause biological, physical, and chemical changes, including (but not limited to) increased flows, change in temperature, change in dissolved oxygen, change in pH, increased turbidity, and an increase in metal concentrations. Given the increased flows and a discharge of mine wastes to SFWC and WC for 20 or more years, which will lead to physical, chemical, and biological stressors on aquatic life, potential BMI impacts should be anticipated. The Draft Environmental Impact Review (DEIR) inadequately addresses these potential BMI impacts.

I saw no mention of BMI sampling. What BMI sampling along WC and SFWC has been done to establish baseline BMI data? How many years and during what seasons has BMI sampling been done? What were the locations of the BMI sampling?

How will you determine shifts in BMI populations and locations along WC and SFWC if BMI sampling is not proposed throughout the duration of the mining project and reclamation period? How will you mitigate for detrimental shifts to the BMI populations and what will the funding source for that mitigation be? What other baseline data for aquatic species has been compiled? What other monitoring for aquatic species is proposed?

Given the potential for mine waste discharge to continue on indefinitely after the mine has ceased operations, how will you determine any detrimental shifts in BMI populations and locations along WC and SFWC caused from mine waste discharge if BMI sampling is not proposed periodically after the reclamation period?

Section 4.3 addresses only contaminant concentrations and turbidity when stating that dewatering operations would have less than significant impacts to aquatic life. What are the potential impacts to aquatic life from year-round increase in flows? What are the potential impacts to aquatic life when the year-round increase in flows cease and the channel morphology has changed?

## Potential Impacts to aquatic life after pumped dewatering ceases

I have not found any mention of potential impacts to aquatic life in SFWC and WC once mining activities stop and pumped mine dewatering ceases. Increased flows to SFWC and WC that have gone on for 20 or more years will cease. The water tables will have been drastically drawn down, and the canopy cover over the creeks will be for wider creeks, preventing proper shading to the water and aquatic life. Potential impacts from a dramatic decrease in the flows within the creeks, especially in SFWC, should be anticipated. The DEIR inadequately addresses these potential impacts to aquatic life.

What mitigation measures are anticipated for potential impacts to aquatic life (increase in stress and mortality) once mine dewatering drastically slows? What agency or agencies will determine impacts to aquatic life?

What funding mechanism has been put in place to implement potential mitigation addressing impacts to aquatic life from a decrease in normal flow once mine dewatering drastically slows and the mine has been shut down?

## Potential Impacts to riparian habitat after pumped dewatering ceases

I have not found any mention of potential impacts to riparian habitat along SFWC once mining activities stop and groundwater and mine waste discharge is no longer pumped from the mine. Potential impacts to the riparian habitat from dramatic decreases in creek flows, especially along SFWC, should be anticipated. These impacts may include stress on and mortality of streamside vegetation, a change in floodplain vegetation, a lowering of the water table, a lack of available water to riparian species from channel degradation and incising, and the introduction of invasive plant species along dry creek banks. The DEIR inadequately addresses these potential impacts to riparian habitat.

What mapping of the riparian habitat along the potentially affected portions of WC and SFWC has been accomplished? What mitigation measures will be implemented if it is found there are impacts to riparian habitat once mine dewatering drastically slows? What agency or agencies will determine potential impacts to riparian habitat and the need, if any, for mitigation

What funding mechanism has been put in place to implement potential mitigation measures that will address impacts to riparian habitat from a decrease in flows once mine dewatering drastically slows and the mine has been shut down?

## Potential Impacts to meadow habitat

I have not found any mention of potential impacts to the meadow along SFWC that is downstream of the proposed mine discharge points. The DEIR inadequately addresses potential impacts to the meadow hydrology, vegetation, and provided habitat.

What measures will be implemented to assure the hydrology within the meadow is retained? What mitigation measures will be implemented to restore the hydrology and vegetation of the meadow if it is determined that there are impacts to the meadow hydrology and /or vegetation have occurred? What agency or agencies will determine potential impacts to meadow hydrology and/or vegetation and the need, if any, for mitigation measures?

What funding mechanism has been set up to address these potential mitigation measures?

#### 4.3-2a and 2b

As mitigation measures 4.3-2a and 2b, dissolved oxygen and temperature are proposed to be monitored weekly between May 1 and October 31.

Since pH, total dissolved solids (TDS), and total suspended solids (TSS) are good indicators of potential chemical and mineral contaminants, why aren't pH, TDS, and TSS also being monitored at least on a weekly basis?

What scientific monitoring guidelines allow monitoring to be discontinued between November 1 and April 30?

Given a) the potential for chemical and mineral contaminants to enter the creeks from the mine waste discharges, b) any contaminants to go undetected until weekly monitoring is conducted and results analyzed, and c) the feasibility of installing monitoring stations, why aren't monitoring stations being proposed at the discharge points that (at minimum) will record pH, temperature, and TDS on at least an hourly basis?

If mine contaminants or a change in water chemistry are found to have caused detrimental effects to aquatic life during mining operations or the reclamation period, what mitigation measures are anticipated? What agency or agencies will determine impacts to aquatic life? What funding mechanism has been put in place to implement potential mitigation addressing impacts to aquatic from mine contaminants or a change in water chemistry?

## Section 4.3 2d

This section states that an in-stream diffuser along WC would be installed when flows are low (Aug/1 to Nov/30). Since NID ships water through WC until approximately October 15 of each year and since CDFG requires projects within the bed and banks of creeks to be completed by October 15 of the given construction year, when will installation of the diffuser take place? What BMIs to assure water quality will be implemented?

#### Section 4.7

This section states that WC's summer base flow is attributed from NID water conveyance. This statement is, I believe, incorrect. WC flows perennially above the confluence with the NID canal. It also receives perennial waters from Olympia Creek, which enter WC just below the NID canal.

## Section 4.7-4

This section addresses erosion only at the discharge location of SFWC. The potential for downstream erosion along SFWC has not been adequately addressed in the DEIR. What analysis has been given to potential downstream erosion and scouring? Has the reach from the discharge point to the confluence with WC been surveyed for areas of potential erosion?

How will increased flows change the hydrology of the downstream meadow? How will increased flows change the channel morphology of SFWC? Assessments of siltation to WC and SFWC over the life of the project have been inadequately addressed in the DEIR. Why has monitoring for siltation and embeddedness throughout the duration of the mining project and reclamation period not been included?

Sally Bartindale Resident/Homeowner Grass Valley, CA