



## Understand the Gaps

Nevada County's Final Environmental Impact Report (FEIR) on the Idaho-Maryland Mine claims there will be no "significant" or "unavoidable" impacts on local well owners. These claims are based on a flawed groundwater analysis that expert reviewers say has serious deficiencies. The FEIR includes a short list of "mitigations" and a supplemental well monitoring program, but ***well owners are getting the shaft!***

### Groundwater Analysis

*"The FEIR's groundwater analysis is deeply flawed, lacking a current and accurate baseline, which is required in order to assess the project's impacts, alternatives, and mitigation measures. In addition, it failed to define a valid threshold for determining impacts on well owners."*

Ralph Silberstein, President, Community Environmental Advocates Foundation

#### Claims

##### "Zero risk to well owners"

- No "significant" impact.
- Groundwater modeling shows risk to only 7 homes, but **30 properties will be offered NID service** as a "precautionary measure."
- Estimated water drops will be from **1 to 10 feet for 152 wells**.
- "Threshold of significance" set at a **10% drop in water levels**.

#### Gaps

##### The groundwater analysis can't be trusted

- Per expert reviewers, **threshold of significance at 10% drop in water level** is arbitrary / invalid. [1]
- **Not compliant with the California Environmental Quality Act (CEQA)**, which requires collection of current baseline data prior to evaluating impacts. [2]
  - **The computer model used only sparse patches of data from over 15 years ago** - before the drought.
  - Did not gather *current* well monitoring data for private wells in the area before finalizing the FEIR.
- We live on top of "fractured rock" geology. Per hydrology experts, groundwater modeling cannot be done with high a degree of accuracy. 100% certainty is not possible.[3]

[1] IMM FEIR Volume I, Page 2-811, Grp 21-26 (p884), Shute, Mihaly & Weinberger LLP

[2] IMM FEIR Volume I, Page 2-809,10, Grp 21-23,24 (p 882,883)

[3] Houmau Liu, hydrologist for Itasca, February 9, 2022 NID board of directors meeting

### Well Monitoring

#### Why it matters:

Well monitoring characterizes the performance of a well over time. It can be used as an early warning system if problems occur. It can also be used in a court of law to prove that impacts have occurred. Data on multiple wells can be combined and used in computer models to try to predict potential impacts of major hydrological events - such as dewatering a mine or drilling new mine tunnels – but modeling can't be done with 100% certainty.

## Well Monitoring

| Impact Group  | Claims   | Gaps   |
|---|--|--|
| <b>1</b> 30 properties on Bennett Road [4]  | <ul style="list-style-type: none"> <li>• Opt-in to <b>connect to NID</b> before mine dewatering.</li> <li>• <b>Mine pays NID bill</b> until property is sold or annexed by City of Grass Valley.</li> <li>• Mine pays to shut down well if desired.</li> </ul>   | <ul style="list-style-type: none"> <li>• Water quantity limit may be a burden for some: <b>400 gal/day</b>.</li> <li>• Water quality: “<b>NID Treated</b>” vs well water.</li> <li>• If a well is not shut down, the well owner <b>pays monthly fee for double-check valve</b> to prevent backflow. [4]</li> <li>• No property damage insurance for any NID installation damages.</li> </ul>   |
| <b>2</b> 378 properties qualify for the “supplemental” domestic well monitoring program [5] | <ul style="list-style-type: none"> <li>• “By request”. Well owners can opt in to the <b>supplemental domestic well monitoring program</b> before mine dewatering. <ul style="list-style-type: none"> <li>○ <b>Baseline data collection:</b> 12 months of quantity tracking; 1 water quality sample.</li> <li>○ The program <b>ends 5 years after mine is dewatered</b>.</li> </ul> </li> <li>• <b>Note:</b> The 378 parcels <b>exclude</b> properties in <b>NID served neighborhoods</b> - even though some of these parcels are within the “1’ drawdown isopleth” of the groundwater analysis.</li> </ul>                           | <ul style="list-style-type: none"> <li>• <b>Inadequate baseline data collection timeline</b> (only 12 months). Experts say a minimum of 3 years is needed to collect valid data. [6] E.g., due to seasonal variations.</li> <li>• <b>Insufficient water quality sampling.</b> Experts say 2x year is needed on an ongoing basis. (April &amp; October) [6]</li> <li>• <b>No protection beyond 5 years</b> if accidents happen as mine operation expands.</li> </ul> <p style="text-align: center;"><i>With no monitoring, there is no individual well history - hence NO way to legally argue that a negative impact happened - or could be the result of mine operations.</i></p>   |
| <b>3</b> Everyone other than the 30 properties [7]  | <p>Official mitigation: <b>Uses 15 monitoring wells to predict impact</b> on all domestic wells (called the Groundwater Monitoring Plan, or GMP)</p> <ul style="list-style-type: none"> <li>• <b>During/after dewatering:</b> Mine operator takes action if GMP monitoring wells show impact that meets a defined threshold.</li> <li>• Mine operator reaches out to the well owner, <b>pays costs of fixing if needed</b>. E.g., flow adjustment, drilling new well.</li> <li>• Mine operator <b>will provide temporary water if water supply is disrupted for an “appreciable” amount of time</b> (think water trucks).</li> </ul> | <ul style="list-style-type: none"> <li>• <b>No financial bond or plan for connecting to NID if wells fail.</b> <ul style="list-style-type: none"> <li>○ FEIR rejected NID request for \$14M bond.</li> <li>○ No plan for design, construction, permitting, easements.</li> <li>○ No water assessment to determine feasibility of NID service.</li> <li>○ No timeline commitments if NID service is required - typical NID projects take years to complete.</li> </ul> </li> <li>• <b>The decision to fix wells or bring in water trucks lies with the mine operator.</b> <ul style="list-style-type: none"> <li>○ No independent liaison to facilitate between mine operator, well owner, and NID. This was required the last time an operator tried to reopen the Idaho-Maryland Mine.</li> <li>○ Mine operator takes action only if their 15 monitoring wells show impact w/10% drawdown as threshold.</li> <li>○ There are no specific timeline commitments for providing temporary water or fixing wells.</li> </ul> </li> </ul> <p style="text-align: center;"><i>Homeowners with marginal wells may see impacts before the mine operator’s threshold gets triggered.</i></p> <p style="text-align: center;"><i>Property values would plummet if the only source of water is a water truck.</i></p> |

[4] IMM FEIR Volume VII-IX (Appendix D), page 34-37

[5] IMM FEIR Volume VII-IX (Appendix E), page 42

[6] IMM FEIR Volume I, Page 2-8199 (p8285), Pages 2-7658, (p7743) Steve Baker, reference email dated 3/23/23

[7] IMM FEIR Volume 1, Page 2-70 – 2-82 (p143-155)