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October 28, 2020

U.S. Forest Service, Payette National Forest
Attn: Linda Jackson, Payette Forest Supervisor
500 North Mission Street
McCall, ID 83638

Subject: Comments on the Stibnite Gold Project Draft Environmental Impact Statement: Surface Water and Groundwater Quantity and Surface Water and Groundwater Quality

Dear Ms. Jackson,

Midas Gold Idaho, Inc. (Midas Gold) appreciates the opportunity to provide comments on the Draft Environmental Impact Statement (DEIS). Clearly, the document represents a substantial effort by many individuals to compile and convey a very large volume of information and analysis regarding the Midas Gold proposed Stibnite Gold Project (SGP). The synthesis of hundreds of documents developed from a much greater multitude of data values, statistical analyses, and modeling projections into a single draft product is a noteworthy accomplishment, and Midas Gold is pleased to have been a stakeholder in its development.

In its comments, Midas Gold wishes to respectfully offer its perspective and insight to assist in clarifying and improving content for the Final Environmental Impact Statement (FEIS). This letter offers comments on the portions of the DEIS devoted to surface water and groundwater quantity and quality in the Affected Environment (Sections 3.8 and 3.9) and to the potential Environmental Consequences of the project on surface water and groundwater quantity and quality (Sections 4.8 and 4.9), for your consideration in developing the FEIS. Our comments are summarized below, and for your convenience, comments have been provided in a tabulated format (included as Attachment A) that references each appropriate subsection heading, page number, and paragraph.

1.0 Sections 3.8 Surface Water and Groundwater Quantity and 3.9 Surface Water and Groundwater Quality – Affected Environment

We believe Sections 3.8 and 3.9 overall provide a reasonable characterization of water quality and quantity for existing surface water and groundwater conditions at the Stibnite Gold Project (SGP) site. The summary of baseline surface water and groundwater monitoring data from recent years, combined with citations to numerous agency reports and published technical papers, yields an appropriate representation of current conditions at the site. The sections point to the influence of both natural mineralization and legacy mining activities on surface water and groundwater quality. They point to

elevated levels of arsenic and antimony in groundwater and in the East Fork of the South of the Salmon River (EFSFSR) and some of its tributaries and elevated mercury in Sugar Creek, but also note that most constituents are below regulatory criteria at the site.

2.0 Section 4.8 Surface Water and Groundwater Quantity – Environmental Consequences

We believe that Section 4.8 generally portrays the five alternatives in a reasonable manner. In several places, it points to several hydrologic factors making Alternative 2 (the Modified Plan of Restoration and Operations [Modified PRO]) superior to other action alternatives, largely through the mitigative provisions proposed as part of Alternative 2. It also notes projected streamflow alterations that make Alternative 3 decidedly less attractive than other action alternatives.

One statement in Table 4.8-1 seems to raise concern about long-term recovery of the bedrock aquifer, relative to expectations for the alluvial aquifer, but we found no discussion or support for this concern in the section narrative. The alluvial and bedrock aquifer will maintain their hydraulic connectivity after mining and reclamation, and long-term recovery of the bedrock aquifer is not likely to be a concern. We suggest re-examining this matter and either discussing it more fully (i.e., supported by evidence in the document narrative or appendices) or revising the statement in the Final Environmental Impact Statement (FEIS).

3.0 Section 4.9 Surface Water and Groundwater Quality – Environmental Consequences

We believe that Section 4.9 generally provides a reasonable evaluation of surface water and groundwater conditions associated with the five alternatives. We do, however, offer the following comments on some of the content in Section 4.9.

Midas Gold provided a Water Quality Management Plan (WQMP) to support the DEIS preparation. Design criteria for the WQMP were derived from conditions specific to the Modified PRO (DEIS Alternative 2), and thus the DEIS discussion of water quality for Alternative 2 acknowledged the benefits of treatment with respect to surface water quality. We note that the WQMP states that it could be readily adapted to each of the other alternatives. Because the DEIS authors did not have quantitative projections regarding water treatment for Alternatives 1, 3, and 4, the discussions of water quality for those alternatives can be considered very conservative, because actual conditions under those alternatives would be better than stated in the DEIS when water treatment is included. The FEIS should emphasize that Midas Gold would comply with federal Clean Water Act and Idaho permitting and other regulatory requirements for any feasible alternative that it undertakes and water quality effects would be limited accordingly.

Section 4.9 makes four independent references to a “Biotic Ligand Model criterion” to assess predicted future copper levels. Currently, there are limited water quality data to inform the model, so only estimates can be made of potential criteria. We suggest the FEIS refer to Biotic Ligand Model output as “estimates of copper criteria” to avoid future conflict or confusion when sufficient data are available to calculate actual criteria.

For Alternatives 1, 3, and 4, Table 4.9-12 projects substantial increases in dissolved mercury at modeled stream nodes after closure, relative to baseline levels, but the accompanying text notes that the values in the table do not consider water treatment which would remove mercury from tailings storage facility (TSF) consolidation water prior to any discharge to surface waters. The elevated levels of dissolved mercury were also used to make a rough projection of methylmercury concentrations in the stream. Because water treatment would be provided to ensure compliance with Idaho surface water quality criteria, the values in Table 4.9-12 dramatically overstate the anticipated dissolved and methylated mercury concentrations anticipated to be present in surface waters. The discussion of Alternative 2 is more accurate in stating that it "would have no discernible effect on (methylmercury) concentrations in the mine site streams." If Table 4.9-12 is included in the FEIS, a footnote should be added indicating that the mercury levels are based on model output that do not consider water treatment that would be required to meet water quality criteria.

Section 4.9 makes more than 20 references to the Idaho Pollutant Discharge Elimination System (IPDES) permitting process to protect surface water quality but does not make any reference to the establishment of Points of Compliance under Idaho's Groundwater Rule to regulate groundwater quality. This may give readers the impression that protection of groundwater quality is not being addressed, but it is a primary component of IDEQ's role for the SGP. The FEIS should make specific reference to the Point of Compliance Process as a mechanism for ensuring groundwater management consistent with Idaho regulations.

Section 4.9 states that water quality for Alternatives 1 and 2 during mine operations would be the same but for the effects of water treatment under Alternative 2. As noted above, water treatment described in Alternative 2 could be provided for Alternative 1 (or other alternatives). But more importantly, it should be clarified that for Alternative 2, the elimination of the West End development rock storage facility (DRSF), extending the Meadow Creek diversion channel liner, and the piping of low flows in the stream diversions around the TSF and DRSFs would all contribute to better surface water quality under Alternative 2 than for Alternative 1. We suggest that this section be clarified in the FEIS.

Midas Gold understands potential impacts to fish resulting from an increase in water temperature are a concern for the SGP and for the public. We appreciate the effort undertaken in the DEIS and the breadth of the temperature analysis with respect to potential impacts on fish. We recommend some clarifications to present the analysis more clearly, better inform the reader of the context for the temperature analysis, and describe actions to mitigate and minimize potential impacts. These recommendations are: (1) including a description of the conservative assumptions in the Stream and Pit Lake Network Temperature model and of the sensitivity analyses employed in the discussion of potential effects of climate change, (2) describing measures proposed to mitigate impacts described in the WQMP, (3) comparing simulated values to temperature criteria in a manner consistent with previous agency discussions and United States Environmental Protection Agency guidance, and (4) acknowledging that temperature is one factor in evaluating suitable habitat, and that temperatures near or above certain temperature criteria should be interpreted within the full context of habitat conditions.

Section 4.9 generally characterizes projected conditions for the No Action Alternative as being equivalent to existing conditions, with little recognition of the potential water quality improvement expected to result from the removal and repurposing of legacy materials by Midas Gold under the action alternatives. We submit that the No Action Alternative would continue water quality conditions as they are now and

would not result in the water quality improvements that would occur under other action alternatives. This should be explicitly acknowledged in the FEIS.

The Cumulative Impacts subsection includes substantial discussion of potential sedimentation impacts from roads and utility corridors for each alternative in the prior subsections, but there is no mention of the reduction in sediment transport expected to result from restoration work on Blowout Creek, with the exception of a brief mention of the creation of "step pools" in Alternative 4. Blowout Creek has been documented by the United States Geological Survey as the largest sediment source in the upper EFSFSR, so actions proposed by Midas Gold to reduce that sediment loading should be considered in parallel with the potential for sediment loading from road and utility crossings.

The Summary of Section 4.9 points to potential sources of water quality degradation as a result of the SGP. However, there is only one brief mention of the anticipated water quality improvement from removing and repurposing legacy mine wastes. Removal of legacy materials is referenced a number of times in the individual discussions of each alternative, but this information is not carried through to the Summary. The Summary also does not mention the reduction in sediment transport expected to result from restoration actions on Blowout Creek. These omissions may result in some readers missing the information on water quality improvements because they only review the Summary section. We suggest that the FEIS should include reference to both positive and negative potential effects in its Summary sections and should consider all aspects of water quality.

4.0 Water Rights Comments

In addition to the comments above, we identified content related to water rights issues in Chapters 3 and 4 that we believe warrants comments from Midas Gold. Our intent in providing these comments is to provide insight and clarification regarding water rights for consideration in preparing the Final EIS.

The text in Chapters 3 and 4 of the DEIS extends the Wild and Scenic River designation of the Salmon River to the EFSFSR without basis and with the implication that water rights and water use in the EFSFSR will be evaluated against the wild and scenic character. Consideration of “Wild and Scenic eligibility values" for the EFSFSR is not an appropriate consideration by the Idaho Department of Water Resources (IDWR) under state law when evaluating a water right application. The water rights discussion in Chapter 4 of the DEIS would benefit from clarifying language to more accurately describe the anticipated water right applications and associated impacts, existing minimum streamflow water rights and the Wild and Scenic River water rights, and the IDWR administrative procedures. We suggest that these clarifications be made in the FEIS.

The DEIS language partitions the water right application by water source, therefore attributing specific diversion rates to groundwater and surface water. However, the anticipated industrial use water right seeks authorization for total diversion rate of 9.1 cubic feet per second (cfs) from the combination of all designated groundwater points of diversions and surface water runoff, and storage of up to 500 acre feet of surface water runoff. The industrial use water right application should be described accordingly in the FEIS.

Additionally, the DEIS Chapter 4 Section 4.8.2.1.3.1 text quotes a surface water (contact water) diversion of 3.47 cfs as the cause of a 12 percent baseflow reduction in the EFSFSR below Sugar Creek. This assertion is not substantiated in that (1) the water right application will seek authorization to divert 9.1 cfs from a combination of all sources (rather than specifically 3.47 cfs of contact water), and (2) contact water is primarily generated during snowmelt, high-flow periods that do not coincide with baseflow conditions. Because contact water is available primarily during high-flow periods, the impact to surface water baseflow due to diversion or storage of contact water will be negligible. We suggest that this section be clarified in the FEIS to be consistent with Midas Gold's anticipated water rights application.

Additionally, the discussion of minimum streamflows in DEIS Chapter 3 and Chapter 4 would benefit from more specific detail and clarity. The subordination of minimum streamflow water rights on the EFSFSR, the South Fork Salmon River, and the Salmon River to future DCMI (Domestic, Commercial, Municipal, and Industrial) uses is a condition affecting Midas Gold's anticipated industrial water right application. In the current DEIS language, the EFSFSR minimum streamflow water right, 77-14190, is described such that this water right asserts a subordination to future water rights. While this water right does assert certain limitations on the system, Midas Gold's anticipated industrial use water right enjoys the benefit of non-subordination. This is information that should be more clearly distinguished in all discussion of minimum streamflow water rights in the FEIS.

Further, DEIS Chapter 4 text suggests that if injury to existing water rights is anticipated during the IDWR analysis the water right application will be denied. This assertion does not consider that, in instance of existing water right injury, mitigation can be provided to prevent injury. Indeed, water storage is subordinate to the federal reserved water rights in the Salmon River and, in this situation, Midas Gold is planning to mitigate for this use. This planned mitigation should be clarified in the FEIS and considered in response to DEIS comments received on this topic.

Thank you for considering Midas Gold's comments. Please contact me if you any questions.

Sincerely,
MIDAS GOLD IDAHO, INC.

Alan Haslam
Vice President – Permitting

Enclosures:
Attachment A: Stibnite Gold Project DEIS Surface and Groundwater Quantity (Sections 3.8 and 4.8) and Surface and Groundwater Quality (Sections 3.9 and 4.9) Comments Compilation Table

Attachment A

Attachment A-1: Stibnite Gold Project DEIS Surface and Groundwater Quantity (Sections 3.8 and 4.8) Comments Compilation Table

Comment Number	Page # or Global	Section	Paragraph (count from top of page)	Commenter Initials	Relevant DEIS Text Excerpt (if applicable)	Comment
1	3.8-1	3.8.1.1.1	3	MG	"The water quantity analysis area encompasses the 12-digit Hydrologic Unit Codes or sub-watersheds that overlap the proposed mine site. The mine site is near the upper end of the East Fork South Fork Salmon River (EFSFSR) within two sub-watersheds: Headwaters EFSFSR and Sugar Creek."	Text should reference that Hydrologic Unit Codes are defined by the USGS (and NRCS) and provide the 12-digit HUC numbers for the 2 watersheds. Recommended text: "The water quantity analysis area encompasses the 12-digit Hydrologic Unit Codes (HUC) or sub-watersheds that overlap the proposed mine site (USGS and NRCS, 2013). The mine site is near the upper end of the East Fork South Fork Salmon River (EFSFSR) within two sub-watersheds: Headwaters EFSFSR (HUC 170602080201) and Sugar Creek (HUC 170602080202)." Reference: U.S. Geological Survey and U.S. Department of Agriculture, Natural Resources Conservation Service, 2013, Federal Standards and Procedures for the National Watershed Boundary Dataset (WBD) (4 ed.): Techniques and Methods 11–A3, 63 p., https://pubs.usgs.gov/tm/11/a3/.
2	3.8-5	3.8.2.1	1	MG	The relevant instream flow rights and "detailed administration" are primarily established and delineated in the Snake River Basin Adjudication. Settlement stipulation is referenced and discussed in Section 3.8.3.3 Water Rights.	**Proposed change:** "The relevant instream flow rights are set forth in a Partial Decree in the Snake River Basin Adjudication. The Partial Decree is referenced and discussed in Section 3.8.3.3 Water Rights." **Reason for proposed change:** The operative document memorializing the relevant federal instream water rights for the Salmon River is contained in a partial decree entered by the court in the Snake River Basin Adjudication.
3	3.8-6	3.8.3	3	MG	"Hydrologic conditions are dominated by seasonal patterns of snow accumulation and snowmelt. Throughout the winter, snow accumulates and then melts as temperatures rise in spring and early summer. The majority of snowmelt contributes to surface runoff, and to a lesser extent infiltrates into the subsurface, or is taken up by vegetation."	These sentences do not include the processes of sublimation of snow nor evaporation of water. Recommended text: "Hydrologic conditions are dominated by seasonal patterns of snow accumulation and snowmelt. Throughout the winter, snow accumulates (subject to loss to direct sublimation) and then melts as temperatures rise in spring and early summer. The majority of snowmelt contributes to surface runoff, and to a lesser extent infiltrates into the subsurface, evaporates or is taken up (transpired) by vegetation."
4	3.8-8	3.8.3.1.1	1	MG	Historic waterworks from the 1940s and 1950s	The waterworks should be referred to as historical rather than historic
5	3.8-9	3.8.3.1.1	4	MG	Hennessy Creek also has a historic water diversionn just above the county road…	The waterworks should be referred to as historical rather than historic
6	3.8-12	3.8.3.1.1.1	1	MG	These estimates assume that groundwater flow across the analysis area boundaries and groundwater losses via evapotranspiration are negligible	The basin yield analysis used to estimate groundwater recharge does account for evapotranspiration and does not assume this loss is negligible. Suggest this be indicated as such .
7	3.8-26	3.8.3.2.4	2	MG	A more comprehensive test on the Gestrin well ws conducted in December 2013.	The information presented here should be included in Section 3.8.3.2.1, as it provides additional supportive data for estimates of alluvial hydraulic conductivity
8	3.8-32	3.8.3.3	1	MG	Water Right 77-14190 is subordinate to all future domestic, commercial, municipal, and industrial uses and future non-domestic, commercial, municipal, and industrial development up to 8.2 cfs.	**Proposed change**: "Water Right No. 77-14190 is subordinate to all future domestic, commercial, municipal and industrial ("DCMI") uses and future non-DCMI uses of up to 8.2 cfs." **Reason for proposed change**: Revise for clarity. Same suggested wording when describing Future DCMI and non-DCMI uses for Water Right No. 77-14174 but substitute "8.2 cfs" with "20.6 cfs".
9	3.8-32	3.8.3.3	1	MG	Further, IDWR would consider the effect of additional water rights on the Wild and Scenic eligibility values of the EFSFSR.	**Proposed change**: Delete this sentence. **Reason for proposed change**: This statement seems to imply the EFSFSR is a candidate for Wild and Scenic River status without basis. This sentence should be deleted because the consideration of "Wild and Scenic eligibility values" for the EFSFSR is not an appropriate consideration by IDWR under state law when evaluating a water right application. IDWR does consider whether a water right application conflicts with the local public interest when considering a water right application. See Idaho Code Section 42-203A(5).
10	3.8-32	3.8.3.3	2	MG	The minimum in-stream flow rates provided by the water rights range from a low of 1,200 cfs for the period of September 1 to September 15 to 9,450 cfs for the period of June 1 to June 15. The total diversion rate is 13,600 cfs.	**Proposed change:** "The minimum in-stream flows provided by the water rights range from a low of 1200 cfs for the period of September 1 to September 15 to 9,450 cfs for the period of June 1 to June 15 when stream flows in the Salmon River are less than 13, 600 cfs." **Reason for proposed change:** The description of the federal reserved water rights in the Salmon River (Water Right Nos. 75-13316 and 77-11941) should be clarified to be more accurate. As written the statement is inaccurate.
11	3.8-33	3.8.3.3	1	MG	They also are subordinated to other beneficial use rights (with some caveats) such as domestic use, irrigation, and stock watering.	**Proposed change**: "They are also subordinated to other water rights (with some exceptions) such as domestic use, stock watering and municipal use as well as future water rights in the amount of 150 cfs when Salmon River flows are less than 1,280 cfs and an additional 225 cfs of future water rights when Salmon River flows is greater than 1,280 cfs." **Reason for proposed change**: Revise to more accurately describe the range water rights subject to the subordination provisions.
12	4.8-46	4.8.2.1.3.1	2	MG	Preliminary hydrologic modeling indicates that an estimated additional 2.39 cfs and 1,730 acre-feet of groundwater rights would need to be secured to support ore processing during the life of the SGP (approximately 15 years of ore processing).	**Proposed change**: "Preliminary hydrologic modeling indicates that an average of 2.39 cfs (1,730 acre-feet annually) of groundwater would need to be secured to support ore processing during the life of the SGP (approximately 15 years of ore processing)." **Reason for Proposed Change:** This statement confuses anticipated water needs with water rights. Although the DEIS text excerpt reiterates text from the PRO, the proposed change more accurately describes the anticipated water right application.

Attachment A-1: Stibnite Gold Project DEIS Surface and Groundwater Quantity (Sections 3.8 and 4.8) Comments Compilation Table

Comment Number	Page # or Global	Section	Paragraph (count from top of page)	Commenter Initials	Relevant DEIS Text Excerpt (if applicable)	Comment
13	4.8-46	4.8.2.1.3.1	3	MG	Midas Gold plans to apply for a permit seeking a maximum diversion rate of approximately 5.63 cfs from groundwater sources to support mining and ore processing. This maximum diversion rate would be to maintain ore processing operations during prolonged severe drought and withdrawal of the full 5.63 cfs would be expected to be uncommon and limited in duration. Additionally, Midas Gold plans to submit an application to divert 3.47 cfs of surface (contact) water and store 500 acre-feet. Therefore, applications for permits to appropriate/divert up to 9.1 cfs of groundwater and diffuse runoff (i.e., contact water), to store up to 500 acre-feet of diffuse runoff for industrial use, and to divert the 500 acre-feet of stored water to industrial use would be submitted.	**Proposed Change:** "Applications for permits to appropriate/divert up to 9.1 cfs of groundwater and diffuse runoff (i.e., contact water), to store up to 500 acre-feet of diffuse runoff for industrial use, and to divert the 500 acre-feet of stored water to industrial use would be submitted." **Reason for Proposed Change:** This Section does not accurately describe Midas Gold's proposed water right application for industrial uses. The application which will be filed with IDWR in the fall of 2020, will seek a total diversion rate of 9.1 cfs from all designated groundwater points of diversions, surface water runoff and from storage of water. Midas does not intend to limit diversions from specific sources, but instead will seek an industrial water right permit authorizing up to 9.1 cfs from all sources in combination. The estimates of maximum diversion rates from ground water and surface water runoff described in this section will not be delineated in the water right application. Diversion from all designated points of diversion will be dependent upon the weather and the stage of mining.
14	4.8-46	4.8.2.1.3.1	3	MG	The applications would include a mitigation plan to protect existing instream water rights on the South Fork Salmon River and the Salmon River.	**Proposed change**: "The application will include a mitigation plan to protect the minimum streamflow water rights 75-13316 and 77-11941 on the Salmon River at the Shoup gage. Instream flow mitigation is not required on the South Fork Salmon River because Midas Gold's proposed water rights are covered by the minimum streamflow water right subordination clauses." **Reason for Proposed Change:** This sentence is not accurate. A mitigation plan will only be submitted to protect instream flow rights in the Salmon River (Water Right Nos. 75-13316 and 77-11941). A mitigation plan will not be submitted for instream water rights on the South Fork Salmon River because Midas Gold's water rights are covered by the subordination provisions.
15	4.8-46	4.8.2.1.3.1	3	MG	This maximum diversion rate would be to maintain ore processing operations during prolonged severe drought and withdrawal of the dull 5.63 cfs would be expected to be uncommon and limited in duration.	Please clarify or correct use of the term "dull" in this sentence.
16	4.8-47	4.8.2.1.3.1	4, 5, 6	MG	After a water right application has been filed, IDWR would perform an analysis to determine if the application would infringe on any existing downstream water rights, or if it would detract from the wild and scenic values of the EFSFSR and instream flows of water rights on the South Fork Salmon River and the Salmon River. Instream rights on the South Fork Salmon River are subordinate to 20.6 cfs; maximum diversions proposed by Midas Gold would be 9.1 cfs. Minimum instream flow in the Salmon River water rights is 1,200 cfs, over 60 miles downstream from the SGP area. IDWR would be responsible for determining the impacts of the water right application. It should be noted that no water right with a junior priority date can deplete the water needed to maintain the minimum streamflow water right on the EFSFSR (Water Right 77-14190), unless allowed as a condition of approval of the proposed junior water right. All the existing water rights at the mine site predate the priority date of April 1, 2005 associated with Water Right 77-14190. Any new water rights permits would have a junior priority date, but the minimum stream right (77-14190) on the EFSFSR is subordinate to all future domestic, commercial, municipal, and industrial uses, and up to 8.2 cfs of new non- domestic, commercial, municipal, and industrial uses.	**Proposed Change:** "After a water right application has been filed, IDWR performs an analysis to determine if the application would injure downstream water rights on the EFSFSR, South Fork Salmon River, and Salmon River, including instream water rights. Any new water rights permits would have a junior priority date however IDWR would determine during this analysis if Water Right Nos. 77-14190 and 77-14174 (State of Idaho minimum flow rights in the EFSFSR and the South Fork of the Salmon River) are subordinated to Midas Gold's application. Water Right No. 77-14190 is subordinate to all future DCMI uses and up to 8.2 cfs for non-DCMI uses and Water Right No. 77-14174 is subordinate to all future DCMI uses and for up to 20.6 cfs for non-DCMI uses (Section 3.8.3.3); maximum diversion proposed by Midas Gold would be 9.1 cfs. Similarly, IDWR would determine if Water Right Nos. 75-13316 and 77-11941 (federal minimum flow rights) are subordinated to Midas Gold's application. Water Right Nos. Right Nos. 75-13316 and 77-11941 protect instream flows in the Salmon River at a range of flows over the period of a year (Section 3.8.3.3). Depending upon flows in the Salmon River certain future water rights obtain subordination protection under these rights. If IDWR determines that Midas Gold's application is not covered by these subordinated provisions and would otherwise injure the instream flow rights, IDWR would require a mitigation plan to offset any injury. In addition, IDWR evaluates whether an application meets other criteria specified under Idaho Code Section 42-203A." **Reason for Proposed Change:** (1) As originally written the first sentence implies that there is a Wild and Scenic water right on the EFSFSR. There is not. The only Wild and Scenic Right is on the Salmon River. (2) The discussion would benefit from specific statements for accuracy and clarity. (3) Describe instream flow subordinations correctly. (4) There would not necessarily be a specific condition on the junior water right.
17	4.8-47	4.8.2.1.3.1	7	MG	Midas Gold proposes to request the additional 2.39 cfs and 1,730 acre-feet groundwater right for mining activities, and the additional 0.34 cfs and 10 acre-feet for potable water supply over the present water right. Midas Gold also plans to apply for a permit seeking a maximum diversion rate of approximately 5.63 cfs from groundwater sources to maintain ore processing operations during prolonged severe drought. Such peak withdrawals would be uncommon and limited in duration.	**Proposed change:** "Midas gold proposes to request additional water rights for industrial and potable purposes." **Reason for proposed change:** As previously noted, The description of Midas Gold's water right application is not accurate. Midas Gold proposes to apply for a total diversion rate of 9.1 cfs for industrial uses with points of diversion from groundwater wells, surface runoff and from storage. The text confuses water needs with water rights. The actual numerical values of the water rights that will be sought do not matter for the purpose of the paragraph.
18	4.8-48	4.8.2.1.3.1	1	MG	The greatest concern regarding downstream water rights would be in times of drought, when groundwater resources are reduced, which is when Midas Gold proposes in the water right application to increase diversions from the local groundwater systems.	**Proposed change:** "The greatest concern regarding downstream water rights would be in times of drought, when surface water resources are reduced." **Reason for proposed change:** Surface water flows will determine impact to downstream water right holders and groundwater variation due to drought is not quantified.
19	4.8-48	4.8.2.1.3.1	2	MG	As part of the water rights application process, IDWR would perform an analysis to determine if additional groundwater withdrawals associated with the new water rights would infringe on state and federal downstream water rights; specifically, the instream flow right on the EFSFSR, the South Fork Salmon River, and the Salmon River. If IDWR concludes that the new water right would not infringe on downstream water rights, including the wild and scenic nature of the EFSFSR, the South Fork Salmon River, and the Salmon River, IDWR would grant the water right. If, however, IDWR concludes that it may infringe on downstream water rights, the application would be denied. If the agency approves the water right, then IDWR has concluded that there is no impact on downstream water rights.	**Proposed Change**: "As part of the water right application process, IDWR would perform an analysis to determine if additional groundwater withdrawals associated with the new water rights would injure downstream water rights, including state and federal instream flow rights in the EFSFSR, the South Fork Salmon River and the Salmon River. If IDWR concludes that the new water right would not injure instream flow rights and all other criteria have been met, IDWR would issue the water right. If IDWR were to conclude that that Midas Gold's application would injure downstream minimum flow rights, IDWR would require mitigation to avoid injury." **Reason for proposed change**: As originally written the first sentence implies that there is a Wild and Scenic water right on the EFSFSR and the statement implies automatic denial of the water if injury to existing water rights is anticipated. Only the Salmon River has a Wild and Scenic Right, associated the Wild and Scenic status to the EFSFSR and the South Fork Salmon River is misleading. In the event that injury to an existing water right is anticipated by the Midas Gold water right application, the Department can condition the water right to mitigate the injury. The anticipated water right application to be submitted by Midas Gold is either cover by subordination clauses of the minimum streamflow water rights or Midas Gold is anticipating to provide mitigation.

Comment Number	Page # or Global	Section	Paragraph (count from top of page)	Commenter Initials	Relevant DEIS Text Excerpt (if applicable)	Comment
20	4.8-48	4.8.2.1.3.1	3	MG	Base flows in the EFSFSR below Sugar Creek are approximately 17 cfs, and 60 cfs in Johnson Creek. The maximum diversion rate under existing surface water rights is 0.58 cfs, which is approximately 3.4 percent of the base flow in the EFSFSR and 0.8 percent of the combined flows of the EFSFSR and Johnson Creek. Current Midas Gold surface water right diversions are negligible compared to the combined EFSFSR and Johnson Creek flows and would not impact downstream consumptive water rights. Midas Gold also plans to apply for a water right to divert an additional 3.47 cfs of surface (contact) water and to store up to 500 acre-feet for industrial use. Storage of water is not covered under the subordinations of federal water rights 77-11941 and 75-13316 and may require mitigation. During mine operations, the additional diversion of 3.47 cfs would decrease flows in the EFSFSR below Sugar Creek by an average of 12 percent during the seasonal low flow period (Section 4.8.2.1.1.1, Changes in Stream Flow Characteristics).	**Proposed change:** "Current Midas Gold surface water right diversions are negligible compared to the EFSFSR and Johnson Creek baseflows. Base flows in the EFSFSR below Sugar Creek are approximately 17 cfs, and 60 cfs in Johnson Creek. The maximum diversion rate under existing surface water rights is 0.58 cfs, which is approximately 3.4 percent of the base flow in the EFSFSR and 0.8 percent of the combined flows of the EFSFSR and Johnson Creek. Midas Gold's water right application is expected to seek 9.1 cfs total diversion for industrial use and storage of 500 acre-feet. Contact water storage and diversion is a component of this total diversion and storage. Contact water generation primarily occurs during peak flows and storage volume and diversion rate to storage is negligible during high flow periods. It is possible that contact water storage and diversion would occur during low flow periods at much lower quantities than high flow. Midas Gold anticipates to provide mitigation for water storage and diversion rate to storage as storage of water is not covered under the subordinations of federal water rights 77-11941 and 75-13316 and may require mitigation." **Reason for proposed change:** Midas Gold does not plan on applying for a water right to divert 3.47 cfs of surface contact water. The water right application will seek a maximum diversion rate of 9.1 cfs from a combination of ground water wells, surface runoff and storage. Also the statement that surface runoff diversions would decrease flows in the EFSFSR by an average of 12 percent during the seasonal low flow period is not accurate. Surface runoff diversions would almost always occur during the seasonal high flow period. It is possible that some surface runoff may occur during a rain event during the low flow period but such diversions would be minor and would certainly not reach 3.47 cfs.
21	4.8-48	4.8.2.1.3.1	3	MG	If IDWR determines that this reduction would not impact downstream water rights, they would approve the water rights application. If they find that the additional withdrawals would significantly impact downstream water rights, they would reject the application.	**Proposed change:** "If IDWR determines that additional withdrawals to storage would injure protected instream flows in the Salmon River, IDWR would condition the water right to avoid injury which would typically include a requirement that the applicant submit a mitigation plan." **Reason for proposed change:** Statement should be reworded be more specific and increase accuracy of IDWR procedures.
22	4.8-66	4.8.5.1.1	1	MG	However, the SGP would irreversibly alter the mine site by the development of the TSF, by eliminating the existing Yellow Pine pit lake (and reconstructing the EFSFSR through its present location), and creating three lakes in the Hangar Flats, West End, and Midnight area pits. The degree of irreversible effects would be lower under Alternative 2 due to backfill of the Midnight area pit.	Negatively phrased. Add to the end "The reconstruction of the EFSFSR would permanently improve surface water transport." Reason: Reconstruction of the EFSFSR is presented as a negative
23	4.8-69	4.8.7	Table 4.8-1 Alternative 1 description	MG	However, there is less confidence about overall long-term recovery of the bedrock aquifer.	There is no discussion in Chapter 4.8 as to why this would be the case. The bedrock and alluvial aquifer systems are in hydraulic communication, are recharged by the same source (e.g., precipitation), and will be in equilibrium with the same hydrogeologic system. It is not apparent why there would be any less certainty in water level recovery in the bedrock aquifer than in the alluvial aquifer. Suggest that the source of this uncertainty be detailed or that text be changed such that uncertainty in recovery of bedrock water levels is no different than for alluvial water levels.
24	4.8-70	4.8.7	Table 4.8-1, pg. 4.8-70, Column 4 (Alternative 1), Row 4	MG	An additional 2.39 cfs and 1,730 acre-feet of groundwater rights needed to support ore processing. An additional 0.34 cfs and 10 acre-feet of groundwater rights needed for potable water supply. During drought conditions, temporary seasonal withdrawal of up to 5.63 cfs from groundwater. An additional water right for 3.47 cfs diversion of surface would be needed.	**Proposed Change:** "An average groundwater supply of 2.39 cfs (1,730 acre-feet per year) is needed to support ore processing. An additional 0.34 cfs and 10 acre-feet of groundwater rights needed for potable water supply. A new water right for 9.1 cfs of combined groundwater and surface water (contact) water, including up to 500 acre feet of contact water storage, will be sought for industrial purposes including ore processing. Water rights for domestic use will be sought to meet the additional domestic demand." **Reason for proposed change:** Revise description of Water Rights to more accurately describe Midas Gold's Water Right application and clarify difference between supply and water rights. Midas Gold proposes to divert a total of 9.1 cfs from groundwater, surface runoff and from storage.

Attachment A-2: Stibnite Gold Project DEIS Surface and Groundwater Quality (Sections 3.9 and 4.9) Comments Compilation Table

Comment Number	Page # or Global	Section	Paragraph (count from top of page)	Commenter Initials	Relevant DEIS Text Excerpt (if applicable)	Comment
1	3.9-14	3.9.2.2.2	5	MG	The Idaho Ground Water Quality Rule (IDAPA 2011) establishes minimum requirements for the protection of groundwater by setting standards and beneficial uses and categorizing aquifers to be protected at different levels. The protection levels in IDAPA 58.01.11, summarized in Table 3.9-2, include both primary and secondary numerical groundwater quality standards promulgated by IDEQ to protect human health and the environment. These standards apply to in situ groundwater, as well as water that infiltrates to groundwater through artificial recharge such as the rapid infiltration basins planned for the SGP (see Section 2.3.5.9, Surface Water and Groundwater Management, Groundwater Management, Rapid Infiltration Basins). After groundwater or artificial recharge through the rapid infiltration basins reaches surface water, the surface water quality standards shown in Table 3.9-2 would apply.	Reference should be made to the natural background provision in Idaho's Groundwater Rule in this paragraph. Insert prior to the sentence beginning with "These standards apply to in situ groundwater..." the following sentence: "If the natural background level of a constituent exceeds the standards, the natural background shall be used as the standard."
2	3.9-14	3.9.2.2.2	6	MG	IDEQ also is responsible for establishing a point of compliance location, if requested by a mine operator and pursuant to the Idaho Ground Water Quality Rule (IDAPA 2011), where groundwater and surface water downgradient of mining activity must meet established water quality standards.	The last sentence should be reworded to more accurately describe Idaho's point of compliance process as follows: "IDEQ is also responsible for establishing a point of compliance location pursuant to Idaho's Groundwater Rule if requested by a mine operator. A point of compliance allows groundwater standards to be exceeded within the mining area and degradation of ground water is allowed so long as current and projected future beneficial uses of ground water are protected at the point of compliance and the mine operator applies best management practices."
3	global	4.9		MG		In considering Cumulative Impacts, it is noteworthy that there is substantial discussion of potential sedimentation impacts from roads and utility corridors for each Alternative in the prior subsections, but there is no mention of the reduction in sediment transport expected to result from restoration work on Blowout Creek, with the exception of a brief mention of the creation of "step pools" in Alternative 4. Blowout Creek has been documented by the USGS as the largest sediment source in the upper EFSFSR, so actions taken to reduce that sediment loading should be considered in parallel with the potential for sediment loading from road and utility crossings.
4	global	4.9.7	all	MG		The 5-page Summary section on surface water and groundwater quality points to potential sources of water quality degradation as a result of the SGP. However, there is only one brief mention of the anticipated water quality improvement from removing and repurposing legacy mine wastes. Removal of legacy materials is referenced a number of times in the individual discussions of each alternative, but this information is not carried through to the Summary. This could lead to some readers missing the information on water quality improvements because they only review the Summary sections of the DEIS. Both positive and negative effects should be included in Summary sections.
5	4.9-6	4.9.1.3	3 (ignoring bullet at top of page	MG	Outputs from the hydrologic model and the site-wide water balance model became SPLNT inputs to simulate streams and pit lakes for the Proposed Action (Alternative 1). Output from the General Lake Model component of the SPLNT model supported development of the SWWC model by providing temperature and dissolved oxygen profiles for the pit lakes.	Recommend also describing the linkage between GLM and SPLNT; **Proposed change:** Outputs from the hydrologic model and the site-wide water balance model became SPLNT QUAL2K inputs to simulate streams and pit lakes for the Proposed Action (Alternative 1). Output from the General Lake Model component of the SPLNT model supported development of the SWWC model by providing temperature and dissolved oxygen profiles for the pit lakes. The GLM model also provides input to the QUAL2K model where pit lakes discharge to streams.
6	4.9-6	4.9.2	bullet list	MG	Bullet list	Suggest including as part of the context: Historic fires in the study area have burned vegetation, destabilized soils, and reduced stream shade.
7	4.9-7	4.9.2	6th bullet	MG	Average annual precipitation is typically higher than average annual evapotranspiration (Brown and Caldwell 2018). As a result, much of the precipitation received at the mine site recharges groundwater or runs off to streams.	This doesn't fully represent the balance between precipitation and ET. A primary reason precip results in groundwater recharge and runoff to streams is that most of it occurs in a small portion of the year during snowmelt, when ET rates are relatively low.
8	4.9-23	4.9.2.1.2.1	3	MG	The comparison to water quality standards has been made using average annual concentrations measured during each year of mining operations and does not reflect the full variability in simulated concentrations that may occur throughout the year.	This sentence states that "measured" values were used for comparison with water quality standards. The preceding language in the paragraph references predictive modeling, thus the sentence should refer to "predicted" concentrations. This is important because the water chemistry modeling included a series of conservative assumptions that likely result in predicted concentrations being higher than those that would actually be observed during the mining program.

Comment Number	Page # or Global	Section	Paragraph (count from top of page)	Commenter Initials	Relevant DEIS Text Excerpt (if applicable)	Comment
9	4.9-27	4.9.2.1.2.1	4, 5	MG	A second pulse of constituent loading was simulated to occur in the pit lake during post closure years 5 through 30 due to consolidation water runoff from the TSF, assuming the consolidation water would not be treated (details of consolidation water treatment were not known during the Alternative 1 water quality modeling). This second pulse would result in mass loading of arsenic, antimony, chloride, copper, mercury, and sulfate. Arsenic concentrations in the pit lake would increase from 0.039 mg/L during post closure year 5 to a maximum concentration of 0.1 mg/L between post closure years 5 and 20. Concentrations of arsenic are then predicted to decrease and stabilize at around the surface water standard from post closure year 30 onwards (Figure 4.9-2). Mercury concentrations (Figure 4.9-3) are predicted to exceed the standard during post closure years 10 through 30, with predicted concentrations during this period ranging from 0.00003 mg/L to 0.00076 mg/L (SRK 2018b). After approximately post closure year 40, mercury concentrations are predicted to decrease to less than the standard. Finally, copper concentrations would exceed the chronic aquatic life standard calculated using the Biotic Ligand Model (0.0024 mg/L) during post closure years 10 through 15, with predicted copper concentrations ranging from 0.0033 to 0.0050 mg/L (SRK 2018b).	It appears unreasonable to suggest TSF consolidation water would be left untreated. Such an occurrence would likely violate the Clean Water Act.
10	4.9-28	4.9.2.1.1.1	3	MG	Meteoric water infiltrating through the Fiddle DRSF growth media cover would contact the underlying development rock. This infiltration has the potential to impact surface water quality as it mixes with upgradient groundwater and discharges from the DRSF as toe seepage. The SWWC modeling results indicate that toe seepage from the Fiddle DRSF could cause arsenic and mercury concentrations in Fiddle Creek to exceed water quality standards during the post closure period. Post closure arsenic concentrations at YP-T-11 are predicted to be between 0.25 mg/L and 0.55 mg/L compared to the water quality standard of 0.01 mg/L (SRK 2018b). This represents an increase of over 2 orders of magnitude compared to average baseline concentrations. Mercury concentrations at YP-T-11 are predicted to range from 0.00005 mg/L to 0.0001 mg/L, compared to the standard of 0.000012 mg/L.	It appears unreasonable to suggest seepage from the Fiddle DRSF would go untreated simply because it has not yet been modelled. Absent modelling, it should be assumed discharges from the TSF and Fiddle DRSF will be subject to an IPDES Permit and that such discharges will not cause or contribute to a violation of surface water quality standards.
11	4.9-36	4.9.2.1.2.1	5	MG	Average annual copper concentrations are predicted to be above the Biotic Ligand Model criterion at nodes YP-SR-10, YP-SR-8, and YP-SR-6 during post closure year 10.	There are limited WQ data to utilize the Biotic Ligand Model, so only an estimate can be made at this time. Statement should reflect that fact by saying "...estimated Biotic Ligand Model criterion..."
12	4.9-37	4.9.2.1.2.1	1	MG	Under Alternative 1, changes to stream flow, groundwater-surface water interactions, and stream shading have the potential to affect stream temperatures. Surface water tends to warm when streams become shallower, receive smaller fluxes of groundwater inflow, or receive more direct sunlight due to removal of riparian vegetation. Effluent from permitted discharges also can affect stream temperature. Predictions of future stream temperatures were generated by Brown and Caldwell (2019a) using a SPLNT model.	Recommend mentioning discharge from pit lakes and removal of YPP as potential to impacts. **Proposed change:** Under Alternative 1, changes to stream flow, groundwater-surface water interactions, discharges from pit lakes, removal of YPP lake, and changes in stream shading have the potential to affect stream temperatures. Surface water tends to warm when streams become shallower, receive smaller fluxes of groundwater inflow, or receive more direct sunlight due to removal of riparian vegetation. YPP lake currently provides a 3C reduction in summer maximum temperature due to its large thermal mass, and removal of this feature affects temperatures downstream. Effluent from permitted discharges also can affect stream temperature. Predictions of future stream temperatures were generated by Brown and Caldwell (2019a) using a SPLNT model.
13	4.9-37	4.9.2.1.2.1	2, bullet list	MG	Bullet list	Suggest including stream diversions and changes to lakes and pit lakes in the list. **Proposed additional bullets:** *Back filling of Yellow Pine Pit Lake; *Creation of Hangar Flats Pit Lake, West End Pit Lake, and Midnight Pit Lake that may discharge to streams; *Diversion of some streams during operations in open channels
14	4.9-37	4.9.2.1.2.1	2, bullet 1	MG	Lining of some channels (preventing exchange with groundwater).	Suggest editing bullet one to refer to lining restored stream channels.
15	4.9-37	4.9.2.1.2.1	3	MG	The No Action model provides a representation very similar to existing conditions that allows for direct comparison and quantification of mining-related impacts.	Suggest including the following at the end of the paragraph: "A graphical comparison of No Action simulated temperatures to observed stream temperatures is provided in Appendix B of the Proposed Action Report (BC 2019a) along with tabulated performance statistics."
16	4.9-37	4.9.2.1.2.1	4	MG	Table 4.9-11 summarizes the predicted maximum weekly summer condition, average weekly summer condition, maximum weekly fall condition, and average weekly fall temperatures ...	Suggest rewording to clarify: "Table 4.9-11 summarizes the predicted maximum and average temperatures for the maximum weekly summer condition and the maximum weekly fall condition..."
17	4.9-38	4.9.2.1.2.1	2	MG	The reason for the high temperature is the limited vegetation regrowth that would occur during the first six years post closure, and the relatively low flows that would persist in Meadow Creek until the creek channel is reclaimed.	Suggest rewording to clarify: "The reason for the high temperature is the limited vegetation regrowth that would occur during the six years of closure and reclamation, and the relatively low flows that would persist in Meadow Creek until the creek channel is reclaimed."

Comment Number	Page # or Global	Section	Paragraph (count from top of page)	Commenter Initials	Relevant DEIS Text Excerpt (if applicable)	Comment
18	4.9-38	4.9.2.1.2.1	3	MG	This finding shows that water temperature increases from Alternative 1 would extend downstream in the EFSFSR past Sugar Creek (near the approximate location of surface water assessment node YP-SR-2) and would persist for at least 112 years after mining is initiated.	Recommend mentioning removal of the YPP lake as one of the contributing factors. Proposed additional sentence to add to the end of this paragraph: "One contributing factor is the removal of the Yellow Pine Pit lake which dampens diurnal temperature variability, resulting in higher maximum temperatures. Removal of this pit lake results in warmer maximum stream temperatures in the downstream reaches."
19	4.9-38	4.9.2.1.2.1	3	MG	However, maximum summer (19.3°C) and fall (14.4°C) temperatures and average summer temperatures (13.2°C) are still predicted to be as much as 4.4 degrees above baseline 100 years into the post closure period.	The wording suggests that each metric is up to 4.4°C higher, but that only applies to the summer max temp. The summer average temperatures is within 0.8°C of No Action. **Proposed change**: "However, maximum fall (14.4°C) and summer (19.3°C) temperatures are still predicted to be 2.5°C to 4.4°C above baseline, respectively, 100 years into the post closure period; maximum weekly average temperatures are within 0.8°C of No Action for both seasons."
20	4.9-68	4.9.2.2.2.1	3	MG	Without water treatment, impacts to surface water quality during the mine operational period would be the same for alternatives 1 and 2, because changes to waste rock and surface water management under Alternative 2 mainly apply to the post closure period.	Water treatment is not the only change under Alternative 2 that will affect water quality during mine operations. The elimination of the West End DRSF, extending the Meadow Creek diversion channel liner, and the piping of low flows in the stream diversions around the TSF and DRSFs will all reduce overall impacts to surface water quality. Suggest striking this sentence.
21	4.9-69	4.9.2.2.2.1	2	MG	The surface water quality analysis for Alternative 2 is organized by first discussing SWWC model predictions developed without water treatment, followed by a description of the water treatment approach proposed for the various stages of mining. Information is then presented to describe how active and passive treatment systems would reduce solute loads derived from mining to meet permit discharge limits and prevent surface water quality degradation in the mine site area. The analysis of water quality impacts post-treatment assumes that any treated water discharge would meet applicable water quality standards at the permitted outfall. It does not take into account mixing zones or higher discharge concentration limits that could be requested by Midas Gold. Any requests from Midas Gold for higher discharge limits would be based on the site-specific surface water quality criteria regulations in the Idaho Water Quality Standards (IDAPA 58.01.02), and would be subject to public notice and comment. If site-specific criteria are granted by the permitting agency, future surface water concentrations would fall somewhere between the model scenario with no water treatment, and the model scenario where all treated water effluent is assumed to meet water quality standards.	The discussion on Idaho's site-specific water quality criteria regulations is somewhat confusing as it is not clear what they are describing within the current regulatory regime.
22	4.9-70	4.9.2.2.2.1	6	MG	In post closure year 1, the predicted copper concentration (0.0029 mg/L) also would exceed the Biotic Ligand Model copper criterion (Brown and Caldwell 2019c).	There are limited WQ data to utilize the Biotic Ligand Model, so only an estimate can be made at this time. Statement should reflect that fact by saying "...estimated Biotic Ligand Model criterion..."
23	4.9-70	4.9.2.2.2.1	4	MG	This shows that with water treatment, Alternative 2 would generally maintain existing surface water quality in the headwaters EFSFSR subwatershed during the mine operational period.	As discussed in the previous paragraphs, the water treatment will actually improve water quality for some parameters, such as arsenic. Suggest rephrasing to say that water treatment "would generally improve or maintain existing water quality."
24	4.9-79	4.9.2.2.2.1	2	MG	Table 4.9-19 summarizes the predicted maximum weekly summer condition, average weekly summer condition, maximum weekly fall condition, and average weekly fall temperatures ...	Suggest rewording to clarify: "Table 4.9-19 summarizes the predicted maximum and average temperatures for the maximum weekly summer condition and the maximum weekly fall condition..."
25	4.9-79	4.9.2.2.2.1	3	MG	At the EFSFSR downstream of Sugar Creek, summer and fall stream temperatures would increase during the mine operational period and early post closure period to reach a maximum at the EOY 18.	In this area, maximums increase but averages decrease. **Proposed change:** "At the EFSFSR downstream of Sugar Creek, summer and fall maximum stream temperatures would increase during the mine operational period and early post closure period to reach a maximum at the EOY 18. Averages decrease during operations and then increase to their maximums by EOY18."
26	4.9-79	4.9.2.2.2.1	3	MG	However, maximum summer (19.0°C) and fall (14.5°C) temperatures and average summer temperatures (13.0°C) are still predicted to be as much as 4.1°C above baseline 100 years into the post closure period.	The wording suggests that each metric is up to 4.1°C higher, but that only applies to the summer max temp. The summer average temperatures is within 0.6°C of No Action. Proposed change: "However, maximum fall (14.5°C) and summer (19.0°C) temperatures are still predicted to be 2.6°C to 4.1°C , respectively, above baseline 100 years into the post closure period; maximum weekly average temperatures are within 0.6°C of No Action for both seasons."
27	4.9-79	4.9.2.2.2.1	3	MG	The long-term temperature increases occur despite replanted vegetation along reclaimed stream channels reaching full maturity at the end of the post closure period. The additional shading provided by vegetation regrowth is offset by other reclamation practices, such as backfilling the Yellow Pine pit and creating longer channels post-reclamation to provide additional fish habitat and lower gradient reaches (Brown and Caldwell 2019c).	Recommend mentioning removal of the YPP lake as one of the contributing factors. Proposed additional sentence to add to the end of this paragraph: "Backfilling the Yellow Pine Pit lake dampens diurnal temperature variability, resulting in higher maximum temperatures. Removal of this pit lake results in warmer maximum stream temperatures in the downstream reaches."

Comment Number	Page # or Global	Section	Paragraph (count from top of page)	Commenter Initials	Relevant DEIS Text Excerpt (if applicable)	Comment
28	4.9-80	4.9.2.2.2.1	Last	MG	As a result, Brown and Caldwell (2020) concluded that the treatment process could result in warming by a maximum of 1°C, although an increase of no more than 0.5°C was more likely.	BC 2020 explains that a 1°C increase would be highly unlikely due to the temperature differential that would be required for that degree of increase, and states that the increase is likely between 0.25°C and 0.5°C, and that 0.5°C was applied. Suggest rewording this statement to: "As a result, Brown and Caldwell (2020) concluded that the treatment process could result in warming by 0.25°C to 0.5°C, and the analysis assumed an increase of 0.5°C."
29	4.9-83	4.9.2.2.2.1	4	MG	The analysis determined that there would negligible change in surface water temperature during the summer months.	Suggest rewording to clarify: "The analysis determined that there would often be negligible change in surface water temperature during the summer months, but during some conditions, temperatures could decrease by 1.5°C to 2°C. "
30	4.9-88	4.9.2.2.2.1	2	MG	This shows that with water treatment, Alternative 2 would generally maintain existing surface water quality in the headwaters EFSFSR subwatershed and prevent new exceedances of applikcable water quality standards.	As discussed in the previous paragraphs, the water treatment will actually improve water quality for some parameters, such as arsenic. Suggest rephrasing to say that water treatment "would generally improve or maintain existing water quality."
31	4.9-104	4.9.2.3.2.1	3	MG	Table 4.9-23 summarizes the predicted maximum weekly summer condition, average weekly summer condition, maximum weekly fall condition, and average weekly fall temperatures ...	Suggest rewording to clarify: "Table 4.9-23 summarizes the predicted maximum and average temperatures for the maximum weekly summer condition and the maximum weekly fall condition.... "
32	4.9-125	4.9.4	4	MG	Reasonably foreseeable future actions that could cumulatively contribute to water quality impacts in the analysis area include: • South Fork Restoration and Access Management Plan; and • East Fork Salmon River Restoration and Access Management Plan.	This language points to actions other than those proposed by Midas Gold that could contribute to cumulative impacts in the assessed study area. However, there is no discussion of what types of impacts those might be, and in fact, there is no other mention whatsoever of the two plans in Section 4.9. If there is no information on potential effects of the plans, the reference to them should be removed to avoid confusion.
33	4.9-134	4.9.7	4	MG	Surface water quality also could be impacted by modification of temperature due to removal of shading vegetation, development of pit lakes, and modification of stream depth during construction, operations, or the post closure/reclamation period. Baseline summer maximum temperatures range from 11.4°C in Fiddle Creek to 19.8°C in Meadow Creek below East Fork Meadow Creek. Summer maximum temperatures could increase up to 10.5°C under Alternatives 1 and 4, 13.2°C under Alternative 2, and 12.1°C under Alternative 3. As part of the water treatment in the WTP under Alternative 2, there would be little or no change in summer maximum temperatures, but winter temperatures at the discharge outfall on the EFSFSR could increase by up to 4°C.	Suggest rewording to clarify: "Surface water quality also could be impacted by modification of temperature due to removal of shading vegetation, removal of YPP lake, development of pit lakes, use of low-flow pipes during operations to provide shade, and modification of stream depth during construction, operations, or the post closure/reclamation period. Baseline summer maximum temperatures range from 11.4°C in Fiddle Creek to 19.8°C in Meadow Creek below East Fork Meadow Creek. Summer maximum temperatures could increase from 0.5°C to 12.3°C under Alternatives 1 and 4, from 0.5°C to 13.2°C under Alternative 2, and from 0.8°C to 12.1°C under Alternative 3. As part of the water treatment in the WTP under Alternative 2, there would often be little or no change in summer maximum temperatures, but during some conditions temperature decreases of 1.5°C to 2°C could occur. Winter temperatures at the discharge outfall on the EFSFSR could increase by up to 4°C, but engineering controls leveraging cold air temperatures in winter months could be used to reduce effluent temperature down to ambient temperatures using passive techniques to meet permit limits."
34	4.9-135	4.9.7	5	MG		The Summary subsection of Section 4.9 reiterates concern over sedimentation from mining activities, road usage, and utility corridors, but again makes no mention of the reduction in sediment transport expected to result from restoration work on Blowout Creek, with the exception of a brief mention of the creation of "step pools" in Alternative 4. Blowout Creek has been documented by the USGS as the largest sediment source in the upper EFSFSR, so actions taken to reduce that sediment loading should be considered in parallel with the potential for sediment loading from road and utility crossings. Language should be added to acknowledge the substantial reduction in sediment transport in the EFSFSR expected to result from restoration activities on Blowout Creek.
35	4.9-136	4.9.7	3	MG	At the West End DRSF under all action alternatives, arsenic and antimony concentrations would exceed their respective IDAPA 58.01.11 groundwater quality standards beginning during operations, and continuing throughout post closure.	This language ignores the fact that there would not be a West End DRSF under Alternative 2.
36	4.9-139 to 4.9-141		Table 4.9-27	MG	Table showing some exceedances of Water Quality Standards in Action Alternatives as well as some in baseline conditions	MGII will be required to obtain applicable state permits for any discharges to which WQS apply and to comply with the effluent limits and other conditions to assure WQS are met in order to operate. So no significant exceedances, particularly above existing baseline conditions, will occur.