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April 18, 2023

Nevada County Board of Supervisors
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Subject: Final EIR for the Idaho-Maryland Mine Unacceptable for Well Owners

The Wells Coalition is a group of property/well owners and residents near the Idaho-Maryland Mine. Our purpose is to protect our only source of water, our wells.

We shared our concerns with you about the mine during public comment on December 13th. This was just a few days before the Final EIR was released. All the arguments we shared with you then are all still valid – but there is more to say now.

Today, we're here to formally ask you to REJECT the FEIR and VOTE NO on the project. Huge risks are not being addressed, posing a very real threat to our local groundwater resources and property values.

The Final EIR asserts that stronger mitigations and/or financial assurances are *“not necessary because no significant impact to domestic water wells are predicted”*.

But a “prediction” is only an educated guess – NOT a certainty. And in this case, it is based on an analysis that has serious flaws.

The stakes are too high to get this wrong. The County's Economic Impact Report revealed this mine proposal is unprecedented in its proximity to so many homes. Pumping over a million gallons a day from an area with hundreds of wells is a huge risk. If “predictions” are wrong, it could cost the County, NID, and individual homeowners tens of millions of dollars – and years or decades – to connect a permanent water supply to each property.

Claiming “no significant impact” defies both science and common sense.

In Draft EIR comments, multiple hydrology experts confirmed that groundwater models in fractured bedrock like ours can NOT deliver 100% certainty. They also revealed numerous defects in the groundwater model. The Final EIR dismissed these concerns, but then – in contradictory fashion – agreed that more data is needed for validating the model.

Without current well monitoring data, the FEIR's "threshold of significance" is invalid. The FEIR lacks *current* well performance baseline data and is inadequate under CEQA. The FEIR relies only on sparse patches of data from 15 years ago.

Baseline data is needed to assess potential impacts to groundwater and well owners *prior* to determining mitigations. It is also the lynchpin in determining what threshold should be used to determine the measure of "significance". The FEIR sets that threshold at a 10% drawdown in water level, but legal experts call that number "arbitrary" and "invalid".

The FEIR's addition of a Domestic Well Monitoring Program for 378 properties is a feeble attempt to address the issue, but it's too little, too late, too short, and it's not even a mitigation.

The Final EIR states that the applicant is in compliance with the County General Plan requirement that "*provides for protection of domestic water wells from potential mining impacts*" and "*to guarantee a comparable supply of water to such homes or businesses*" but the FEIR does not demonstrate or even discuss how or if the Applicant can meet the County requirements.

Other than the proposed 30 NID connections along East Bennett Rd,

THERE IS NO MITIGATION PLAN IN THE FEIR FOR CONNECTING IMPACTED WELLS TO NID WATER SERVICE.

That means:

- No additional wells identified as needing mitigation
- No water supply assessment
- No infrastructure design plans
- No permitting, acquiring easements, or rights-of-way
- No timetable

But most importantly, No financial assurances for design construction and bringing service to impacted well owners.

NID has asked for a \$14 million dollar bond but the FEIR dismisses the request, stating

“A bond for construction of water supply infrastructure in this area is not necessary”.

This is a recipe for disaster. Today’s NID projects take many years to complete, but a failure in this project could create a large-scale crisis for NID, the County, and especially homeowners. People will scream “where’s my water?”. And a property with no permanent water supply is worthless.

The FEIR is also striking in its absence of accountability. It describes steps for fixing wells or providing temporary water, but all decisions are left solely up to the mine operator, who would take action only if the 15 monitoring wells in the official Groundwater Monitoring Plan flag an impact.

This is especially concerning because the complexity of the fractured bedrock geology in the area may mask impacts. With the impact threshold arbitrarily set at a 10% drawdown, homeowners with marginal wells may lose water long before they get a call from the mine operator.

What’s missing here is a separate oversight committee or commission authorized to make decisions. They would make determinations of impact to well owners, resolve disputes, provide professional analysis and reporting of data regarding the monitoring, assure timely execution of mitigations, and administer fines or corrective notices.

The bottom line is that well owners are being told to trust that nothing will go wrong with their water supply for 80 years based on assumptions and speculation. The Wells Coalition is asking the County to REJECT the FEIR and VOTE NO on the project.

Thank you,

Christy Hubbard (District 3) and Gary Pierazzi (District 3)
The Wells Coalition
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Attached:

1. “Understand the Gaps” - At-a-glance handout showing key FEIR claims for well owner protections vs the gaps.
2. Preview of full Wells Coalition Group Comment Letter to be delivered May 10 - with citations.



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	
<p><i>"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."</i></p> <p>Ralph Silberstein, President, Community Environmental Advocates Foundation</p>	
Claims	Gaps
<p>"Zero risk to well owners"</p> <ul style="list-style-type: none">• 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.	<p>The groundwater analysis can't be trusted</p> <ul style="list-style-type: none">• 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]<ul style="list-style-type: none">◦ The computer model used only sparse patches of data from over 15 years ago - before the drought.◦ Did not gather <i>current</i> 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]
<p>[1] IMM FEIR Volume I, Page 2-811, GIP 21-26 (p884), Shute, Mihaly & Weinberger LLP</p> <p>[2] IMM FEIR Volume I, Page 2-809,10, GIP 21-23,24 (p 882,883)</p> <p>[3] Houmau Liu, hydrologist for Itasca, February 9, 2022 NID board of directors meeting</p>	
Well Monitoring	
<p>Why it matters:</p> <p>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.</p>	

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

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

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

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

WELLS COALITION



The Wells Coalition

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May 10, 2023

Subject: Protection for Well Owners in the Final EIR for the Idaho-Maryland Mine is Unacceptable

Dear Mr. Kelley:

The Wells Coalition is a group of property/well owners and residents near the Idaho-Maryland Mine. Our purpose is to protect our only source of water, our wells.

We, the undersigned members of the Wells Coalition, respectfully ask that the County REJECT the Final Environmental Impact Report (FEIR) for the Idaho-Maryland Mine and VOTE NO on the project. Huge risks are not being addressed, making this project completely unacceptable for well owners in the area.

100% certainty is a myth.

The Final EIR asserts that stronger mitigations and/or financial assurances are *“not necessary because no significant impact to domestic water wells are predicted”*.

But a “prediction” is only an educated guess – NOT a certainty. And in this case, it is based on an analysis that has serious flaws.

The stakes are too high to get this wrong. A review of the County’s Economic Impact Report revealed this project is unprecedented in its proximity to so many homes [1]. Pumping over a million gallons a day from an area with hundreds of wells is a huge risk. If “predictions” are wrong, it could cost the County, NID, and individual homeowners tens of millions of dollars – and years or decades – to connect a permanent water supply to each property.

Claiming “no significant impact” defies both science and common sense.

The FEIR is inadequate and provides well owners with very limited assurances for at least the following three reasons:

1) Predictions of the groundwater model have limited reliability.

In DEIR comments, the Wells Coalition provided many quotes from hydrology experts confirming that groundwater models in fractured bedrock like ours can NOT deliver 100% certainty. [2] There are also numerous defects in the groundwater model [3]. Even the FEIR agrees that additional data is needed for validating the model.

2) FEIR provides no current well baseline data / Domestic well monitoring program is too little, too late, and too short.

The FEIR lacks *current* well baseline data and is inadequate under CEQA. The FEIR relies only on sparse patches of data from 15 years ago.

Baseline data is needed in order to assess potential impacts to groundwater and well owners *prior* to determining mitigations. Current well performance data is key to establishing what current conditions are – e.g., establishing water quality or determining when a well has gone down or doesn't recharge as quickly. It is also the lynchpin in determining what "threshold" should be used to determine whether an impact is "significant". Legal experts call the FEIR's choice of setting the significance threshold at a 10% drawdown in water level arbitrary and invalid. [4]

The Final EIR's addition of a Domestic Well Monitoring Program (DWMP) for 378 properties does little to ease the concerns of well owners within the designated area or beyond (it does not include properties with wells in NID-served areas). It is included as a condition of approval, but it is not mitigation.

Instead of collecting data before evaluating the project, as CEQA requires, this program takes place after the fact. It won't collect the well performance data NID or the County needs. Monitoring is scheduled for only 12 months and takes just one water quality sample, which doesn't account for seasonal variations. A minimum of three years are needed to collect valid water quantity data and water quality should be tested twice a year. The program also expires five years after dewatering, but that provides no protection for accidents that could occur in future years as the mine operation expands. [5]

3) The proposed mitigations, which are not technically valid under CEQA, are deeply flawed.

Without accurate data on groundwater conditions and data from the actual domestic wells, valid mitigations cannot be determined. What constitutes a significant impact must be based on real data, not arbitrary ideas created by the applicant. For example, even the current groundwater model shows groundwater level drops over a large area. But it is unknown how that may affect well owners.

In other words, well owners are being told to trust that nothing will go wrong with their water supply for 80 years based on assumptions and speculation. The FEIR compounds this uncertainty with a dizzying array of feeble mitigations and "peace of mind" programs stitched together with vaguely worded promises.

This statement in the FEIR Mitigation and Monitoring Program seemingly assures everyone that the applicant would mitigate potential well impacts – *"pursuant to Nevada County General Plan Policy 17.12, the project applicant shall be responsible for providing a comparable supply of water to such homes and businesses whose wells are significantly impacted"* – but the rest of the FEIR does not demonstrate how the applicant would meet these requirements.

Key concerns for members of the Wells Coalition include:

- a. **No financial bond or plan for connecting to NID if wells are damaged (beyond 30 parcels)** NID asked for a \$14M bond to cover the costs of providing service to three neighborhoods in the event of unrecoverable well damage or failure [6]. The FEIR dismissed it, insisting NID needs nothing.

At the same time, the FEIR expanded the area of potential impact with the addition of the supplemental Domestic Well Monitoring Plan (which defined the area of impact as within the 1' drawdown isopleth in the groundwater model) – suggesting that even more money is needed. There is no plan for connecting impacted wells beyond the 30 properties along Bennett Road. For example: no additional wells identified as needing mitigation; no water assessment to determine the feasibility of NID service, no plan for design, construction, permitting, or easements; and no timeline commitments if NID service is required.

This is a recipe for disaster. Even under the best of circumstances, today's NID projects take many years to complete, but a failure in this project could create a large-scale crisis. Neither the County nor NID want citizens screaming "where's my water?" for years on end. And property owners connected to unsightly water trucks will be faced with plummeting home values. A property with no water is worthless.

- b. **Promises to Fix Wells or Provide Water Trucks Won't Cut It**

One of the most significant gaps in the FEIR is the absence of accountability. Its most concrete promise about providing potable water for impacted well owners is this: *"If water supply to a property is disrupted for an appreciable amount of time (greater than a day) a temporary water supply will immediately be provided to the property using water tanks..."*. [7] These words fall short of holding the mine operator accountable for specific or reasonable timelines – for either fixing wells - or providing a permanent water supply replacement.

Even more concerning, all decisions about fixing wells or replacing water are left solely up to the mine operator, who would take action only if the 15 monitoring well locations in the official Groundwater Monitoring Plan flags an impact. It makes no commitment to use the data from the individualized measurements in the supplemental Domestic Well Monitoring Program to flag an impact. This is especially concerning because the complexity of the fractured bedrock geology in the area may mask impacts and the threshold for triggering that impact is arbitrarily set at a 10% drawdown.

For homeowners with marginal wells, much smaller drawdowns may make their wells useless long before they get a call from the mine operator. For all well owners in the area, the described approach opens the door to unending debates about whether damage to a well was caused by the mine or some other condition.

If the mine were to reopen, a separate oversight committee or commission must be required. Such a committee would be authorized to make determinations of impact to well owners, resolve disputes, provide professional analysis and reporting of data regarding the monitoring, assure timely execution of mitigations, and administer fines or corrective notices.

c. E. Bennett Road Well Owners Forced to Make Compromises

For the 30 well owners who live along E. Bennett Road, connecting to NID is a compromise compared to their current situation. These wells typically cost very little to operate each year and produce sweet water without quantity restrictions, the need to add heavy chemical treatments, or fear of microplastic contaminants.

The fact that the mine is offering to pay the bills for a new service they don't currently need has little value – and it comes with a list of compromises. The property owner will be responsible for paying for NID water usage over 400 gallons a day (gpd), which may be a burden for some. There has been no measurement of existing gpd usage at any of these 30 properties. If they don't shut down their well, they'll need to pay monthly fees for a double-check valve to prevent backflow. And if the property is annexed to Grass Valley or sold to anyone else, they'll get stuck with the full water bill - which increases the cost of maintaining their home.

Conclusion

The FEIR's assertion that there will be no significant impact to wells defies both science and common sense. The groundwater model is questionable. The FEIR provides no current well baseline data and tries to make up for it with a flimsy domestic well monitoring program that is too little, too late, and too short. And the proposed mitigations, which are not technically valid under CEQA, are deeply flawed.

This alarmingly inadequate FEIR provides no procedure, no funding guarantees, and no independent oversight of the means by which the replacement of a permanent water source could be provided in a timely fashion for well owners. Ultimately, it does not provide a mechanism by which we can concretely say whether or not a well has been impacted by mine dewatering. Without such information there is no way to hold the mine accountable for lost domestic wells and the cost of replacement water services.

Please REJECT the Final Environmental Impact Report for the Idaho-Maryland Mine and VOTE NO on the project. This project is completely unacceptable for well owners in the area.

Sincerely,

ADDRESS _____ DATE _____

NAME 1 _____ NAME 2 _____

SIGNATURE 1 _____ SIGNATURE 2 _____

[1] Community Review of the County Economic Impact Report, Property Value Use Cases, Martin Webb
<https://youtu.be/FaBrdyZBhOY>

[2] IMM FEIR Volume I, Page 2-1031, 2-1032, (pg 1104-1105)

[3] IMM FEIR Volume I, Page 2-812-813, (pg 885-886), Shute, Mihaly & Weinberger LLP

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

[5] Text of March 23, 2023, Stephen Baker (attached)

[6] IMM FEIR, Volume I, Page 2-326, (pg 402)

[7] IMM FEIR, Volume VII, Appendix E, (pg 34)

Footnote 5 - Steve Baker Email dated March 23, 2023*

From: Steve Baker <water@operationunite.co>
Sent: Thursday, March 23, 2023 11:38 AM
To: hubbard714@comcast.net
Cc: 'GARY PIERAZZI' <pierazzi@pacbell.net>
Subject: Re: Statement about Well Monitoring

Christy,

Groundwater monitoring is key to identifying, in real time, aquifer and well impairments during mine operation. Monitoring will require, at a minimum, three to five years to begin to understand the well vulnerabilities associated with domestic groundwater wells before mine dewatering begins and continue this groundwater monitoring program throughout the life of the mine plus five additional years after the mine operation has terminated. Ultimately, groundwater monitoring data will be used to identify groundwater and wells influenced by the mine operation. Criteria for making this decision and the analysis of data must be completed by an unbiased group or person not associated with Rise Gold Mine, the County and the well owners.

The above recommended monitoring is reasonable, feasible, and economic with respect to the risks and liabilities associated with developing a gold mine under domestic groundwater supplies.

1. Develop a domestic groundwater network at residential properties that the current EIR suggests and additional domestic wells according a qualitative rating based on the location, depth, geology, well completion, productive fracture depths, proximity and/or association to all projected mine workings during the life of the project, surface water and water diversion locations.
2. Complete an aquifer pumping test for quantifying the well's sustained pumping rate (before first rain of the subsequent water year (October)).
3. Collect and analyze groundwater samples in April and October before the project begins and during all mining activities thereafter (as defined by the schedule for mine working expansion and well location depth).
4. Document pre-groundwater level behavior at a high temporal resolution. Continue groundwater level monitoring during all mining activities.

The above recommendation has been developed from a ten-year domestic groundwater study completed between 2006 and 2016, a demonstration property that has incorporated this approach to their community groundwater management program and land developers in rural residential areas.

If you have questions, please contact me.

Stephen J. Baker
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* Stephen Baker also submitted the following comments on the DEIR. IMM FEIR Volume I, Page 2-8199 (p8285), Pages 2-7658, (p7743)