

Fish and Game Question	Response	Who has responded
1. Contaminant pathway to downstream water bodies		
<p>My understanding from the technical documents is that mine contaminants will reach the Lindis, Clutha, and Lake Dunstan via two pathways:</p> <p>a) treated surface water discharging to Shepherds Creek, infiltrating to groundwater, and resurfacing downstream; and</p> <p>b) direct groundwater seepage from the ELFs and TSF, which resurfaces downstream.</p> <p>I have written many of the following questions on this understanding. For the sake of clarity, can you confirm that this is correct?</p>	<p>Mine impacted water (MIW) will be treated where required to meet water quality compliance limits at SC01 and RS03. Recommended water quality compliance limits have been set by Ryder¹ (2025) to manage human impacts and ensure ecosystems, stock water, and drinking water remain safe. Any solute loads further downstream (e.g., in the Lindis River, Clutha River, Lake Dunstan) would simply be lesser again due to catchment dilution.</p> <p>As discussed further in the response to RFI#2, high levels of Mine Waste Storage Facility (MWSF, i.e., engineered landforms (ELFs) and the tailings storage facility (TSF)) seepage capture can be expected within the primary seepage control design elements (e.g., underdrains). In addition, strategically placed groundwater performance monitoring and contingency engineering controls will enable seepage to be responsibly managed such that water quality (groundwater and surface water) remains below recommended water quality limits at the proposed compliance monitoring locations.</p>	<p>MWM responses are provided by:</p> <ul style="list-style-type: none"> • Dr Paul Weber, Director and Principal Environmental Geochemist for Mine Waste Management, part of the Green Road group of companies with over 25 years working within the field of mine environmental geochemistry: • Mr Ryan Burgess, Principal Consultant for Hydro Geochem Group, part of the Green Road group of companies with over 15 years practising in the field of mine water management and hydrogeology.

¹ B.07 Greg Ryder Consulting- Recommended water quality compliance limits for the Bendigo-Ophir Gold Project (Ryder 2025)

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		<ul style="list-style-type: none"> Ms Julie Palich, Principal Environmental Consultant for Geocontam Risk Management, part of the Green Road group of companies with over 25 years' experience in environmental and mining industries
2. Scale of seepage to groundwater and contradictory statements		
<p>What is the expected volume and contaminant loading of seepage to groundwater from the ELF and TSF?</p> <p>The application contains contradictory statements:</p> <p>a) Engineering reports (B.21, Section 14.6) state drains will "capture most of the tailings seepage" with "any seepage into the underlying groundwater will be minor"</p>	<p>To clarify, the formation of the TSF within Shepherds Valley enables effective collection and management of tailings seepage water during operations and in closure. Shepherds TSF will incorporate a series of underdrains installed along the valley floor and along the upstream side of the embankment forming the TSF to intercept seepage. This underdrainage system will collect seepage generated from the tailings. Any residual seepage that migrates past the TSF embankment will be intercepted downstream beneath the ELF through toe underdrainage well before it reaches potential downstream receptors, i.e. the Ardgour Terrace and Lindis Aquifer. The quantity of seepage from the TSF is expected to reduce over time. This is because as the tailings consolidate their permeability reduces and in closure tailings discharge will cease.</p> <p>The permeable gravels of the Ardgour Terrace and Lindis Aquifer are located more than 4 km downstream of the TSF. Any potential long, slow seepage pathways that may occur deep within the tight, low</p>	<p>EGL responses are provided by:</p> <ul style="list-style-type: none"> Eric Torvelainen Director Engineering Geology Limited BE (Hons), MEngNZ Eric has a BE (Hons) Civil from the University of Canterbury and has more than 15 years' experience in geotechnical and earthquake engineering, for

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	<p>permeability schist rock are a low risk to the Ardgour Terrace and Lindis Aquifer due to the significant contrast in permeability between the schist and the downstream gravels, as well as the limited TSF footprint relative to the overall schist groundwater system.</p>	<p>building, dam, and infrastructure projects.</p> <ul style="list-style-type: none"> Julie Zou Senior Geotechnical Engineer BE (Honours) Civil Engineering Julie is a Senior Geotechnical Engineer with over fourteen years' industry experience. Her geotechnical design skills include numerical modelling of soil structure interaction, slope and embankment stability and groundwater seepage.
<p>b) Water management documents (G.01, Section 4.5.2) state the TSF will be "fully contained" and seepage "will not be discharged to any watercourses"</p>	<p>The term fully contained relates to surface water management, not seepage. To be clear the management plan states "<i>During operations, the TSF will be a fully contained, no release facility with no dedicated spillway, with all supernatant (decant) water managed onsite and contained within the mine circuit water.</i>" This refers to the management of water on the surface of the tailings which will not be released from the facility. Sufficient storage volume is</p>	<p>EGL</p>

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	<p>allowed on the TSF to manage all operational situations plus a Probable Maximum Flood, plus 1 m freeboard for wave action.</p> <p>As clarified above, seepage will be collected and treated. Only a minor amount of seepage may bypass the collection system. Performance monitoring will confirm that any bypass is minor and will meet the water quality and aquatic standards. If the water quality and aquatic standards were not being met there are contingency measures, such as grout curtains and pump wells, which will be effective in the constrained valley that means the residual risk to the Ardgour and Lindis Aquifer is low i.e. the site can be effectively managed and controlled even if seepage bypassed the proposed collection system as seepage primarily reports in the valley floor.</p>	
<p>What volume of seepage will bypass capture systems and enter groundwater?</p>	<p>MWSFs that include the TSF and ELFs are planned to be situated within the deeply incised valleys at the BOGP. It is noted this is in contrast to Macraes Mine, an often-used nearby analogue, where many MWSFs are situated on a flatter plateau topographic setting. At BOGP, the hydrogeological setting is favourable for achieving high levels (e.g., >80%) of seepage collection. The following site conditions indicate this:</p> <ul style="list-style-type: none"> • Groundwater data presented in KSL (2025b)² and EGL (2025b)³ show the high elevation ridges have higher hydraulic head than the valley bottoms (e.g., Shepherds Creek). • Vertical gradients from VWP1 data in EGL (2025c)⁴ generally show downwards gradients on valley sides and upwards gradients in valley bottoms. See Figure A1 in Attachment A of this letter report 	<p>MWM</p>

² B.03 Komanawa Solutions Limited - Groundwater Existing Environment and Effects Assessment (Komanawa 2025b)

³ B.21 Engineering Geology Limited – Shepherds Tailings Storage Facility Technical Report (EGL 2025b)

⁴ B.22 Engineering Geology Limited – Site Geotechnical Factual Report (EGL 2025c)

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	<p>for presentation of these data. Both these conditions support the interpretation of the valley bottoms, where MWSFs will be placed, to be zones of groundwater discharge.</p> <ul style="list-style-type: none"> • Alluvium within the valley bottoms, the likely main seepage groundwater transport pathway is typically shallow (less than 5 m deep in the vicinity of MWSFs). See Figure A2 in Attachment A of this letter report for presentation of this data sourced from EGL (2025c). <p>In addition, seepage control elements are planned to ensure enhanced seepage collection, including:</p> <ul style="list-style-type: none"> • At the TSF: underdrains, a chimney drain, and a cutoff drain. These drains will convey collected seepage to a lined sump. See EGL (2025b)⁵. • At the MWSF: underdrains and a toe sump. See EGL (2025h)⁶. <p>In summary, given the hydrogeological conditions at the BOGP and the planned seepage collection elements included in the MWSF designs, it is reasonable to expect high levels of seepage collection (or low rates of bypass). Contaminant transport modelling will be completed to support detailed design of these seepage collection systems to achieve appropriate levels of seepage collection.</p> <p>Once in operation, performance monitoring is proposed (see the Water Management Plan⁷) to confirm seepage collection systems are functioning as planned. If it turns out they are not, then the favourable hydrogeological conditions and long flow paths mean</p>	

⁵ B.21 Engineering Geology Limited – Shepherds Tailings Storage Facility Technical Report (EGL 2025b)

⁶ B.27 Engineering Geology Limited – Shepherds, Western, and Srex Engineered Landforms, and Come in Time Backfill Technical Report (EGL 2025h)

⁷ G.01 – Water Management Plan

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	<p>secondary seepage interception systems (SISs) can be implemented to manage unexpected bypass. Global experience has shown that SISs such as interception trenches and/or wells, possibly along with barrier walls if needed, have been successful in achieving high levels of seepage collection from MWSFs.</p> <p>The following consent condition has already been proposed to the Otago Regional Council, which addresses this RFI: Prior to the final detailed design of Mine Waste Storage Facilities (MWSF), including the TSF and engineered landforms (ELFs), the Consent Holder must commission contaminant transport modelling studies to support the design of seepage collection elements to achieve appropriate levels of seepage collection to ensure downstream receptors are not adversely affected. The contaminant transport modelling studies must be made available to the Otago Regional Council on request.</p>	
3. Drainage system failure and post-failure seepage		
<p>The TSF Technical Report (B.21, Section 17.7) states the drainage system will "continue to operate for a period and then can be expected to fail" during the 100+ year treatment period. When drains fail, "seepage will naturally report to the toe of Shepherds ELF." Will seepage volume and contaminant loading from the TSF change after the drain failure?</p>	<p>TSF drains will eventually fail as pipe materials eventually deteriorate. This will be well after discharge of tailings in the operational stage. After tailings discharge has stopped seepage will be from rainfall infiltration. Due to the constrained nature of the valley, seepage will report down valley to the toe of Shepherds ELF. The seepage volume and contaminant loading from the TSF will be the same i.e. it all reports to the same point down valley at the toe of the ELF. In closure, sumps and seepage cutoffs at the surface will be engineered to direct seepage to the active or passive water treatment proposed, under gravity.</p>	EGL
	<p>Post-closure, the consolidated tailings at the base of the TSF will likely be low permeability (e.g., 10⁻⁸ m/s or lower). This layer, along with the net percolation into the TSF, will be the main controls on seepage volume leaving the TSF. All the drainage system will do is make the collection more efficient. When the system 'fails', the</p>	MWM

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	<p>large-scale seepage flow paths will be similar, that is, down the valley towards the toe of the Shepherds ELF that sits down gradient of the TSF. Seepage volume and loading is therefore unlikely to materially change when the system fails.</p>	
4. Groundwater travel times from mine structures		
<p>The application states that contaminants from Shepherds Creek surface water will take 4-10 years to travel through the aquifer, with an additional 3-20 year flushing period. How long will it take for contaminants seeping directly from the ELFs and TSF to travel through the aquifer and express themselves in the Lindis or other downstream water bodies?</p>	<p>As noted in the RFI#2 response, the proportion of seepage bypass can be expected to be low. Screening level groundwater travel time calculations are made (Table 2) that suggest travel times from the toe of the Shepherds ELF to the outlet of the Shepherds Creek Valley (i.e., SC01 location) are in the order of 5 to 50 years, largely a function of the permeability of the valley bottom alluvial. Once at this location, it could take seepage an additional 4-10 years as noted to reach the Lindis River So overall travel times would be in the range of 10 to 60 years. Strategically placed performance monitoring (in both groundwater and surface, see the Water Management Plan (G.01)) will provide an early warning of potential seepage bypass. Contingency measures, such as SISs noted in the RFI#2 response, are proven engineering controls that could be employed if an unacceptable level of seepage bypass occurs.</p>	<p>MWM</p>

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5. Sediment discharge events																														
Colin Macdiarmid, in his geotechnical engineering peer review for the ORC that sediment discharge during storm events is probable (80% likelihood over mine life). Can you provide: a) Estimated volume of silt likely to enter watercourses when control measures are exceeded b) Expected frequency of these discharges over the mine's operational life c) Assessment of water quality effects from sediment discharge.	<p>Water quality compliance limits have been recommended by Ryder (B.07) for turbidity to manage any potential effects of sediment discharge from the BOGP. Recommended turbidity limits are 5 NTU (over a 5-year rolling period, 80% of samples, when flows are at or below median flow, are to meet the limit). MGL (2025b) explains how sediment and erosion will be managed at the BOGP to achieve this compliance limit.</p> <p>Komanawa (2025c)⁸ note in Section 3.2.1 of their report that typically “the creek catchments terminate by infiltrating the entirety of their flow to valley floor alluvial aquifers”. Although “The creek may extend in a flowing state from headwaters to the Lindis River only as a result of periods of exceptionally high rainfall and</p>	MWM																												

⁸ B.04 Komanawa Solutions Limited – Surface water and Catchment Existing Environment Effects Assessment (Komanawa 2025c)

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	<p>flooding”. Hence, there is no direct connection of the Bendigo and Shepherds creeks to the Lindis River except during high rainfall periods.</p> <p>The main disturbed areas during mine operations are the Shepherds ELF, the area between Shepherds ELF and the Rise and Shine (RAS) pit, and the haul roads leading to the Run of Mine (ROM) pad area including the Shepherds Valley Infill. EGL have updated the recommended design criteria for permanent silt ponds and sediment management features in these areas to a 1 in 20 -year design event, following ORC comments. Using the updated design criteria, the probabilities of exceeding the sediment control retention capacity are summarised Table 1 below.</p> <p>There is a 3% probability of more than 2 total sediment discharge events occurring throughout the 14 year mine operating period using updated design criteria of a 1 in 20-year event.</p> <p>When the sediment control design criteria are exceeded during extreme rainfall events, the silt ponds will continue to function at a reduced efficiency. This period of exceedance is limited to only part of the overall storm duration. i.e. for a 24 hour storm, the silt pond may exceed design flow criteria for approximately 6 hours. This will be during the peak flood flow. Any discharge under peak flood flows will have immaterial impact on the Lindis River water quality due to overall high flood flows.</p> <p>EGL’s experience at the Macraes Gold Mine Operation in Otago, within comparable schist terrain is that in practice, very little sediment is conveyed to the silt ponds below rockfills. This is because sediment settles on working surfaces and in channels before reaching the silt ponds. The main risk of sediment discharge exists during site stripping and rehabilitation when surficial soils are</p>	<p></p> <p>EGL</p>

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	<p>being stripped or placed, which is a short timeframe compared to the overall mine operating life.</p> <p>Performance monitoring during operation will confirm erosion and sediment control measures are sufficient to meet water and aquatic quality standards at compliance points. Erosion and sediment control measures can be adapted or increased if required.</p> <p>Table 1: Likelihood of a Sediment Discharge Event Occurring over a 14-year Mine Operating Period</p> <table border="1" data-bbox="869 584 1722 922"> <thead> <tr> <th data-bbox="869 584 1155 619"></th> <th colspan="2" data-bbox="1155 584 1722 619">Probability/likelihood</th> </tr> <tr> <th data-bbox="869 619 1155 683">Number of sediment discharge events</th> <th data-bbox="1155 619 1438 683">1 in 20-year Design criteria</th> <th data-bbox="1438 619 1722 683">1 in 10-year Design criteria</th> </tr> </thead> <tbody> <tr> <td data-bbox="869 683 1155 751">No sediment discharge (0)</td> <td data-bbox="1155 683 1438 751">49%</td> <td data-bbox="1438 683 1722 751">23%</td> </tr> <tr> <td data-bbox="869 751 1155 820">1 sediment discharge event</td> <td data-bbox="1155 751 1438 820">36%</td> <td data-bbox="1438 751 1722 820">35%</td> </tr> <tr> <td data-bbox="869 820 1155 888">2 sediment discharge events</td> <td data-bbox="1155 820 1438 888">12%</td> <td data-bbox="1438 820 1722 888">26%</td> </tr> <tr> <td data-bbox="869 888 1155 922">More than 2 events</td> <td data-bbox="1155 888 1438 922">3%</td> <td data-bbox="1438 888 1722 922">16%</td> </tr> </tbody> </table>		Probability/likelihood		Number of sediment discharge events	1 in 20-year Design criteria	1 in 10-year Design criteria	No sediment discharge (0)	49%	23%	1 sediment discharge event	36%	35%	2 sediment discharge events	12%	26%	More than 2 events	3%	16%	
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6. Absence of downstream impact assessment																				
<p>Why does the application not assess impacts on the Lindis, Clutha, and Lake Dunstan?</p>	<p>The assessment approach adopted for the application focuses on ensuring compliance with water quality limits at upstream compliance points (SC01 and RS03). These limits were developed specifically to protect freshwater ecosystems, drinking water, and stockwater values, and are sufficiently conservative that downstream environments—including the Lindis River, Clutha River, and Lake Dunstan—would be subject to even lower concentrations through natural dilution and dispersion processes.</p> <p>As such, the effects on these larger receiving environments are expected to be negligible when upstream compliance is achieved. For this reason, a separate downstream effects assessment was</p>	<p>MWM</p>																		

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	not considered necessary at this stage. However, the monitoring and management framework proposed in the application is designed to identify any trends that may warrant further investigation in the future.	
7. Downstream effects assessment		
Would the applicant agree to undertake a comprehensive assessment of effects on the Lindis, Clutha, and Lake Dunstan prior to the comment period? It would be helpful for such an analysis to address contaminant concentration, loading, accumulation, and bioaccumulation in these water bodies.	MGL acknowledges the request for a comprehensive assessment of potential effects on the Lindis River, Clutha River, and Lake Dunstan, including contaminant concentration, loading, accumulation, and bioaccumulation. At this stage, MGL does not intend to undertake an additional catchment-wide assessment prior to the comment period. As outlined in MWMs responses to RFI #1 and #6, the application relies on maintaining water quality within the proposed limits at the upstream compliance points. The modelling indicates that concentrations in downstream environments (the Lindis, Clutha, and Lake Dunstan) would be lower than at the compliance points, and therefore the risk to these receiving waters is considered to be low. Based on this, MGL considers that the information provided with the application, including the proposed monitoring and management framework, is sufficient to inform review and comment at this stage.	MGL
8. Sensitivity to net percolation rates		
The application assumes 20% net percolation for post-closure ELF, which is at the low end of the expected range and requires field verification. However, during the 10-year construction and operational phase, net percolation through ELFs is stated as 60-80%, dropping to 20% only after closure capping. Can you clarify:		
a) What are the predicted groundwater quality impacts during the high-percolation operational phase?	As noted in the response to RFI#2, seepage collection systems (e.g., underdrains) can be expected to collect a high proportion of seepage. Strategically placed performance monitoring (see the Water Management Plan (G.01) and contingency SISs can effectively manage risks associated with ELF seepage on the groundwater (and surface water) receptors.	MWM

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b) How do downstream water quality impacts change if the 20% post-closure target cannot be achieved?	If net percolation (NP) were higher during closure, the result would be higher active treatment capacity requirements, which can be managed with a larger water treatment plant and potentially for a longer duration. However, it is noted that it is theoretically possible for cover systems to achieve a NP value of 20% of mean annual precipitation (e.g., INAP, 2017 ⁹). Ultimately it comes down to the design of the cover system.	MWM
c) When will field trials be conducted to verify that 20% net percolation is achievable, and will results be available before irreversible impacts are locked in?	<p>MGL have committed to initiating cover system trials early in mine life (e.g., within the first few years) to validate model results and demonstrate that cover system designs can achieve an acceptable NP. This was identified as a key control for water management risks MIW03 and MIW04 provided in Table 9 of the Water Management Plan (G.01). Furthermore, mine rock needs to be available to develop the trials (i.e., mining needs to commence) and is considered leading practise to establish trials within the first couple years of mine operation. Trials typically need to run of 5-10 years to confirm NP rates, but early data collect prior to this will identify if cover design alternatives are needed to achieve the target performance (i.e., 20% of mean annual precipitation). The following consent condition has already been proposed to the Otago Regional Council, which addresses this RFI:</p> <p>Within the first year of the Operations Phase (i.e., after 2 years of the BOGP commencing), once sufficient materials have been placed to undertake a trial, the Consent Holder must initiate cover system trials to understand expected net percolation rates within ELFs as part of the BOGP. Details on these trials must be made available to the Otago Regional Council on request. These details will include trial design, trial results, and recommendations informed by the results.</p>	MWM

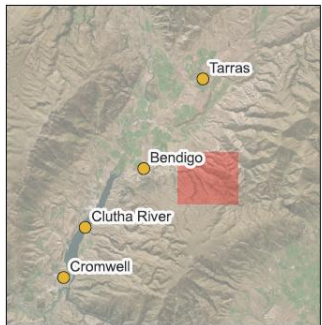
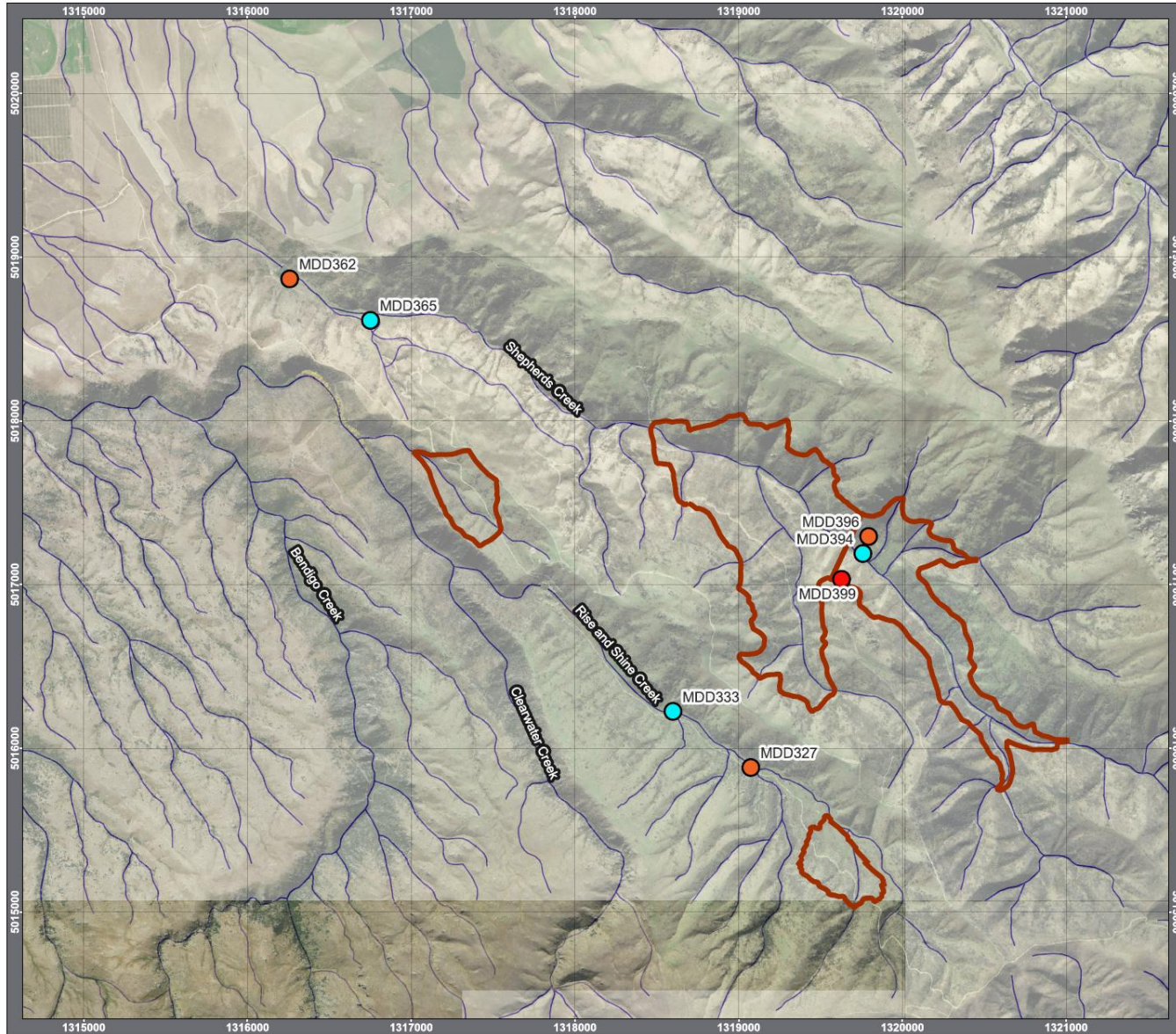
⁹ INAP, 2017. Global Cover System Design Technical Guidance Document. Dated November 2017.

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9. WTP sludge disposal		
<p>The WTP will generate contaminated sludge requiring landfill disposal for ~50 years of active treatment. Which landfill will accept this material, and has capacity been confirmed?</p>	<p>As noted to the MIW Overview Report (B.06) and the Water Management Plan (G.01):</p> <p><i>“Further studies need to be completed to determine the quantity and quality of water treatment residues (sludge) and identify appropriate disposal locations. The sludge should be disposed off-site at a suitable facility, or studies should be undertaken to confirm suitable onsite management options.”</i></p> <p>Characterisation of the sludge will be undertaken as part of the water treatment trials that are proposed (further information is provided on these trials in RFI#14).</p> <p>Once water treatment residue (sludge) is available then testing can be undertaken to identify its characteristics, potential reuse options, and disposal processes. For instance, testing would include TCLP2 testing to understand its geochemical characteristics.</p> <p>Data provided by Process Flow in their water treatment report (Process Flow, 2025) indicates that ~200 to 1,300 t/year (dry basis) of sludge will be generated.</p>	MWM
10. TSF/ELF construction sequencing		
<p>The TSF fails to meet the required 1.5 Factor of Safety without the ELF buttress, yet both structures will be built concurrently over the operation phase. What confidence will the public have that the ELF buttress construction keeps pace with TSF raises in a way that provides for public safety?</p>	<p>The TSF will be designed to have a Factor of Safety of at least 1.5. This is a requirement of the New Zealand Dam Safety Guidelines which will be applied for the design of the TSF. The design will be undertaken under the New Zealand Building Act 2004 and a Building Consent is legally required from Environment Canterbury before construction. As the TSF is a High Potential Consequence facility the design is required to be peer reviewed. The buttress provides</p>	EGL

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	additional protection for the TSF, and has been proposed as a risk reduction measure above the minimum requirements for dams.	
11. Response to downstream impacts		
The application proposes "adaptive management" with active and passive treatment systems to be designed during operations. Given aquifer lag times (4-10 years for contaminant travel from surface water, 3-20 years for flushing, plus unknown additional time from direct ELF/TSF seepage), how will this regime respond to unexpected adverse effects in the Lindis, Clutha, or Lake Dunstan? By the time problems are detected downstream, there will be years of locked-in contamination already in the groundwater system.	Strategically placed groundwater and surface water performance monitoring (see the Water Management Plan (G.01) will allow for early detection of potential water quality issues. Contingency engineering or water/waste management controls, if needed, can then be proactively pursued before potential adverse effect materialise. Contingencies could include for example: <ul style="list-style-type: none"> • Develop additional MIW storage capacity on site to allow for impacted runoff to be retained. • Install SISs to enhance seepage collection. • Commission the WTP earlier in mine life. 	MWM
12. Combined water quality standards		
Would the applicant agree to the following: Adopt a single standard for each contaminant using the most stringent value from either the proposed surface water or groundwater limits? (I note this approach is already assumed in the Order of Magnitude study for the WTP.)	We acknowledge the intent behind adopting a single, most-stringent standard. Before committing to such an approach, we will seek advice from our technical expert, Greg Ryder, to ensure that any combined standard remains scientifically robust and appropriate for both groundwater and surface water environments. Once that advice is received, we will confirm our position and discuss the implications with you.	MGL
13. Downstream monitoring		
Would the applicant agree to the following: Establish long-term water quality monitoring stations in the Lindis, Clutha, and Lake Dunstan to track downstream impacts?	Strategically placed performance monitoring within the BOGP area (as detailed in the Water Management Plan, (G.01) will be used to ensure compliance with recommended water quality limits at compliance locations. These limits have been established by Ryder (2025) to ensure there are no deleterious effects beyond the project boundaries (i.e., manage human impacts and ensure freshwater ecosystems, stockwater, and drinking water remain safe). Any	MWM

Fish and Game Question	Response	Who has responded
	<p>solute loads further downstream would simply be lesser again due to catchment dilution.</p> <p>The proposed water quality compliance limits at SC01 and RS03 have been developed to protect downstream environments, and meeting those limits will ensure no adverse effects occur beyond the immediate project area. For this reason, the monitoring programme focuses on strategically placed upstream locations where potential changes would be detected earliest.</p> <p>At this stage, downstream monitoring is not proposed. However, if operational monitoring identifies unexpected trends or elevated risks, the monitoring network could be expanded to include downstream locations as part of the adaptive management process.</p>	MGL
14. Resolve critical uncertainties before proceeding		
Place the application on hold to resolve fundamental uncertainties before the comment period begins, including:		
<p>a) Completing site-specific bench-scale and pilot testing of the proposed WTP to verify treatment effectiveness for BOGP's specific water chemistry</p>	<p>It is difficult for greenfield projects that have not commenced mining to have representative site specific water quality available for testing of treatment system efficacy. For the BOGP this testing is proposed within the first few years of operations. During this time, Mine Circuit Water (e.g., ELF seepage, TSF seepage and decant water, pit sumps, arsenic-rich topsoil runoff/seepage, Processing Plant and infrastructure area runoff, and underground workings) will be reused in the Processing Plant or will be returned to the TSF. This water can be used for treatability trials.</p> <p>As noted in the MIW Overview Report (B.06):</p> <p><i>“Further studies should be undertaken within the first few years of operations to confirm the WTP requirements and the treatment efficiencies. Early completion of studies will mean that the ability to transition to active treatment can be rapid if required and if the WTP</i></p>	MWM

Fish and Game Question	Response	Who has responded
	<p><i>is required later in the Operational Phase of the BOGP it can be constructed quickly”.</i></p> <p>Furthermore, to validate the technology requires pilot trials and larger quantities of site water. As noted in the MIW Overview report (B.06)</p> <p><i>“The technology development pathway should include bench-scale trials to validate study assumptions; site-based pilot trials as a part of the pre-feasibility study for water treatment; and operational trials as part of the feasibility study for water treatment”.</i></p> <p>MGL have indicated in Section 9.4 of the Water Management Plan (G.01) that <i>“Active water treatment system designs will be completed within the first few years of the mine commencing so that the technology is ready for operation and closure”.</i></p>	
b) Verifying and calibrating water balance models with comprehensive site-specific groundwater investigations around proposed mine waste storage facilities	Additional water balance and groundwater studies are planned to support detailed design. Furthermore, consent conditions are proposed to complete these studies to make clear MGL’s commitment responsibly managing water at the BOGP.	MWM
c) Establishing and completing a cover system trial to demonstrate that 20% net percolation is achievable	As noted in the response to RFI#8, cover trials cannot be initiated prior to commencement of mining. MGL have committed to leading international practice by proposing to (as a consent condition) developing these trials within 2 years of the mine commencing.	MWM
d) Completing detailed TSF and ELF designs, including landslide mitigation and construction sequencing with objective milestones to ensure the ELF buttress keeps pace with TSF raises	The TSF is defined as a large dam under the New Zealand Building Act 2004. This Act requires that detailed design is undertaken prior to any construction of the TSF.	EGL



LEGEND

-  Mine Waste Storage Facilities
- Vertical Hydraulic Gradient**
-  Downwards
-  Upwards
-  Variable
-  Waterways

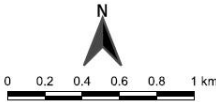


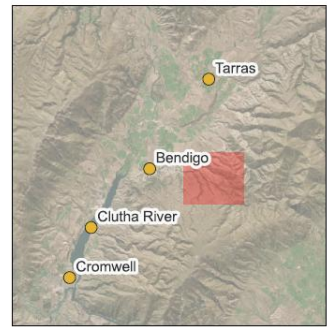
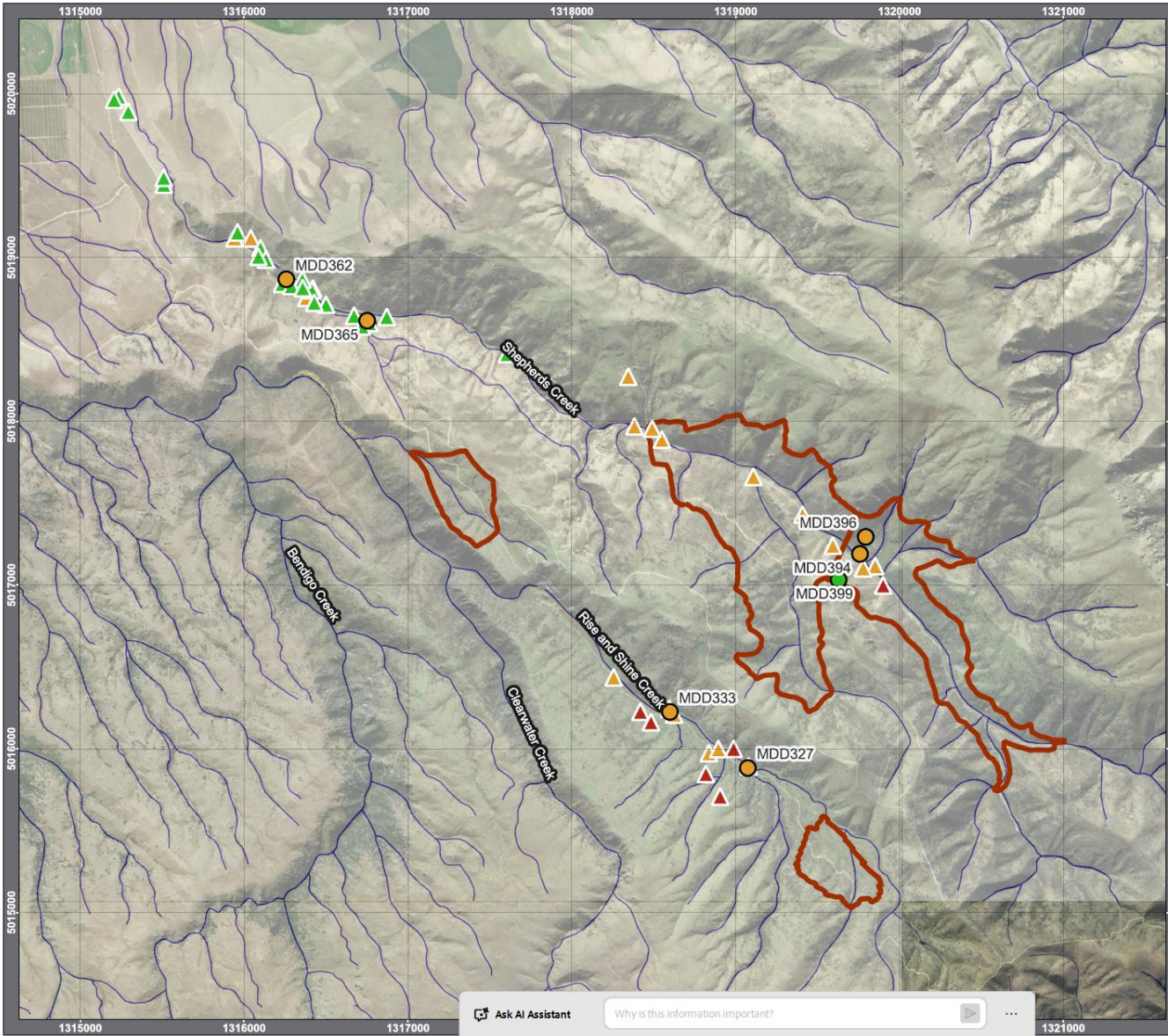
Figure A1: Groundwater - Vertical Hydraulic Gradients
Bendigo-Ophir Gold Project

Scale: 1:31811
 Coordinate System: EPSG:2193
 Reference:
 Date: 29/1/2026
 Size: A4

Project #: J-NZ0488
 Figure: A1
 Revision: RevA
 Prepared: LM
 Reviewed: RB

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- LEGEND**
- Test Pits - Depth to Bedrock (m bgl)
- ▲ 0 - 2
 - ▲ 2 - 5
 - ▲ >5
- Boreholes - Depth to Bedrock (m bgl)
- 2 - 5
 - >5
- ▭ Mine Waste Storage Facilities
 - Waterways

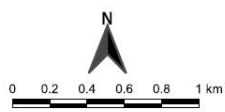


Figure A2: Depth to Bedrock
Bendigo-Ophir Gold Project

Scale: 1:31811
 Coordinate System: EPSG:2193
 Reference: 29/1/2026
 Date: A4
 Size: A4

Project #: J-NZ0488
 Figure: A2
 Revision: RevA
 Prepared: LM
 Reviewed: RB

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