TRANSFERT
ENVIRONNEMENT ET SOCIÉTÉ

***Virtual Thematic Workshop #3 — Water***
***Agnico Eagle Mines Ltd. — Upper Beaver Gold Project***

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| MEETING INFORMATION | |
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| DATE | June 19th 2025 |
| TIME | 6:00 p.m. – 8:30 p.m. EST |
| LOCATION | Online meeting (Zoom) |
| NUMBER OF PARTICIPANTS | 28 (excluding Agnico Eagle and consultants) |
| AGNICO EAGLE TEAM | **Members**<br>✓ Sarah Morin – Environmental Permitting Manager, Ontario<br>✓ Amy Danchuk – Senior Community Relations Coordinator<br>✓ Jason Plamondon – Permitting Lead, Upper Beaver<br>✓ Kishan Leakram – Operations Manager, Upper Beaver |
| CONSULTANT | ✓ Derrick Moggy – Project Manager / Impact Assessment Lead, WSP<br>✓ Dale Klodnicki – Fish and Fish Habitat Lead, WSP<br>✓ Amy Elliott – Water Quality Specialist, WSP<br>✓ Maria Ma – Hydrologist, WSP<br>✓ Meilling Tamkei – Lead Hydrologist / Water Resources Engineer, WSP<br>✓ Elizabeth Robertson – Facilitator, Transfer Environment and Society (TES)<br>✓ Roxanne Breton – Zoom manager, Transfer Environment and Society (TES)<br>✓ Laurence Roger – Note taker, Transfer Environment and Society (TES) |
| AGENDA | 1. Welcome, Introductions and Objectives of the Workshop<br>2. Upper Beaver Project and Impact Assessment Overview<br>3. Topic 1 Water Quality<br>4. Topic 2 Water Level and Flow<br>5. Topic 3 Fish and Fish Habitat<br>6. Closing remarks |

# EVENT PROMOTION AND ATTENDANCE

## Invitations

Invitations were shared and the event was promoted through various communication channels, including:

Email: sent to over 150 recipients on Project email alert list, including Indigenous Nations, local town councils, provincial and federal authorities, identified non-profit organizations, landowners, and other stakeholders.

Post Card: due to potential Canada Post strike, no mail out was completed. Instead, 300 post cards were printed and distributed to key locations within the local and surrounding communities.

Social Media: Advertised on Agnico Eagle Ontario Facebook page.

Radio: 40 thirty-second commercials aired between 6 a.m. and 6 p.m., between June 9 – 19, 2025.

Direct contact: The community relations team contacted organizations through calls and emails. Members of the Advisory Committee were also invited to attend the workshop.

## Attendance

In total, 28 people attended the event.

A copy of the PowerPoint presentation was shared with registered participants prior to the workshop (May 16) and is included in Appendix I of this meeting report.

# WELCOME AND INTRODUCTIONS

TES welcomes participants to the third workshop on the Upper Beaver project Impact Assessment, which focuses on potential impacts related to water.

Agnico Eagle follows with a land acknowledgement, stating that Agnico Eagles respectfully acknowledges that its offices and operations worldwide are located on the traditional territories of many Indigenous Peoples and Nations.

The TES and Agnico Eagle teams are introduced. Representatives from WSP, the firm in charge of conducting the Impact Statement, also introduce themselves.

TES then presents the objectives of the workshop series, which are to share information related to the potential impacts of the project, proposed mitigation measures, and monitoring programs, and to gather community feedback. This feedback will be included in the Impact Statement submitted to the Impact Assessment Agency of Canada (IAAC) and considered in the final project design.

TES also outlines the agenda and meeting guidelines.

Agnico Eagle presents the forward-looking statement, which notes that all information presented is based on data available at this time and may be subject to change.

## UPPER BEAVER PROJECT AND IMPACT ASSESSMENT OVERVIEW

The Upper Beaver Project (the Project) is presented. First, Agnico Eagle reviews the timeline of the Project's development phases, emphasizing that community engagement and environmental permitting are essential components throughout all phases. The Project has obtained all required authorizations for the advanced exploration phase which includes construction of the exploration shaft and ramp. The Project has also been directed to proceed with the preparation of the Impact Statement for the potential production phase, which considers the option of a mill on site. Agnico Eagle notes that tonight's workshop will be focused on the construction, production, and closure phases.

Agnico Eagle then outlines key features of the proposed production phase. The Project would be primarily underground, with a small open pit operating in the first years in order to manage risks related to rock stability and water infiltration, which are due to historical mine workings and the lake situated above. The life of mine could extend to 14 years, with construction potentially starting as early as 2028, pending all necessary approvals. Agnico Eagle also presents an updated site layout for the production phase.

Agnico Eagle mentions that engagement on the Upper Beaver Project has been ongoing since 2018. The most recent initiative was the creation of an Advisory Committee. All feedback gathered through engagement activities is documented and considered in the development of the project.

WSP explains that the Project requires a Federal Impact Assessment due to its projected production capacity and the temporary diversion of the Misema River. The impact Assessment evaluates the Project's potential positive and negative effects and identifies mitigation measures to reduce, avoid or minimize the impact of adverse effects, and measures to increase the positive effects. The Project has to be approved under the Federal Impact Assessment Act before Agnico Eagle can apply for federal and provincial permits for the construction and operation phases.

WSP presents the timeline for the Impact Assessment process, noting that the project is currently on the second of five steps. Agnico Eagle has started developing the Impact Statement, which will include information on how the Impact Assessment is conducted, community engagement, baseline conditions, potential effects, and proposed mitigation and monitoring plans. The document will also include environmental baseline reports and modelling studies. The next steps are also described, including the IAAC's review and final decision process. While the current submission deadline is December 27, 2025, Agnico Eagle plans to request an extension to March 2026.

WSP then presents the key steps involved in conducting the Impact Assessment, which is informed by field studies, community input, and multidisciplinary science-based analysis. A diagram illustrating how existing conditions, the proposed project, and potential effects interact with each other throughout the assessment process is presented. Residual effects refer to remaining impacts after mitigation measures are applied. The assessment also considers valued components to better understand potential indirect impacts. Models and analytical tools are used to predict what these residual effects could be.

Finally, WSP presents a table showing the expected activities during construction, operation, and closure of the project that could affect water flow, water quality, and fish and their habitats.

| QUESTIONS AND COMMENTS | | ANSWERS |
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| **Q & C 1** | Is the proposed open pit size the same size as it was when we commented in 2022? | Since 2022, the pit design has changed based on the ongoing optimization studies. Although the footprint has been modified slightly, the depth of the pit has been reduced. |
| **Q & C 2** | Are there any expectations or plans for the project to intersect with Ontario's Bill 5 or the proposed similar federal legislation? | It is a bit early to confirm how and if Bill 5 will affect the Upper Beaver Project permitting. Agnico Eagle is dedicated to responsible, sustainable development and to building respectful, collaborative, and lasting relationships. Regardless of recent actions by the provincial legislature, Agnico Eagle will continue to engage meaningfully with communities and remains committed to implementing its Reconciliation Action Plan with Indigenous Peoples. |
| **Q & C 3** | The Impact Assessment Act of Canada clearly states that no environment can be disturbed until the completion of the Impact Assessment Process and approvals given for the project. How is it that Agnico is not adhering to this legislation but proceeds under the Ontario Mining Act? | Agnico Eagle is aware of Section 7 of the Impact Assessment Act and that Section 7 prohibits the proponent, Agnico Eagle, from carrying out any act or thing that is in connection with the designated project. The designated project in this case being the Upper Beaver Gold Project – which is described in the Detailed Project Description. Section C.5 of the Detailed Project Description outlines the activities and things related to the Advanced Exploration Project which are not part of the designated project. In addition, Agnico Eagle had to follow the required permitting process for Advanced Exploration and has obtained all of the required permits and approvals. |

## WATER QUALITY

The Water Quality Specialist from WSP begins by explaining the differences between surface water and groundwater. Surface water is the water found above ground, like rivers, lakes, ponds, and streams. Groundwater is the water that collects underground in the spaces between soil, sand, and rock. Both are assessed in terms of hydrology (amount and distribution of water) and water quality (chemical composition).

For the Upper Beaver Project, modelling efforts aim to quantify and characterize the interactions between surface water and groundwater in terms of quality and quantity. WSP presents a conceptual overview of how data on surface water and groundwater are used in the Impact Statement. This process involves defining and

characterizing baseline conditions to better understand potential changes. Baseline data and Project plans are fed into various modelling tools, including mine site water balance and receiver water balance models. The water balance and water quality models are interconnected, as water balance influences water quality. The results from these models inform the Impact Assessment. A diagram of the mine site water balance model is then explained, illustrating the types of information used to quantify water inflow and management on site.

Baseline studies describe current conditions in and around the Project site, generating site-specific data to support a tailored Impact Statement and Assessment. These studies help establish pre-project conditions, identify sensitive areas, and propose mitigation measures.

WSP presents a map of the Project area showing the surface water quality monitoring locations. Between 2011 and 2024, surface water quality samples were collected at 25 stations to measure the chemical composition of the water. Sampling occurred monthly or quarterly, depending on seasonal changes and safe site accessibility, resulting in approximately 150 samples per year, and a cumulative database of around 800 samples. Surface water quality baseline results are typically presented in graphs comparing concentrations to Water Quality Guidelines for the Protection of Aquatic Life (WQG PAL). These are surface water guidelines that set recommended concentration thresholds for chemicals or physical parameters (e.g., metals, nutrients, pH). They are designed to protect the most sensitive aquatic species and are generally more stringent than drinking water quality guidelines for most parameters. Surface water quality monitoring results are generally presented in tables or graphs showing the range of concentrations for various water quality parameters relative to WQG PAL values.

A second map is presented, showing groundwater quality stations. Groundwater samples are collected less frequently than surface water samples because of slower movement and less seasonal fluctuation. Groundwater quality results are compared to WQG PAL and drinking water quality guidelines for benchmarking purposes. Once baseline water quality conditions have been established, and interactions between the Project and water have been identified, the next step is to minimize impacts on water quality. Mitigation measures are developed using site-specific data, industry best practices, and modelling results. Examples include collecting and managing all water that encounters the mine footprint and prioritizing the reuse of water for industrial purposes whenever possible.

Two water quality models are being developed for the Project – one for the mine site and another for the receiving environment. These models are used to predict future water quality conditions, assess potential risks, and guide mitigation planning. WSP presents examples of the types of data used as inputs in the models, such as baseline water quality, geochemistry baseline data, contact water quality, and influent/effluent water quality. Predicted future water quality will be compared against baseline conditions and appropriate benchmarks (like WQG PAL). If predicted concentrations exceed acceptable levels, additional mitigation measures or project design changes will be required.

A key objective of the water quality modelling is to determine appropriate effluent limits and identify parameters of potential concern. These effluent limits establish the maximum allowable concentrations of certain parameters that may be discharged into natural water bodies. While these limits are regulated by the Metal and Diamond Mining Effluent Regulations (MDMER), the Project must also consider site-specific conditions, consistent with the Ontario regulatory environment. For example, effluent limits will be established and water treatment designed to meet the more stringent WQG PAL benchmarks in the receiving environment.

WSP shares a preliminary table of model results, showing predicted parameter concentrations prior to water treatment. The models will be refined as data collection continues.

Water quality monitoring will take place throughout the Project's life and post-closure, as required by regulatory approvals. A new map will show monitoring station locations during construction, operations, and closure, helping to verify project effects and model predictions. Typical water quality parameters to be monitored include metals, nutrients, and E. coli.

## Question to participants

A Zoom poll asks participants a multiple-choice question: What was new to you in this presentation? The choices are:

- How surface and groundwater are studied
- How modelling helps predict impacts
- Common mitigation approaches
- Nothing – I was already familiar with it
- Monitoring programs
- What information is considered when predicting impacts
- I'm not sure
- Other (please specify)

Participants may select more than one answer to reflect their concerns.

13 people respond to the poll:

- The most frequently chosen answers are "Monitoring programs" and "Nothing – I was already familiar with it", which are each selected 5 times.
- "How modelling helps predict impacts" is selected twice.
- "What information is considered when predicting impacts" is chosen once, as is "I'm not sure".

In the comments under the poll, one respondent writes that all the content presented was new, while another writes that none of the information is new and that the answers provided are unhelpful.

| QUESTIONS AND COMMENTS | | ANSWERS |
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| **Q & C 4** | Could the sampling results be released to residents, as results are available? | Agnico Eagle is currently in discussions with IT to add a section to the website where final baseline reports will be shared once available. The link is expected to be functional in the near future. |
| **Q & C 5** | Are you using the Canadian Council of Ministers of the Environment (CCME) guidelines for protection of aquatic life? | Yes and no. The CCME guidelines are used, along with those from other Canadian jurisdictions, such as the Federal Environmental Quality Guidelines (FEQGs). The idea is to follow best practices and use |

| QUESTIONS AND COMMENTS | | ANSWERS |
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| | | the most up to date, scientifically defensible guidelines. |
| **Q & C 6** | Are you intending to meet aquatic guidelines at the point of discharge or at the boundary of a proposed mixing zone? | Currently, the regulatory requirement is to meet water quality guidelines for the protection of aquatic life in the receiving environment at the end of the mixing zone. More information about the proposed mixing zone will the presented in the coming months once the studies are done and results can be shared. |
| **Q & C 7** | Will Agnico Eagle be transparent and timely with the public about exceedances? How will issues be communicated? | Exceedances are automatically reported to the authorities as soon as they happen. Agnico Eagle is currently looking for a way to communicate results to the public as well. |
| **Q & C 8** | Can you reexplain the effect assessment slide with the table of preliminary results? | The three slides on effect assessment present key elements of the Impact Assessment process and preliminary results from the water quality model. Slide 36 shows predicted contact water quality during operations; this water will be re-used or directed to water treatment. The table summarizes the expected range of contact water quality (concentrations). Grey highlights (bars) indicate concentrations that are higher than the calculated effluent limits before water treatment, helping to identify parameters of potential concern and to guide planning for water treatment and management, including necessary mitigation measures before the water is released to the environment. |
| **Q & C 9** | Slide 35 – How will the amount and content of the effluent of the production phase differ from the amount and content of effluent of the Advanced Exploration phase? | The mine site during the production phase has a larger footprint than during the Advanced Exploration phase, resulting in a greater volume of contact water to manage, as all water interacting with site infrastructure must be collected and treated. Work is ongoing to determine how water quality during operations may differ from |

| QUESTIONS AND COMMENTS | | ANSWERS |
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| | | that observed during the Advanced Exploration phase, although it may be similar. |
| **Q & C 10** | How long do you expect the dispersal plume of the effluent to be?<br>What do you expect mixing ratio of the effluent with the Misema River to be? | This information is expected to become available in Phase 2. The modelling work, currently underway, aims to predict these outcomes and reduce the extent of the mixing zone as much as possible. |

## WATER LEVELS AND FLOWS

The hydrologist from WSP explains that historical underground mining has caused rock instability, which poses a risk to future underground mine construction and worker safety. To manage this risk, Agnico Eagle adjusted the project design by operating an open pit into the area of rock instability for the first 4 to 5 years of extraction. This adjustment requires water management in the area, with key considerations including safely diverting water around the open pit, mimicking natural flow conditions, maintaining connectivity between York Lake and Ava Lake to allow fish passage, and removing mine structures upon closure to restore water flows through original channels. The design of the diversion system must comply with specific provincial legislative requirements, and industry guidelines are used. The information used in the modelling includes water levels and flows from the Water Survey of Canada (WSC) database, climate data from the Kirkland Lake Climate Station, among other sources. Additionally, a monitoring program will be implemented for the diversion system.

WSP explains that the hydrology baseline study involves measuring how water naturally moves through the environment, including its quantity, flow rate, and seasonal variations. This study uses both on-site monitoring data and WSC data to understand normal conditions and detect changes once the project begins. The baseline data helps define existing hydrological conditions, supports modelling, informs mitigation measures, and guides closure planning.

For the project, eight hydrology monitoring stations are strategically located near creeks, lakes, and rivers to monitor water flow and levels. Some stations have been collecting data for up to nine years, providing a detailed understanding of the area's water system. This data is used to understand natural water flows by converting measured water levels into flow rates. This helps establish baseline conditions, assess how mining could change flow timing and magnitude, and inform the design of mitigation measures to prevent or reduce impacts.

The project can affect water flows and levels through changes to the land shape (watershed), altering groundwater and surface water interactions, and using water for operations and discharge. To reduce and avoid these impacts, mitigation measures may include keeping the mine site compact to limit disturbance, diverting clean watersheds away from the mine site, and implementing a monitoring program to track water flows and levels throughout the life of mine.

Hydrologic modelling using baseline data, climate studies, and groundwater modelling is used to predict how the project might affect water and its movement. Two models are typically used: the mine site water balance

model (to understand water flow within the mine site) and the receiver water balance model (to assess water flow from the mine site into surrounding environments).

WSP provides an example of how mining activities can affect water flow, noting that removing water from the open pit may lower the water table and reduce groundwater contribution to surface water. Preliminary modelling results suggest that surface water flow changes in Victoria Lake and Ava Lake are expected to remain under 5%.

While modelling is currently ongoing, preliminary findings indicate that the project is located within the Beaverhouse Lake and Victoria Creek watersheds, which drain into the Misema River watershed. The project footprint covers about 360 ha (or 1%) of the Misema River watershed area 3 km downstream of the site. Although detailed results are pending, current mapping suggests that some small watercourses may be affected by infrastructure, and water levels may change as a result of mine dewatering. A follow-up monitoring program will continue throughout the life of the mine to verify modelling predictions and ensure mitigation measures are effective.

## Question to participants

A Zoom poll asks participants a multiple-choice question: When you think about diverting a watercourse, what is your top concern? The choices are:

- Impact on fish and aquatic habitats
- Risk of flooding
- Stability of the diversion system
- Effects on water levels upstream or downstream
- Ensuring compliance with environmental regulations
- I don't have any concerns
- I'm not sure
- Other (please specify)

Participants may select more than one answer to reflect their concerns.

19 people respond to the poll:

- The most frequently chosen concern is "Impact of fish and aquatic habitats", which is selected 14 times.
- "Effects on water levels upstream or downstream" is selected 8 times.
- "Stability of the diversion system" is selected 4 times, and "Ensuring compliance with environmental regulations, 3 times.
- "Risk of flooding" is chosen once.

In the comments under the poll, one respondent adds they are concerned about water quality past the plume. Another mentions the possibility of reduced water volume downstream at the Misema Hydro Electric Power Station. One respondent says they are concerned about the impact on all habitats and all living creatures. Finally, one person writes "Whose Supreme Title Is It?".

| QUESTIONS AND COMMENTS | | ANSWERS |
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| **Q & C 11** | Slide 21 – How much will the lowering of the water table (cone of depression formed by dewatering pit/mine – see slide 49 and 59) impact Victoria Creek, the Misema River, and other water bodies? | Preliminary results suggest a reduction of less than 15% in groundwater flow for Victoria Creek, the Misema River, and nearby watercourses. Surface water impacts are estimated to be below 5%, a level unlikely to be perceptible. Additional information will be shared once the modelling is finalized. |
| **Q & C 12** | What is the extent of the impact on groundwater? Does it hit the Lake Victoria watershed? | Current modelling indicates that the zone of influence covers an area between 14 and 16 km². Victoria Lake is situated at the western edge of the predicted drawdown of underground water levels area (see map on slide 50), placing it in a zone of lower impact. The zone of influence is approximately 5 km from Victoria Lake. |
| **Q & C 13** | Will there be third-party monitoring of discharge? | There will not be a full-time third-party monitoring of the discharge. However, monitoring will be conducted in compliance with all regulatory requirements. A third party will analyze the samples, and regulatory authorities will also carry out site visits and collect their own samples. |
| **Q & C 14** | Based on the maximum water flow recorded at the spring melt between 2019 and 2025, were there any pre-2019 flow levels that exceeded those values?<br><br>If future water levels were to surpass the maximum flow levels observed between 2018 and 2025, what kind of impacts could this have on workers safety and the stability of the open pit? | On-site data has been collected from 2011 to 2012 and from 2018 to the present. In addition, WSC data spanning over 50 years is being considered. This longer-term dataset has been used to estimate potential historical maximum discharge levels for Beaverhouse Lake. While exact long-term discharge data is not available, a synthesized dataset can be developed to support these predictions.<br><br>*Added after meeting: Using maximum known values and considering climate change in the design, significantly minimizes the risk of overflow and/or breach in the open pit. Strict monitoring will be implemented to monitor potential extreme events and the integrity of infrastructure.* |

| QUESTIONS AND COMMENTS | | ANSWERS |
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| **Q & C 15** | What is the effect on water quality from blockage of the small streams and springs around the lake? | Small streams and springs surrounding the lake are very small contributors to the overall flow and water quality of that system. Any changes are expected not to be noticeable and will be predicted through ongoing modelling work. Based on current flow data, noticeable impacts are not anticipated. |
| **Q & C 16** | Will your team be using the 7Q20 flow for modelling of plume for WTP discharge? | The term 7Q20 refers to an extreme low-flow statistic, representing the lowest 7-day average flow expected to occur once every 20 years, on average. In Ontario's regulatory environment, it is used to assess discharge scenarios under extreme conditions to ensure water quality remains protected. As such, modelling will be conducted to assess the plume and evaluate the discharge to confirm compliance with water quality criteria under the 7Q20 flow condition. |
| **Q & C 17** | Slide 41 – How are the development of the shaft and ramp system during the Advanced Exploration phase possible without the diversion of the river? | Currently, the Advanced Exploration phase is being carried out at a significant distance from the historical development. Mine engineers have established a buffer zone around the old workings to ensure that activities during this phase remain at a safe distance. |
| **Q & C 18** | Slide 42, 46 – Is there a plan to use these dams and dykes to regulate the water level of Beaverhouse Lake during the dry and wet seasons, in order to regulate the amount of water available in the Misema River for effluent dispersion? | The proposed dykes are not intended for flow regulation. The aim is to maintain the river's flow conditions as close as possible to the original state, effectively mimicking natural conditions. |
| **Q & C 19** | With Misema Hydro Generator being a run of the river power station, and preliminary predictions lowering flows between 1%-15%, is this calculation based annually, or on/off peak flows? | The reduction of groundwater flow into surface water features is estimated to be 15%. This figure represents only the amount of water being taken and does not account for the treated water that will be discharged back into the system. Consequently, the overall change in groundwater flow will be |

| QUESTIONS AND COMMENTS | | ANSWERS |
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| | | less than 15%. The predicted change in flows is based on the annual flows in the Misema River. |
| **Q & C 20** | Slide 43 - Extreme climate situations – How will Agnico Eagle deal with potential periods of severe drought with regard to effluent dispersion?<br><br>Potentially, would water be taken from Beaverhouse Lake, thus lowering water levels?<br><br>In years with severe precipitation, will Beaverhouse Lake be used to store the surplus, and subsequently raise water levels? | Modelling is being conducted based on low flow scenarios to account for extreme drought conditions. As part of the regulatory processes, these drought conditions must be considered in the design of the effluent discharge system.<br><br>The current proposal involves taking water from Ava Lake, therefore there is no anticipated perceptible change in the water levels of Beaverhouse Lake.<br><br>No, the design of the diversion system is not intended to retain or hold back water. Its purpose is to mimic natural conditions and allow water to flow freely through the system. |
| **Q & C 21** | Slide 45 – Please indicate how the effluent will affect the Misema River further downstream, including in the South Grassy Lake Outwash, and how the effluents from the Macassa and Upper Beaver sites will impact the Blanche River after the inflow of the Misema River into the Blanche. | The entire project site represents only 1% of the Misema River watershed. The project involves collecting water and releasing it back into the environment. Consequently, a substantial increase in flow of the Misema River system is not anticipated. This will be evaluated through the water balance model, and any potential impacts will be assessed and addressed as needed. |
| **Q & C 22** | Slide 47 - How will the effluent of the mill impact the Misema River and its fish population?<br><br>How will run-off/drainage/seepage of the tailings (potentially because of extreme weather events) impact groundwater, Beaverhouse Lake, streams, and the Misema River (via effluent)? | For the effluent discharge location, the regulatory framework requires comprehensive water quality and biological monitoring. This monitoring occurs both prior to discharge and at periodic intervals, typically every three years after discharge. The purpose is to detect changes in water quality, as well as in the fish and benthic invertebrates (bugs that live in the mud). The monitoring framework is designed to identify whether any changes are statistically significant or ecologically meaningful. If |

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| | | changes are detected, appropriate actions are required to address them.<br><br>The water management system will be designed to operate effectively under extreme conditions, ensuring that all water is contained, managed, monitored, and treated like under average conditions. Given the low volume of effluent and the requirement to meet water quality guidelines for the protection of aquatic life within a short distance from the project, the likelihood of detecting any significant change in water quality is low. Modelling is conducted to quantify and validate these projections. |
| **Q & C 23** | Slide 47 – Will AE consider filling the open pit with tailings/waste rock/etc., similar to what is currently done at Malartic?<br><br>How long would it take for the Upper Beaver underground/open pit workings to naturally fill with ground water? | The current plan includes the potential for waste rock to be placed into the pit to create habitat and support fish habitat design, as well as some overburden to provide sediment for the bugs to live in. However, there are no proposals at this time to put tailings back into the open pit.<br><br>*Added after meeting: Agnico Eagle indicates that it would be less than 3 years if it only filled op with ground water and rain.* |

## FISH AND FISH HABITAT

The Fish and Fish Habitat expert from WSP explains that the baseline studies also include assessments of fish communities and habitats, along with the collection of fish tissue samples to determine existing metal concentrations prior to any project development. The studies also examine benthic macroinvertebrates (bugs living in and on the bottom sediments), which serve as indicators of ecosystem health and sediment quality. This data contributes to a comprehensive baseline assessment aimed at understanding potential project impacts and providing a dataset for future comparisons. Monitoring locations have also been set up outside the development area to serve as controls, allowing for comparisons between potentially impacted sites and control sites that will help measure natural changes in the environment unrelated to potential project activities.

A map is presented showing the various types of sampling conducted over multiple years and across different seasons in lakes, ponds, and watercourses. This approach helps identify seasonal vulnerabilities in habitats and

allows for comparisons between both seasons and years to better understand natural variability and potential impacts.

The target fish community in the baseline studies includes species found in the Misema River and its onstream lakes, such as Northern Pike, Walleye, and Lake Whitefish. No critical habitats, including specialized or spawning areas, were identified near the proposed water intake or discharge locations of the project. Although Lake Sturgeon was not observed during the multi-year baseline studies, its presence within the broader system is acknowledged based on local knowledge.

Fisheries and Oceans Canada (DFO) are the regulatory authority for fish habitat, who regulate projects using their policy for applying measures to offset harmful impacts to fish and fish habitat. This outlines a hierarchy of measures when proposed project activities may interact with fish and their habitat: first seeking alternatives to avoid impacts, then implementing mitigation measures, and finally considering offsetting or compensation if impacts remain. To assess potential effects of the project on fish and fish habitat, quantitative methods are used, including measuring the areal extent of fish habitat affected and using the baseline data to help quantify the potential impacts. This allows for the calculation and accounting of what habitat to be mitigated or compensated. The assessment considers impacts along the full length of affected watercourses, applying a conservative approach to ensure comprehensive accounting of impacts to fish and fish habitat. A visual representation of preliminary fish habitat impacts uses different colours to distinguish between types of impacts, such as those requiring compensation or offsetting due to direct impact or flow reduction (see map on slide 60).

The DFO requires mitigation measures to be included in the offset and compensation plan if avoiding impacts is not possible. These include maintaining riparian buffers, scheduling in-water work outside of sensitive periods like spawning, as well as conducting a fish relocation (salvage) program to live capture and move fish out of areas to be directly impacted, relocating these fish to other areas outside of the project work area. The fish relocation program is completed as per license conditions from the Ministry of Natural Resources. For compensation and offsetting, the DFO prefers habitat restoration enhancement (such as improving the spawning areas) that benefit multiple species, and habitat creation as the primary measures to offset project impacts. Agnico Eagle has engaged with First Nations communities and the public to gather ideas for compensation and offsetting, including habitat structures to improve fish habitat in Beaverhouse Lake, Larder Lake, and York Lake.

The follow-up performance monitoring program will include all the measures outlined in the offsetting and compensation plan. This plan identifies success criteria and includes performance monitoring commitments over several years to ensure the implemented measures effectively offset and compensate for habitat loss resulting from project development. This plan must be approved for the project to proceed.

## Question to participants

A Zoom poll asks participants the question: How confident are you that the proposed habitat compensation and offsetting measures will effectively maintain fish populations? Respondents are invited to answer using a scale from 0 (not at all confident) to 5 (very confident).

Of the 20 respondents:

- Six people report being not at all confident in the effectiveness of the measures, giving a score of 0 out of 5.
- Six respondents report low confidence, choosing a rating of 1 or 2.

- Five respondents are somewhat confident, rating their confidence at 3 out of 5.
- Three respondents report being confident or very confident, selecting ratings of 4 and 5.

| QUESTIONS AND COMMENTS | | ANSWERS |
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| **Q & C 24** | Did you have a focused program to rule out presence of Sturgeon, or was that concluded during normal procedures? Have species at risk been indicated in any streams that are going to be impacted? | The routine multiyear and multi-season program was comprehensive and did not warrant a special Lake Sturgeon study. If Lake Sturgeon were present, it is believed that at least one would have been encountered during the program. |
| **Q & C 25** | Slide 56 – Has the study area not been extended south, in/along the Misema River and further down, which will be the recipient of all the effluent? | The study area was extended to characterize the fish community in the Misema River. Under the MDMER, sampling study areas positioned upstream and downstream of the effluent discharge point are required. In this case, a study would be designed to detect potential changes in sediment quality, fish populations, and benthic macroinvertebrate communities of the discharge location. Any such changes would be identified through biological monitoring. |
| **Q & C 26** | Please release the baseline studies for each of the topics addressed tonight. Water is most likely the most important environmental feature that the Upper Beaver Project will affect. The entire presentation points to data that are not disclosed, but that are necessary for the public to be informed and formulate informed questions. | Agnico Eagle plans to make the studies available on its website. This process is currently underway. |
| **Q & C 27** | Have you utilized eDNA to identify the aquatic species? | For this specific program, no. |
| **Q & C 28** | How will runoff from the tailings' storage affect fish and fish habitat? | The site will be designed to intercept and treat this type of water through the treatment system before discharging it. Consequently, this water will not affect fish and fish habitat, as it will be intercepted and managed. |

| QUESTIONS AND COMMENTS | | ANSWERS |
|---|---|---|
| **Q & C 29** | How does Agnico Eagle plan to offset cumulative effects for multiple projects? | *This question was asked in the chat and not answered during the meeting. Added after meeting: As part of the cumulative effects assessment conducted under the Impact Assessment, each Valued Component is assessed individually in the cumulative effects assessment. Where residual effects remain after mitigation measures are applied, these are compared with other effects in the area. The assessment considers the watershed and other projects nearby, focusing only on residual changes after mitigation has been implemented. Cumulative effects are assessed by considering projects that are currently operating, closed out, and those with a high likelihood of proceeding in the future.* |

## CLOSING REMARKS

A Zoom poll asks participants a last multiple-choice question: Which topics from this evening's presentation would you like us to explore more deeply in future sessions or materials? The choices are:

- Water quality
- Water level and flow
- Fish and fish habitat
- Impact Assessment Process
- I'm satisfied with the information received today
- Other (specify)

16 participants respond to the poll, expressing a range of interests in topics they would like to learn more about:

- "Fish and fish habitat" and "Impact Assessment Process" are each selected 5 times.
- "Water quality" and "Water levels and flow" are each selected 4 times.
- Additionally, four of the respondents indicate being satisfied with the answers received today.

In the comments under the poll, one person mentions being interested specifically in water temperatures at discharge. Another person mentions "Supreme Title" again.

TES then outlines the next planned engagement activities related to the Impact Statement preparation in 2025, noting that this was the last virtual workshop on the Impact Assessment preparation. However, updates will be

shared during the BBQ event on July 19th. Additionally, an Impact Statement overview presentation will be provided by the end of this year or early in 2026.

There are many ways to stay informed and to participate in the Impact Assessment process, including attending information sessions, the community BBQ, as well as subscribing to receive newsletters and other communications related to the project. TES thanks everyone for attending and invites participants to fill out the feedback survey that will be sent to them.

The meeting ends at 8: 55 p.m.

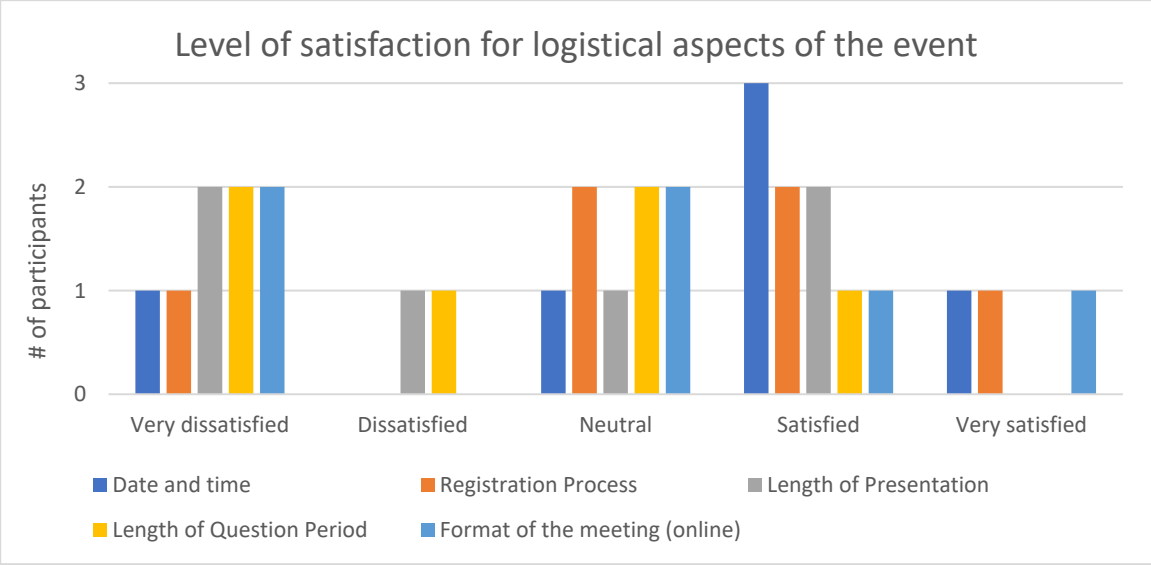
| QUESTIONS AND COMMENTS | | ANSWERS |
|---|---|---|
| **Q & C 30** | Is there concern and consideration for neighbouring communities whose municipal water source is well and groundwater? There are communities that are close but just outside of the area you are reporting on. How will you ensure and support long-term safe water quality for the residents? | The protection of surface water and groundwater resources is governed by numerous regulations. Extensive mitigation and modelling efforts are being undertaken to ensure that water quality is not affected. A robust monitoring program will be implemented to continuously observe and ensure that the water quality remains within the predicted ranges of effects as outlined in the studies. This involves both mitigation measures and ongoing monitoring to ensure compliance and effectiveness. |
| **Q & C 31** | One of the experts said the project is being viewed as a non-acid-generating project. If the project goes ahead with all its approvals, and then ore from outside the mine is being transported to the mill for processing, what procedures are initiated if acid rock is encountered during the process? | If ore were to be sourced from another site in the future, associated approvals would need to be amended to accommodate the change. Geochemical studies would be conducted to assess the quality of the new ore, and, if necessary, the project design would be modified to include additional mitigation measures. Although it is uncertain whether this scenario will occur, any such change would require a Closure Plan Amendment (CPA) and an amendment to the Environmental Compliance Approval (ECA) for industrial sewage works, particularly if acid-generating rock is involved. Processing of the new ore would not proceed until the required amendments are obtained. |
| **Q & C 32** | About the safety features meant to contain tailings seepage and the retention | Yes, design criteria will be developed in the next phase of the project and will be |

| QUESTIONS AND COMMENTS | | ANSWERS |
|---|---|---|
| | ponds, are we talking about them being designed for a once in a 100-year storms? | based on identified risk factors, such as storm intensity and rainfall events. Regulatory requirements dictate the appropriate design standards depending on the potential severity of impacts. For example, where there is a risk of loss of life downstream of dykes, a higher level of design is required. The dykes are also being designed to withstand events exceeding a 1-in-1000-year occurrence. |

## Feedback survey results

A total of **6 participants** completed the feedback survey.

### Levels of satisfaction

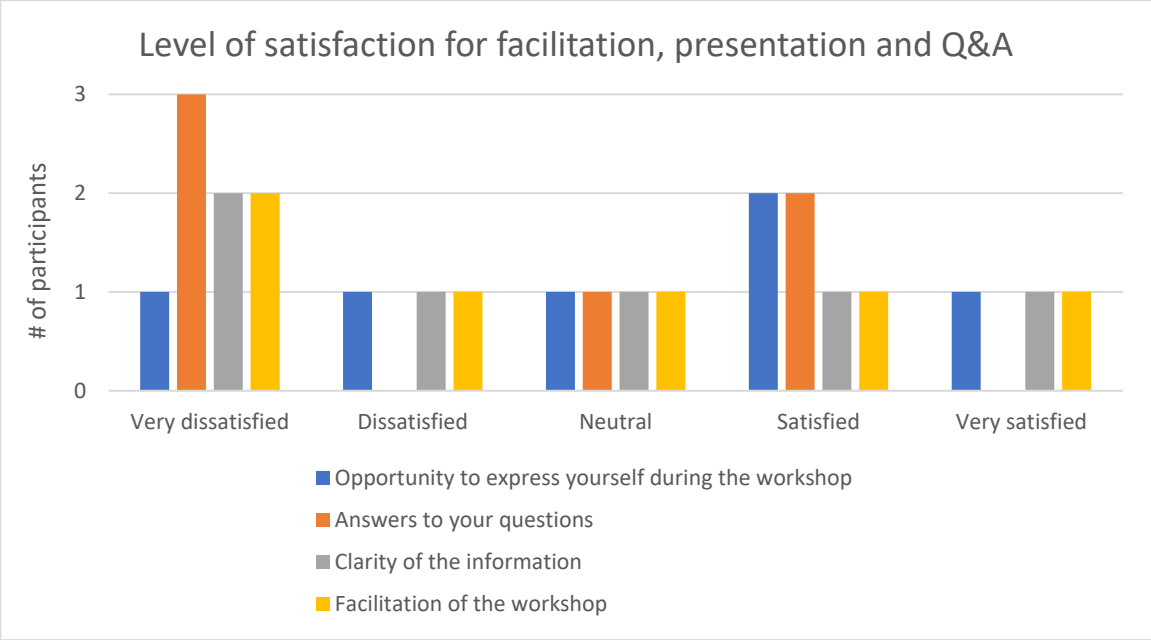



The logistical aspects of the workshop received mixed feedback from participants. Four people were satisfied or very satisfied with the choice of date and time, and three participants were or very satisfied with the registration process. However, all logistical aspects received at least one "Very dissatisfied" rating. Opinions were split regarding the length of the presentation, the length of the question period, and the online format of the meeting.

Respondents shared the following comments on the logistical aspects of the workshop:

- This is the third time - same process: way too much information - not the background information/studies, and therefore the questions remain on the surface
- Enjoyed learning from the professionals about everything that goes into this mine opening
- An onsite tour would be next step
- My family has been in Kirkland Lake nearly, 100 years; a drop in the bucket to Beaverhouse and Matachewan First Peoples, and I must say the "consultation process" these days is not about substantial understand of the reality of the environment and the Life/People entwined with it. This is a legal check boxes exercise, Like I said in the meeting "it's weird it's not Natives telling me what the plans are with this beautiful, living environment" it is very strange that this area has produced all sorts of foreign millionaires but my NATIVE Treaty Peoples in my community and area aren't walking around with the option to be filthy rich and with friends somehow "waiting on housing". It's a grift. It's just painfully obvious now. The mines in this town abused me and my family for years. You're trying to make a greedy monster into something genuine. Big Corps Don't Care> This "Consultation Process" Is Nothing But A Legal Checklist Contained In A Theatrical Preformance

## Facilitation, Presentations and Q&A periods




Satisfaction levels for facilitation, presentation, and the Q&A period were also mixed. Three respondents said they were "Very dissatisfied" with the answers to participants' questions. The highest number of "Satisfied" ratings (two participants each) were given for the opportunity to express oneself during the workshop and for the answers received to questions.

When asked to comment on the facilitation, presentations and question periods, respondents shared the following feedback:

- Enjoyed learning from the professionals about everything that goes into this mine opening
- Wish people could listen to instructions about asking questions during Q&A
- Too many non-answers given. Didn't directly answer many questions. Questions provided in previous workshops were not addressed, as we were promised

- In Reality Water Is Life, In Economics Its A Legal Hurdle To Be Fudged By Soulless Lawyers
- I really appreciated that you sent the slides ahead of time offered for questions to be submitted ahead of time. I do wish that there was more time for a round table discussion where all voices could be heard. Maybe break out rooms then top 2 questions from each come forward?
- There will be, as project progresses

## Questions related to Water components of the Impact Assessment process

When asked if they had any additional questions regarding the **Impact Assessment process**, respondents said this:

- What is the area that is considered and how are you working with neighbouring communities to support them through this project?
- How Isn't Ontario Bill 5, British Columbia Bill 15, And Canada's Bill C-5 Not An Administrative Coup Against The Rights And Protections Afforded To British Columbians, Ontarians, Canadians and Ultimately Beaverhouse and Matachewan First Peoples Supreme Title Rights Long Before Agnico Eagle, Ontario, BC or Canada EVER Existed?

When asked to share additional **questions or concerns** about **water quality**, here is what respondents commented:

- No, it was very informative
- Way too many
- How does the money restore nature? Are the big shot investors going to come here to do it? Do you apply the money directly to the spillage? We feed the money right to the animals once they've ingested Agnico Eagle et al et alibi's poisons then they're better?
- Will need assurance and testing of quality at all levels

When asked to share additional ideas of **mitigation measures** related to **water quality**, respondents provided the following feedback:

- Not without the background/baseline studies
- No, it was very informative
- Dobie town water quality is a concern

When asked if they had any additional **questions or concerns** and ideas of **mitigation measures** related to **water level and flow**, respondents wrote:

- Not without the background/baseline studies
- No, it was very informative

When asked to share additional **questions or concerns** and ideas for **mitigation measures** related to **fish and fish habitat**, respondents wrote:

- Not without the background/baseline studies
- No, it was very informative
- Are water temps being monitored throughout process?

## General feedback from respondents about the meeting

- Reports are not being emailed to participants
- Not without the background/baseline studies
- It was very informative

- I believe the process will work for most parties involved

## Answers to additional questions

| QUESTIONS AND COMMENTS | | ANSWERS |
|---|---|---|
| **Q & C 33** | Regarding the Impact Assessment process, what is the area that is considered and how are you working with neighbouring communities to support them through this project? | The areas covered by the Impact Assessment may vary depending on the element being analyzed. The areas are defined to allow for an adequate evaluation of the Project's potential effects. Agnico Eagle ensures that project information is communicated, and feedback is gathered. Several communication channels are used: newsletters, information session, workshops, community events, updates at Regular Council meetings, etc. Agnico Eagle representatives are always available to answer questions. |
| **Q & C 34** | Regarding mitigation measures related to fish and fish habitat, are water temps being monitored throughout the process? | Yes, temperature is one of the parameters we are monitoring in surface water. |

# APPENDIX I

# PRESENTATION

# Upper Beaver Project

## Impact Assessment

Virtual Thematic Workshop #3

## Water

Thursday, June 19, 2025

Online









# TRANSFER ENVIRONMENT AND SOCIETY (TES)

Founded in 1987, Transfer Environment and Society (TES) offers a unique expertise in multi-stakeholder engagement, consultations, meeting facilitation and coordination, and community relations.

Our goal is to foster meaningful conversations between communities and project proponents.

## OUR TEAM TONIGHT

**Elizabeth Robertson**
**Facilitator**

**Roxanne Breton**
**Zoom manager**

**Laurence Roger**
**Note taker**

# AGNICO EAGLE TEAM TONIGHT

**Kishan Leakram**

Operations Manager, Upper Beaver

**Sarah Morin**

Environmental Permitting Manager, Ontario

**Kaven Bertrand**

Project Study Manager

**Jason Plamondon**

Permitting Lead, Upper Beaver

**Amy Danchuk**

Senior Community Relations Coordinator

# WSP TEAM

**Derrick Moggy**

Project Manager / Impact Assessment Lead

**Dale Klodnicki**

Fish and Fish Habitat Lead

**Amy Elliott**

Water Quality Specialist

**Maria Ma**

Hydrologist

# OBJECTIVES OF THE WORKSHOP

- Present information related to potential impacts, mitigation measures and monitoring programs on topics of interest to the community
- Gather community feedback
    - ➢ to include in the Impact Statement (as required by the IAAC)
    - ➢ to be considered in final design of Project

# AGENDA

6:00PM – 6:10PM – Welcome, Introductions and Objectives of the Workshop

6:10PM – 6:40PM – Upper Beaver Project and Impact Assessment Overview

6:40PM – 7:15PM – Topic 1 Water Quality

7:15PM – 7:45PM – Topic 2 Water Level and Flow

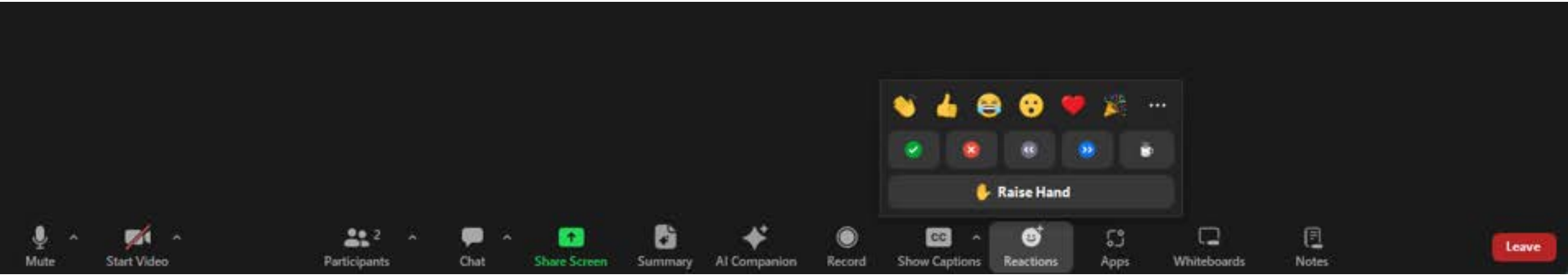
7:45PM – 8:25PM – Topic 3 Fish and Fish Habitat

8:30PM – Closing Remarks

Each topic will have an expert present information followed by direct engagement with participants

# GUIDELINES FOR A PRODUCTIVE ONLINE MEETING

- Please save your questions for the Q&A periods
- There are two ways to ask a question:
    1. Raise your hand using the virtual command
    2. Writing your question in the chat
- We encourage you to keep your camera on during the discussion
- Please keep your microphone muted unless you want to speak
- Keep questions and comments concise and on topic so everyone has a chance to contribute



# FORWARD LOOKING STATEMENT

The information in this presentation has been prepared as of June 19, 2025. Certain statements contained in this presentation constitute "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and "forward-looking information" under the provisions of Canadian provincial securities laws and are referred to herein as "forward-looking statements". When used in this presentation, the words "anticipate", "could", "estimate", "expect", "forecast", "future", "plan", "potential", "will" and similar expressions are intended to identify forward-looking statements. Such statements include, without limitation: statements concerning the Upper Beaver Project of Agnico Eagle Mines Limited (the "**Company**") and other Company's development projects, including the timing, funding, mining methods, expected life of mine, tonnage, or mill capacity, completion and commissioning thereof and production therefrom, the estimated timing and conclusions of technical reports and other studies, the projects' benefits for the communities (including job and business opportunities, the rehabilitation of historic legacies, road and access improvements, etc.), the projects' impacts, the mitigation measures and their efficiency; statements regarding the Company's ability to obtain the necessary permits and authorizations in connection with its exploration, development, and mining operations and the anticipated timing thereof; statements as to future engagement and consultation activities with stakeholders, including with Indigenous groups; statements regarding geological potential or anticipated future exploration or development activities; and the anticipated timing of events with respect to the Company's mine sites or activities. Such statements reflect the Company's views as at the date of this presentation and are subject to certain risks, uncertainties and assumptions, and undue reliance should not be placed on such statements. Forward-looking statements are necessarily based upon a number of factors and assumptions that, while considered reasonable by the Company as of the date of such statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies. The material factors and assumptions used in the preparation of the forward looking statements contained herein, which may prove to be incorrect, include, but are not limited to, the assumptions set forth herein and in management's discussion and analysis ("MD&A") and the Company's Annual Information Form ("AIF") for the year ended December 31, 2024 filed with Canadian securities regulators and that are included in its Annual Report on Form 40-F for the year ended December 31, 2024 ("Form 40-F") filed with the SEC as well as: that there are no significant disruptions affecting the Company's operations; that there are no significant disruptions affecting operations; that production, permitting, development, expansion and the ramp-up of operations at each of Agnico Eagle's properties proceeds on a basis consistent with current expectations and plans; that the Company's plans for its exploration, development and mining operations are not changed or amended in a material way; that the relevant metal prices, foreign exchange rates and prices for key mining and construction inputs (including labour and electricity) will be consistent with Agnico Eagle's expectations; that the effect of tariffs will not materially affect the price or availability of the inputs the Company uses in its operations; that Agnico Eagle's current estimates of mineral reserves, mineral resources, mineral grades and metal recovery are accurate; that there are no material delays in the timing for completion of ongoing growth projects; that seismic activity at the Company's operations at LaRonde, Goldex, Fosterville and other properties is as expected by the Company and that the Company's efforts to mitigate its effect on mining operations, including with respect to community relations, are successful; that the Company's current plans to address climate change and reduce greenhouse gas emissions are successful; that the Company's current plans to optimize production are successful; that there are no material variations in the current tax and regulatory environment; that governments, the Company or others do not take measures in response to pandemics or other health emergencies or otherwise that, individually or in the aggregate, materially affect the Company's ability to operate its business or its productivity; and that measures taken relating to, or other effects of, pandemics or other health emergencies do not affect the Company's ability to obtain necessary supplies and deliver them to its mine sites. Many factors, known and unknown, could cause the actual results to be materially different from those expressed or implied by such forward-looking statements. Such risks include, but are not limited to: the volatility of prices of gold and other metals; uncertainty of mineral reserves, mineral resources, mineral grades and mineral recovery estimates; uncertainty of future production, project development, capital expenditures and other costs; foreign exchange rate fluctuations; inflationary pressures; financing of additional capital requirements; cost of exploration and development programs; seismic activity at the Company's operations, including at LaRonde, Goldex and Fosterville; mining risks; community protests, including by Indigenous groups; risks associated with foreign operations; risks associated with joint ventures; governmental and environmental regulation; the volatility of the Company's stock price; risks associated with the Company's currency, fuel and by-product metal derivative strategies; the current interest rate environment; the potential for major economies to encounter a slowdown in economic activity or a recession; the potential for increased conflict or hostilities in various regions, including Europe and the Middle East; and the extent and manner of communicable diseases or outbreaks, and measures taken by governments, the Company or others to attempt to mitigate the spread thereof may directly or indirectly affect the Company. For a more detailed discussion of such risks and other factors that may affect the Company's ability to achieve the expectations set forth in the forward-looking statements contained in this news release, see the AIF and MD&A filed on SEDAR+ at www.sedarplus.ca and included in the Form 40-F filed on EDGAR at www.sec.gov, as well as the Company's other filings with the Canadian securities regulators and the SEC. Other than as required by law, the Company does not intend, and does not assume any obligation, to update these forward-looking statements.

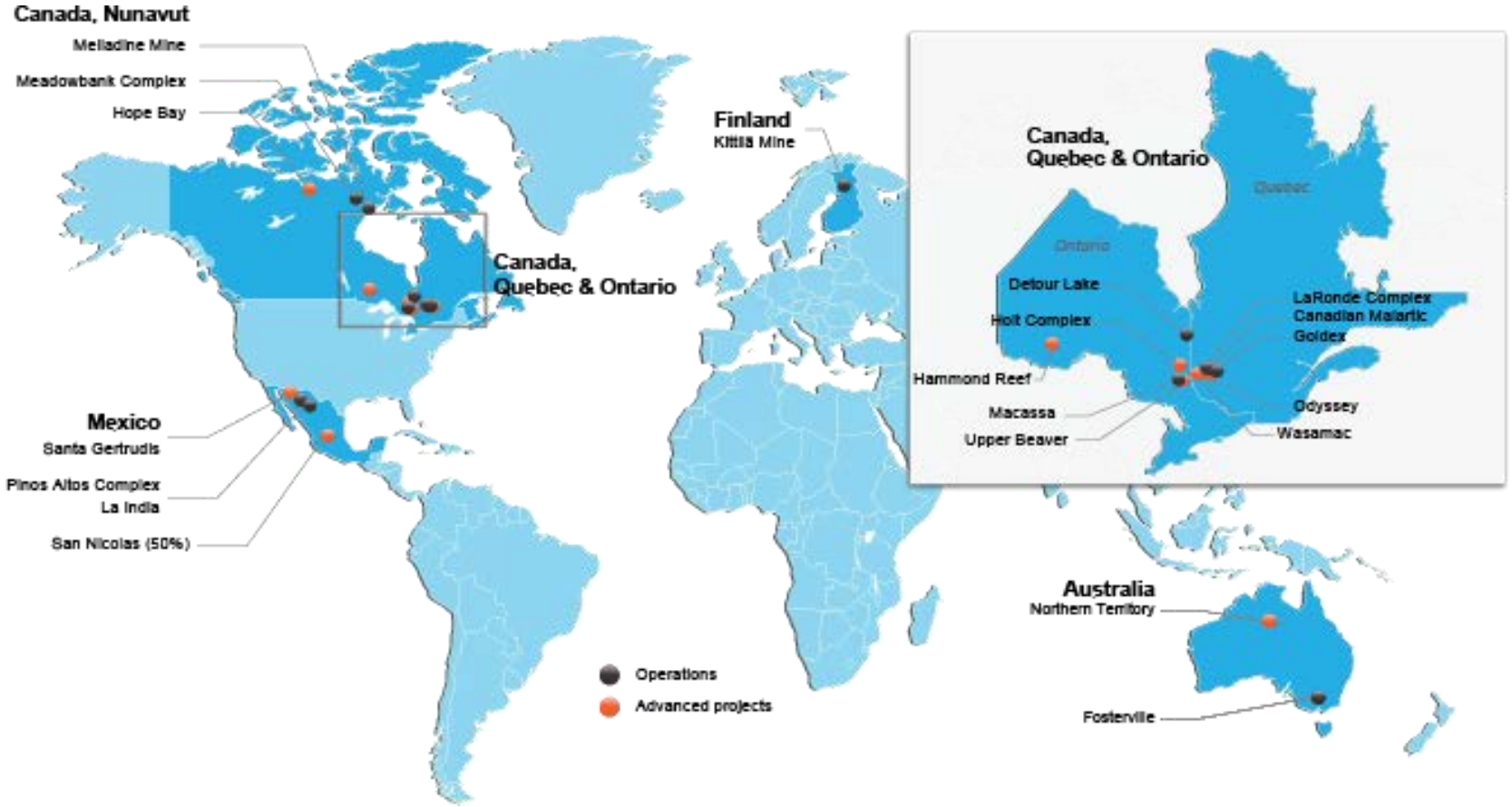
**Further Information**

- For further details on the Company's first 2025 quarter results, please see the Company's news release dated April 24, 2025.

# ABOUT AGNICO EAGLE

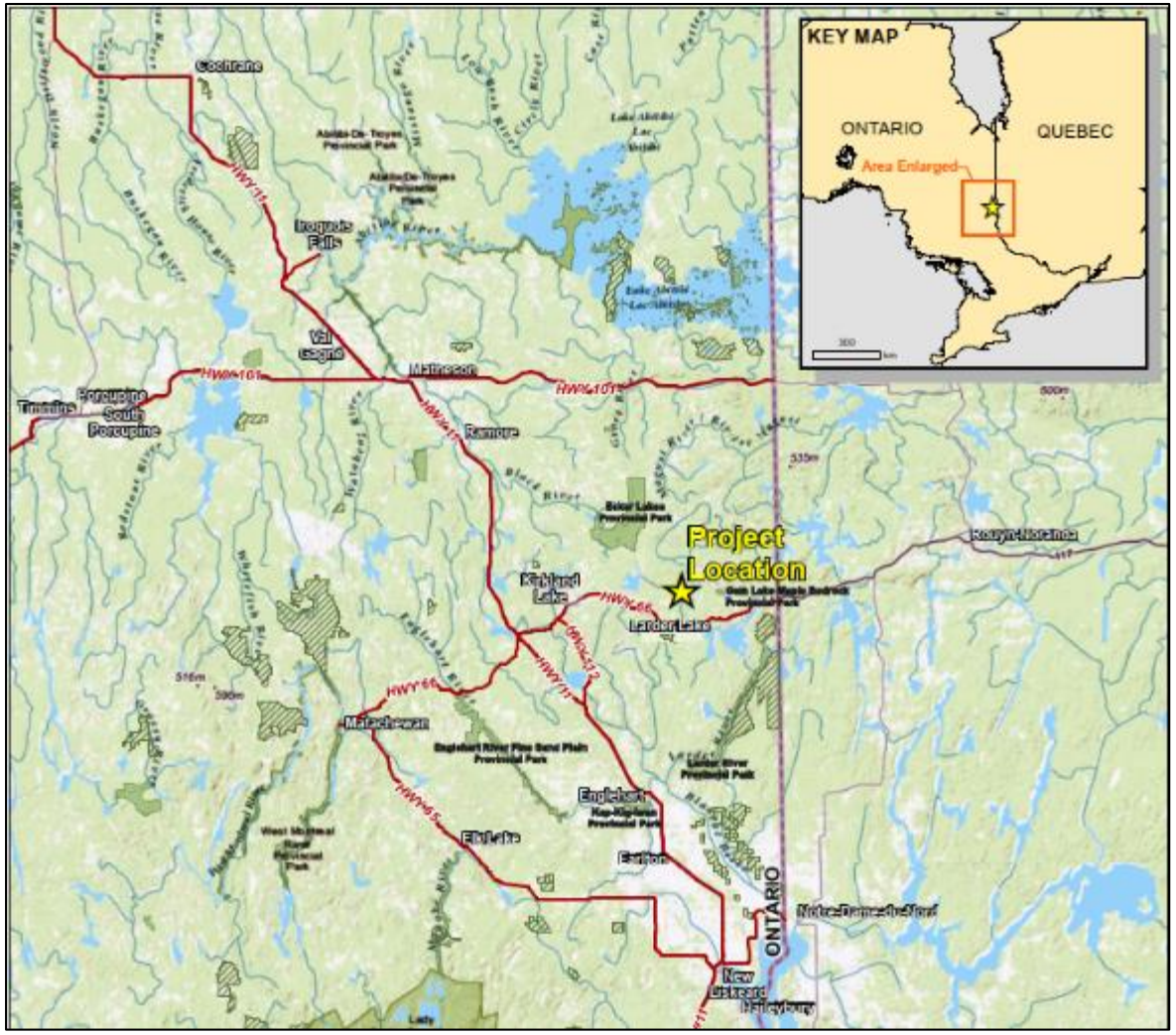
# AGNICO EAGLE MINES

## True National Champion: Canadian Led, Canadian Headquartered, Community Oriented

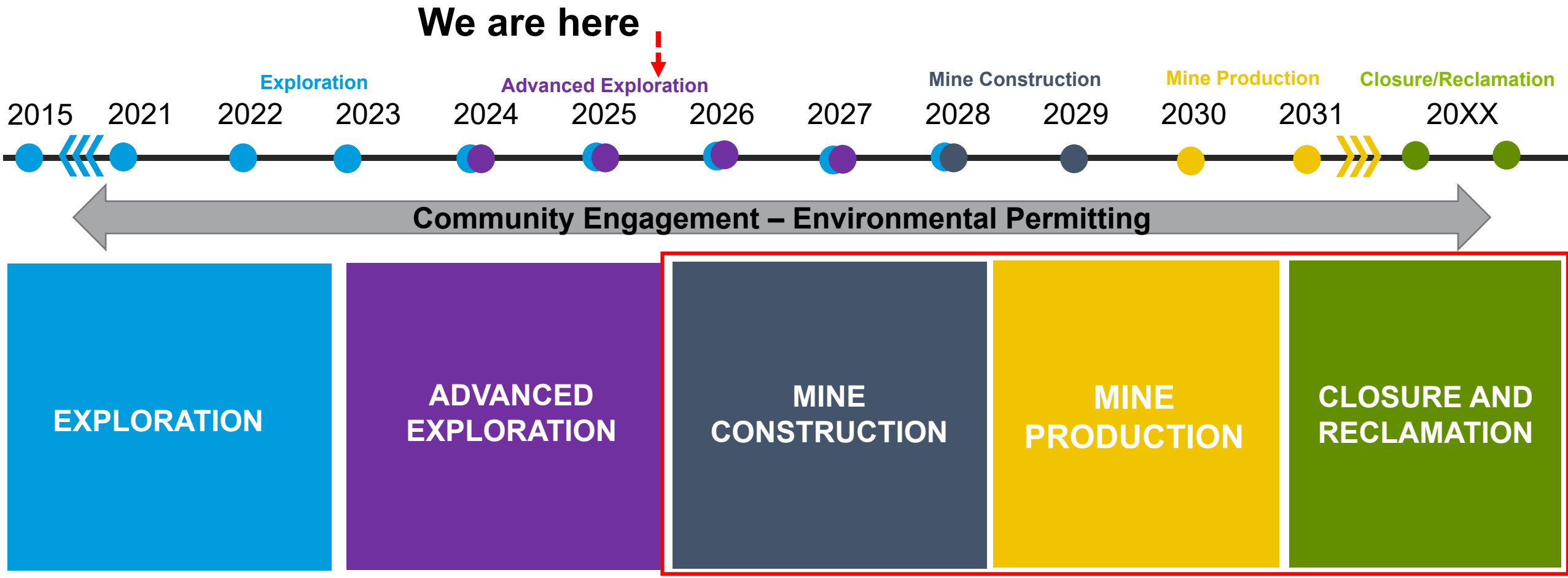



- Agnico Eagle is a senior gold mining company
- Diversified operations in regions with high geologic potential: 11 mines in five regions, four countries
- Global workforce of over 16,000 employees and contractors

# UPPER BEAVER PROJECT AND IMPACT ASSESSMENT OVERVIEW



# DEVELOPMENT PHASES – UPPER BEAVER GOLD PROJECT




***Received internal approval on July 31st 2024, to move forward with the construction of the exploration shaft and exploration ramp and to proceed with the Impact Statement, to include the scenario with a mill at site.**

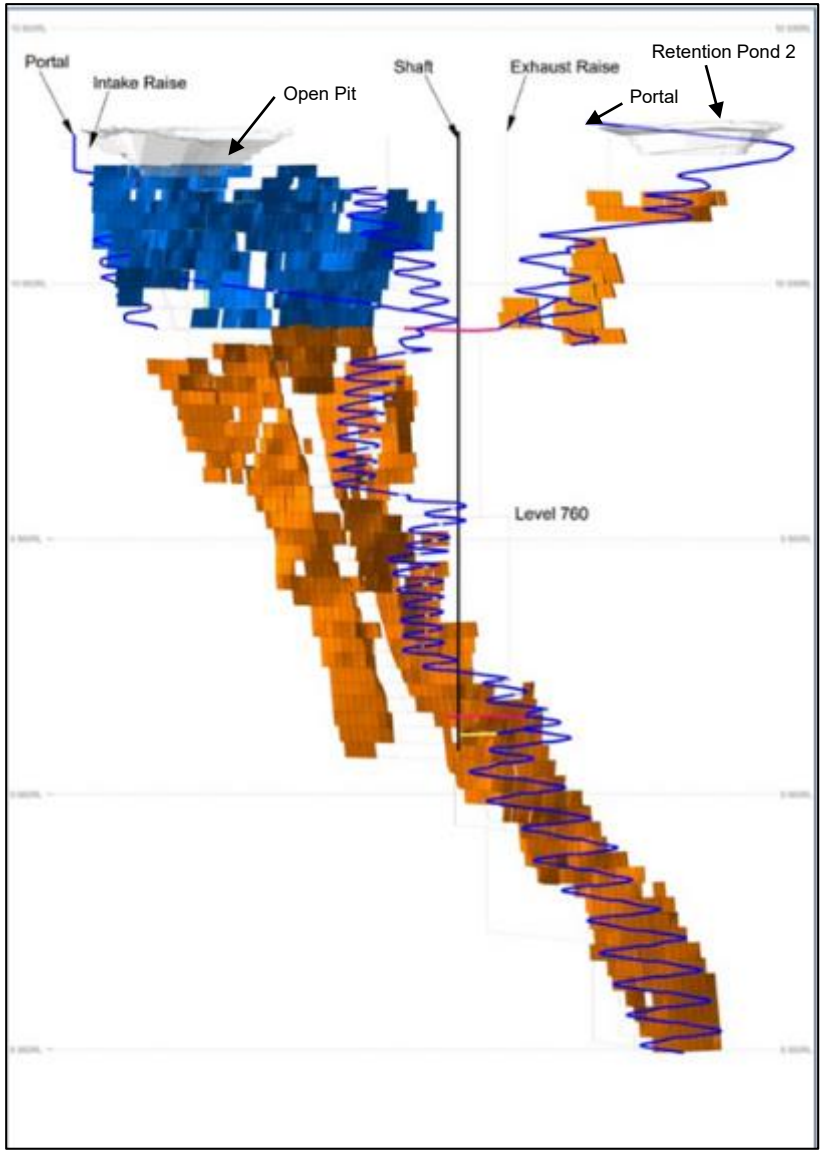
# ADVANCED EXPLORATION VS. MINE PRODUCTION PHASE

| COMPONENT | ADVANCED EXPLORATION | MINE PRODUCTION |
|---|---|---|
| **Ramp** | ✓ | ✓ |
| **Shaft** | ✓ | ✓ |
| **Rock/Overburden Storage** | ✓ | ✓ |
| **Water treatment facilities** | ✓ | ✓ |
| **Mill and Tailings Facilities** | ○ | ✓ |
| **Open Pit** | ○ | ✓ |
| **Diversion and Dykes** | ○ | ✓ |
| **Federal Impact Assessment** | ○ | ✓ |
| **Revenue** | ○ | ✓ |

# UPPER BEAVER - PRODUCTION PHASE

## Highlights of Project:

- Mining development of a historical mine, deeper and wider requires new access
- Primarily an underground project accessible with ramps and shaft
- Small open pit in the first years of operation
  - To manage risk associated with rock stability and risk of water infiltration due to historical development and proximity of lake
- Life of mine that could extend to 14 years
- Daily tonnage and mill capacity between 5,200 and 8,000 tonnes per day
- Employment Opportunities – 500 to 650 employees
- Business Opportunities (Local Procurement Policy)
- Target start of construction: 2028*




*If all required approvals are received (regulators and internal)

# PRODUCTION PHASE – SITE LAYOUT UPDATE

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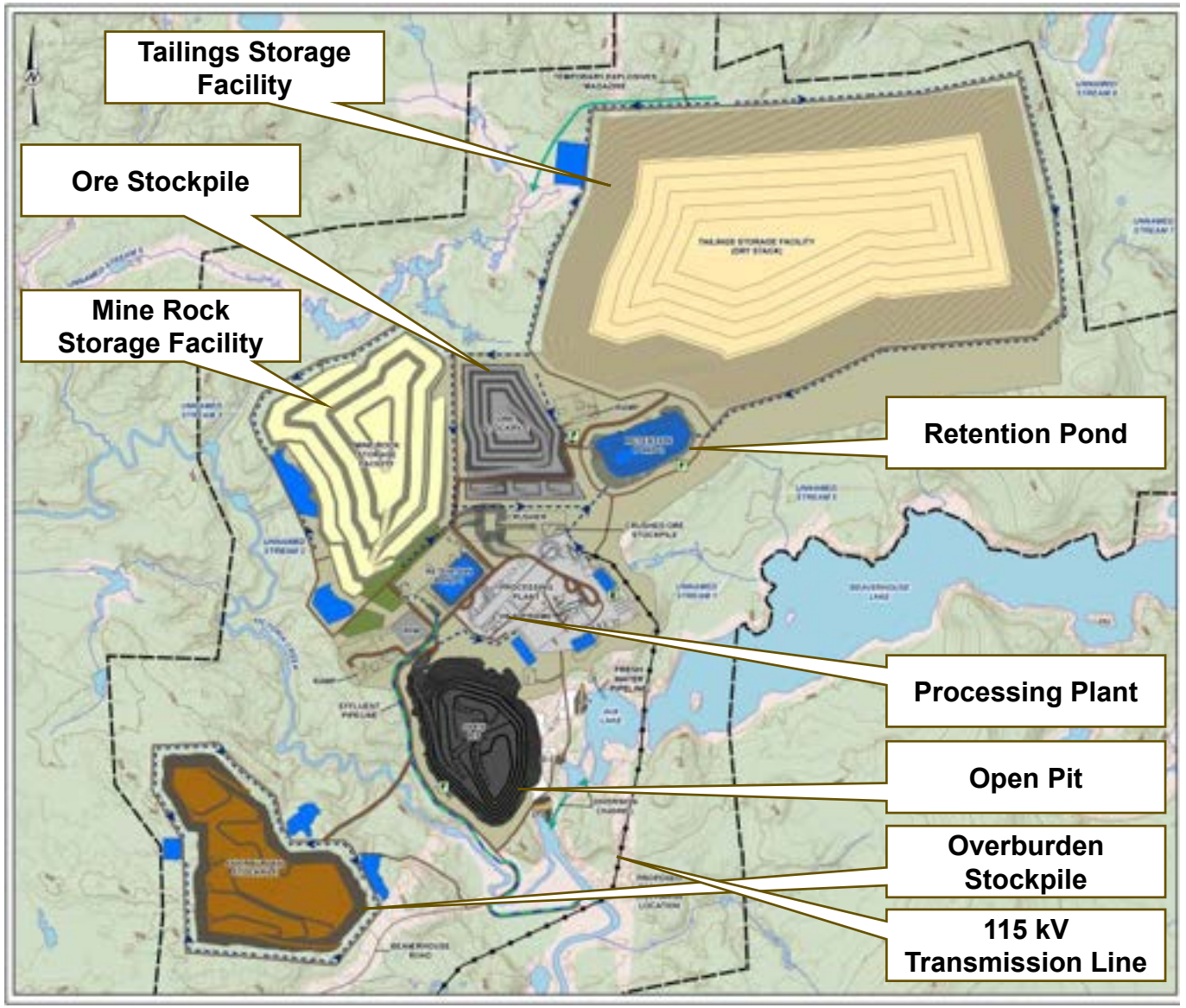
## Proposed Mine Facilities

- Shaft and portals
- Open Pit
- Ventilation intake and exhaust
- Water Management facilities
- Process Plant (mill, paste plant)
- Tailing Storage Facilities (dry stack)
- Crushing Facilities
- Ore stockpile
- Mine rock stockpile
- Overburden stockpile
- Misema water diversion (channels and dykes)
- Mine dry, office, compressor, etc.
- 115 Kv Transmission line



# COMMUNITY ENGAGEMENT OVERVIEW

Agnico Eagle has undertaken several engagement activities regarding Upper Beaver project development. Here is an overview of activities and feedback received.

## Completed Engagement Activities

- Held over 100 activities with Indigenous Nations and stakeholders since 2018
- Developed tools to share Project information:
  - Dedicated Website
  - Newsletters
  - Baseline Studies Booklets
  - Notification of Site Activities
- Community Information Sessions/Workshops/BBQ
- 2 dedicated Community Relations Coordinators with site-based office
- Implementation of an Advisory Committee

## Summary of Feedback Received

- Impact to current land access and to the Beaverhouse Lake Boat Launch
- Concern about road safety within the project area
- Impact to terrestrial and aquatic life, including species at risk
- Impact on water quality and water level
- Impact on neighbours (noise)
- Interest to have justification for open pit

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- Interest in employment and business opportunities
- Interest in Agnico Eagle's involvement in community projects

# IMPACT ASSESSMENT AND OTHER AUTHORIZATIONS

Upper Beaver Gold Project was identified as a designated project (Physical Activities Regulations) due to:

**Mines and Metal Mills**: Ore production capacity of 5,000 tonnes per day or more
**Water Projects**: Diversion of the Misema River

**Confirmation that project required a Federal Impact Assessment**
**+**
**Other Federal and Provincial Authorizations**

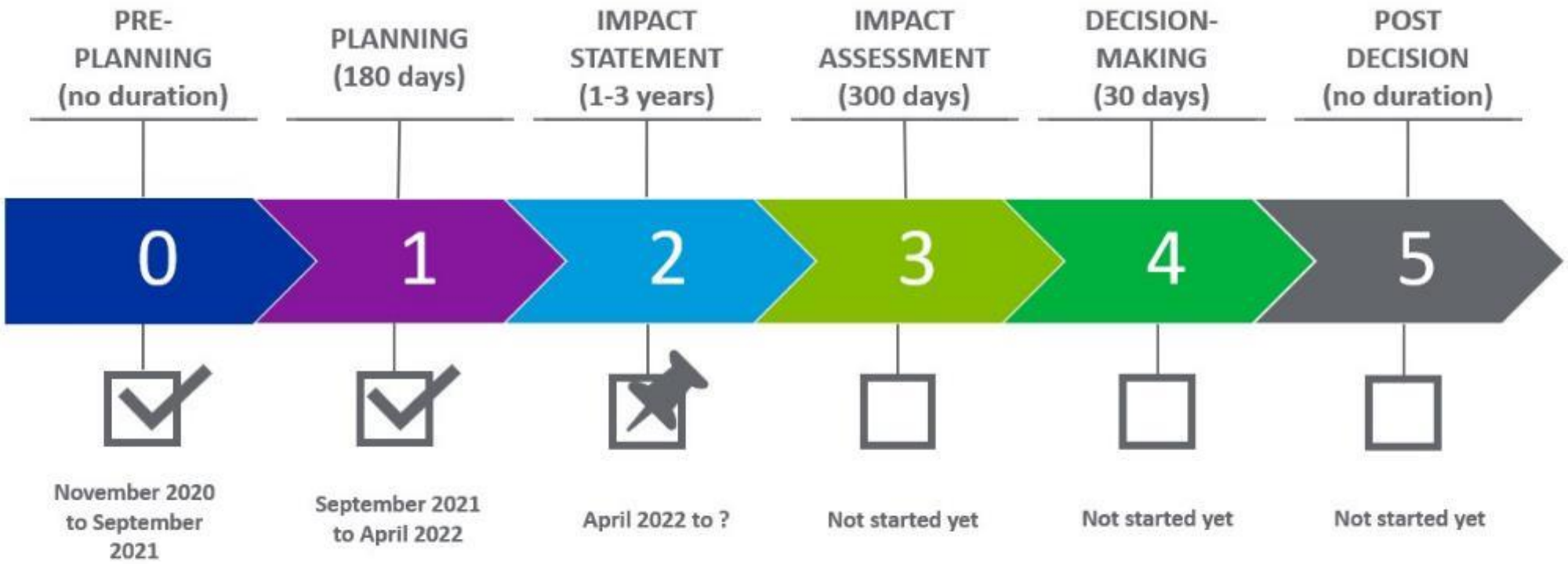

## What is an Impact Assessment:

To examine the positive and negative effects (impacts) that a proposed project could have.

This requires gathering information and evidence from multiple sources: the project proponent, scientific experts, Indigenous Nations, the public, communities, and others.

To identify potential significant harm and ways to mitigate that harm before projects are built. It is also used to enhance a project's positive impacts.

# UPPER BEAVER – IMPACT ASSESSMENT TIMELINE




: We are here

**Impact Statement Phase schedule is under review with the mill option at site:**

- New deadline following the review of the Impact Assessment Act: December 27, 2025
- Extension time limit will be requested, timeframe to be confirmed
- Target completion date for Impact Statement – March 2026

# IMPACT ASSESSMENT PROCESS

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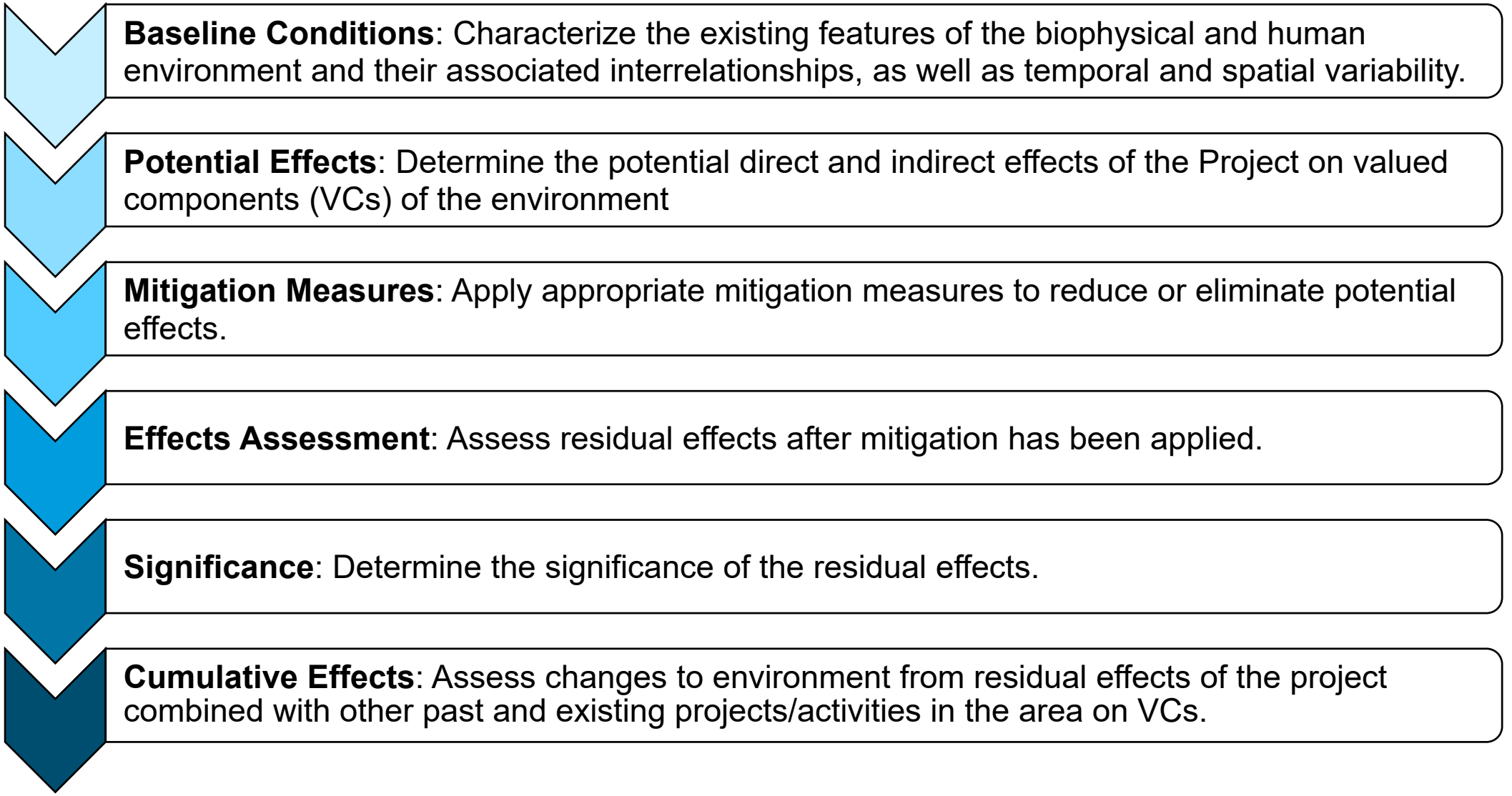
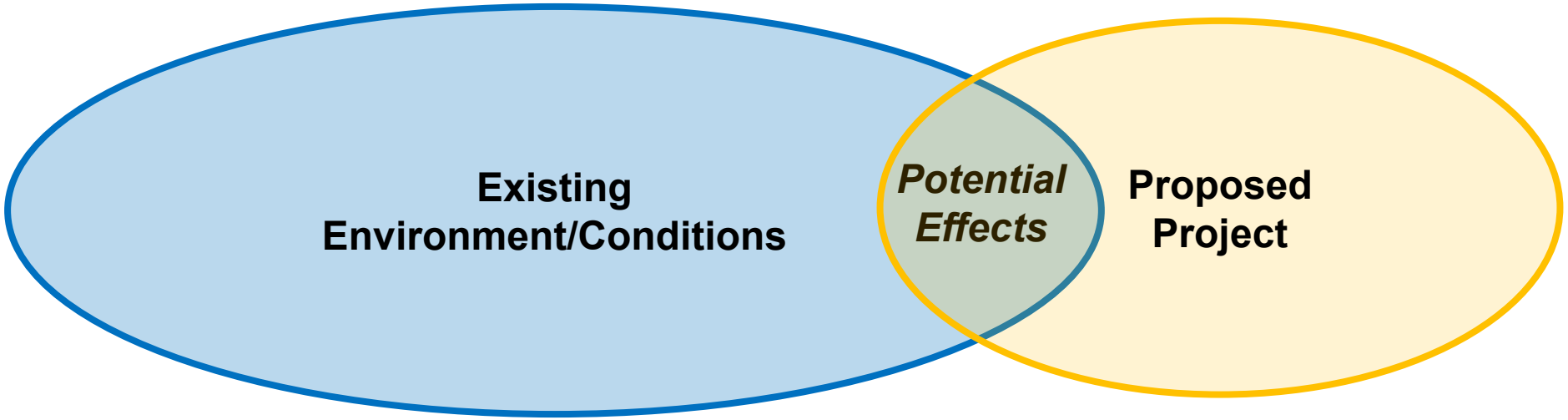


# EFFECTS ASSESSMENT PROCESS




Potential Effects + Mitigation Measures = Residual Effects

**Assessment of Residual Effects:**

- Consideration of existing conditions, and input from traditional knowledge and public
- Inputs from other modelling analysis
- Analysis using modeling and assessment tools to determine the predicted changes

# HIGH-LEVEL TECHNICAL INFORMATION ABOUT PROJECT ACTIVITIES THAT COULD HAVE AFFECT WATER FLOWS/LEVELS, WATER QUALITY AND FISH /FISH HABITAT

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| Project Components and Activities | Water Flows and Levels | Water Quality | Fish and Fish Habitat |
|---|---|---|---|
| **Construction Phase** | | | |
| • Upgrade the site access road, including installation of watercourse crossings | ✓ | ✓ | ✓ |
| • Additional land clearing, site excavation and grading | ✓ | ✓ | ✓ |
| • Construction of new site facilities and/or expansion of existing facilities, including the construction, stabilization and activation of the Ava Lake / Misema River diversion | ✓ | ✓ | ✓ |
| • Transfer of fish from York Lake and dewatering | ✓ | ✓ | ✓ |
| • Establishment of water management and treatment works | ✓ | ✓ | |
| • Development of fish habitat compensation features | | | ✓ |
| **Operation** | | | |
| • Dewatering of the open pit and underground mine | ✓ | ✓ | |
| • Extraction and stockpiling of mine rock and ore from the open pit and underground mine | ✓ | ✓ | |
| • Ore processing | ✓ | ✓ | |
| • Storage of filtered tailings in the tailings management facility | ✓ | ✓ | |
| • Ongoing management and treatment of site water | ✓ | ✓ | |
| **Decommissioning and Closure** | | | |
| • Allow underground mine and open pit to refill | ✓ | ✓ | |
| • Regrade and establish final surface drainage | ✓ | ✓ | ✓ |
| • If appropriate, connect the refilled open pit to the Misema River system once the flooded pit lake quality meets regulatory requirements | ✓ | ✓ | ✓ |

# WORKSHOP

WATER QUALITY

WATER LEVEL & FLOW

FISH & FISH HABITAT

# SURFACE WATER AND GROUNDWATER INTRODUCTION

**Surface water** above ground features (lakes, ponds, rivers, and streams)

- Hydrology: the amount of water; volume (litres) and flow rate (litres/day); 'water balance'
- Water quality: chemical composition of water; includes measurement of the amount of nutrients (like phosphorus) and metals (like copper) in water

**Groundwater** is water that collects underground within the spaces between soil, sand, and rock. Over time, this water gathers in underground layers called aquifers

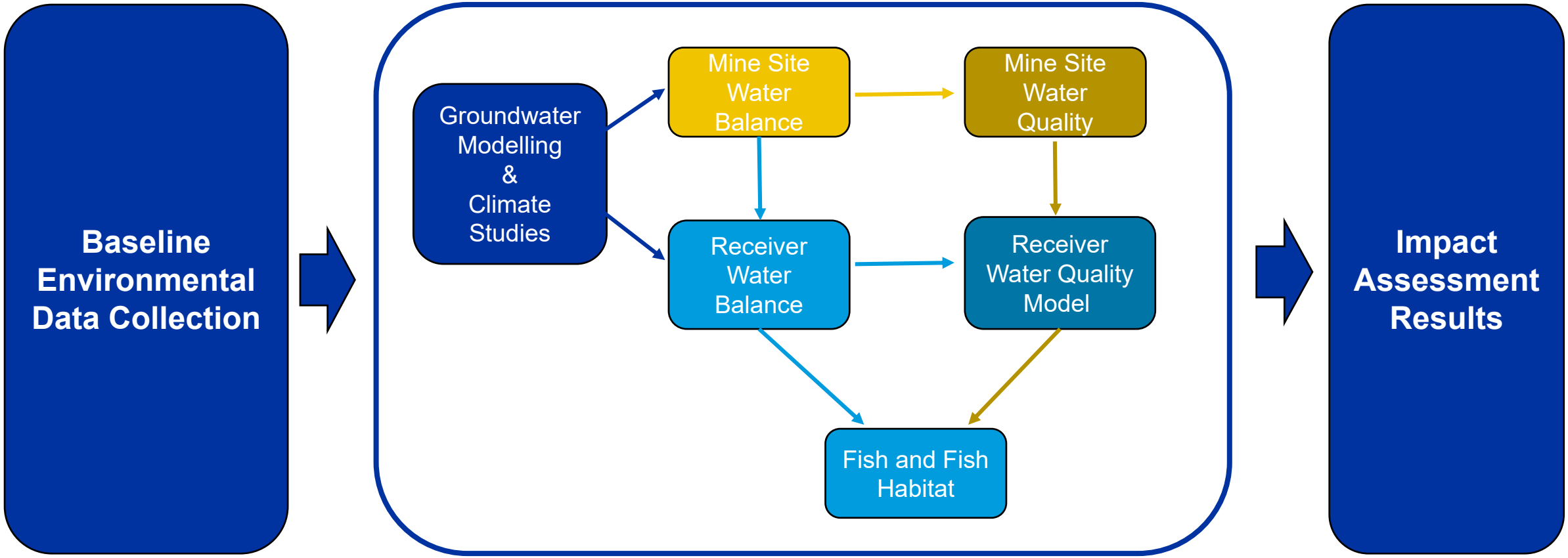
- Hydrogeology: how groundwater moves—where groundwater comes from, where it goes, how fast it moves, and how much water is stored in aquifers; 'water balance'
- Groundwater quality: chemical composition of groundwater; includes measurement of the amount of nutrients (like phosphorus) and metals (like copper)

*Unnamed Stream 5, Spring 2023*

*Misema River (Ava Lake), Spring 2023*

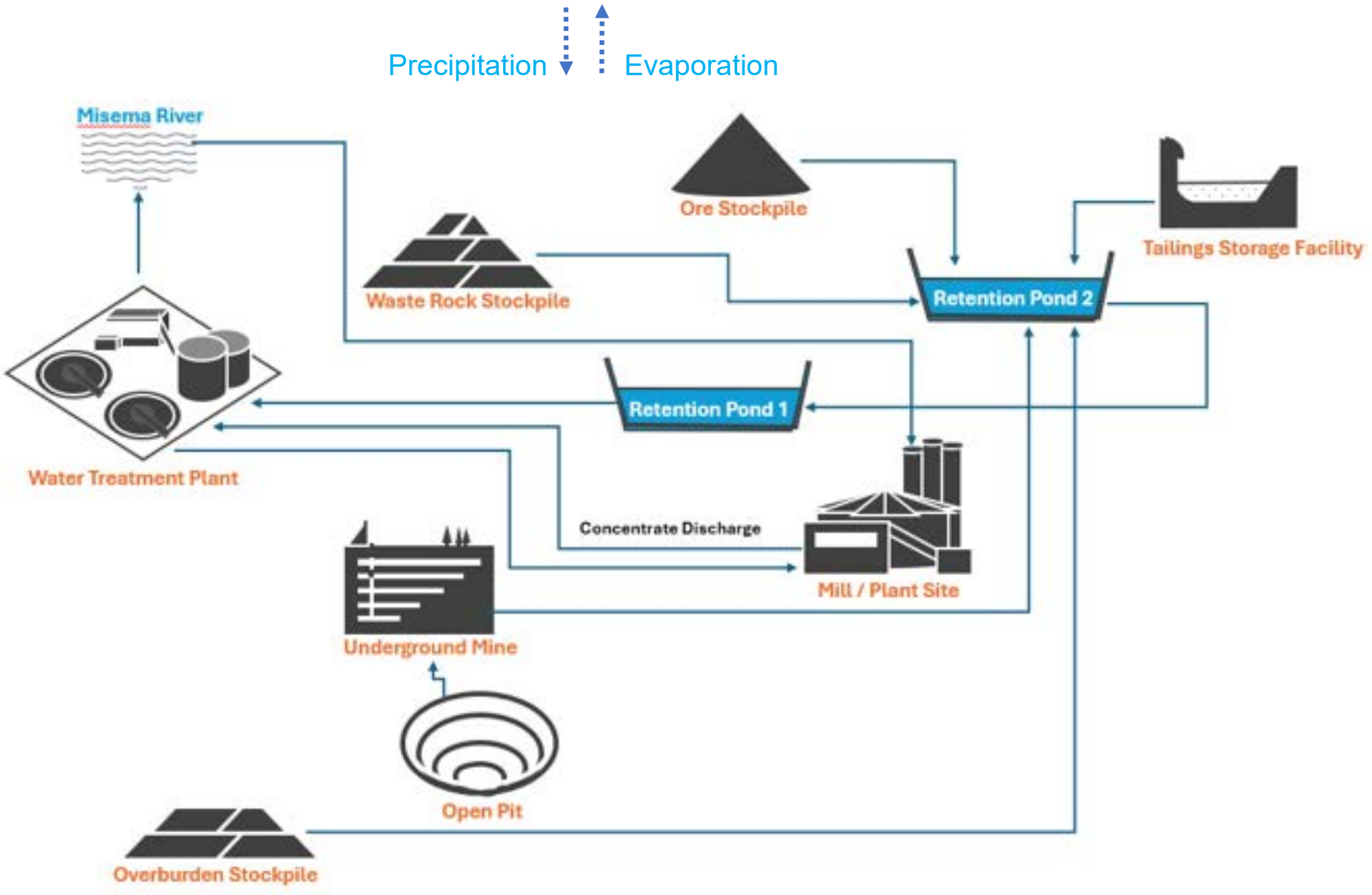
# SURFACE WATER AND GROUNDWATER INTRODUCTION

## INTERACTIONS BETWEEN THE ASSESSMENT OF VARIOUS DISCIPLINES



# SURFACE WATER AND GROUNDWATER INTRODUCTION

Mine Site Water Balance



# SURFACE WATER AND GROUNDWATER QUALITY

# SURFACE WATER AND GROUNDWATER QUALITY: BASELINE STUDIES

## What are baseline studies?

- Used to characterize the predevelopment conditions
- Generate site-specific data, supported by publicly available data sets
- Multi-year seasonal field investigations, to characterize natural variability

## Why are baseline studies necessary?

- Establishes the pre-project conditions against which future potential impacts (negative and positive) can be evaluated
- Identify any sensitive areas
- Inform Project design and water management planning / mitigation measures
- Support regulatory/approvals process

*Hydrology baseline monitoring, station M1 (Misema River)*

*Groundwater monitoring well*

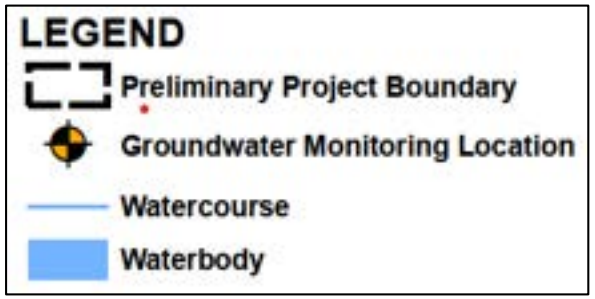
# SURFACE WATER AND GROUNDWATER QUALITY: SURFACE WATER BASELINE STUDIES


## Sampling:

- 2011/2012 and 2018 to 2024
- Upstream Reference Stations
- Downstream Stations
- 25 sampling stations
  - 13 Monthly*
  - 12 Quarterly*
- Approximately 150+ samples collected per year, database over 800 samples
- ~90 parameters monitored (nutrients, anions, metals); ~72,000 datapoints

**When flow is present and site can be safely accessed*

# SURFACE WATER AND GROUNDWATER QUALITY: GROUNDWATER BASELINE STUDIES




**Groundwater monitoring:**

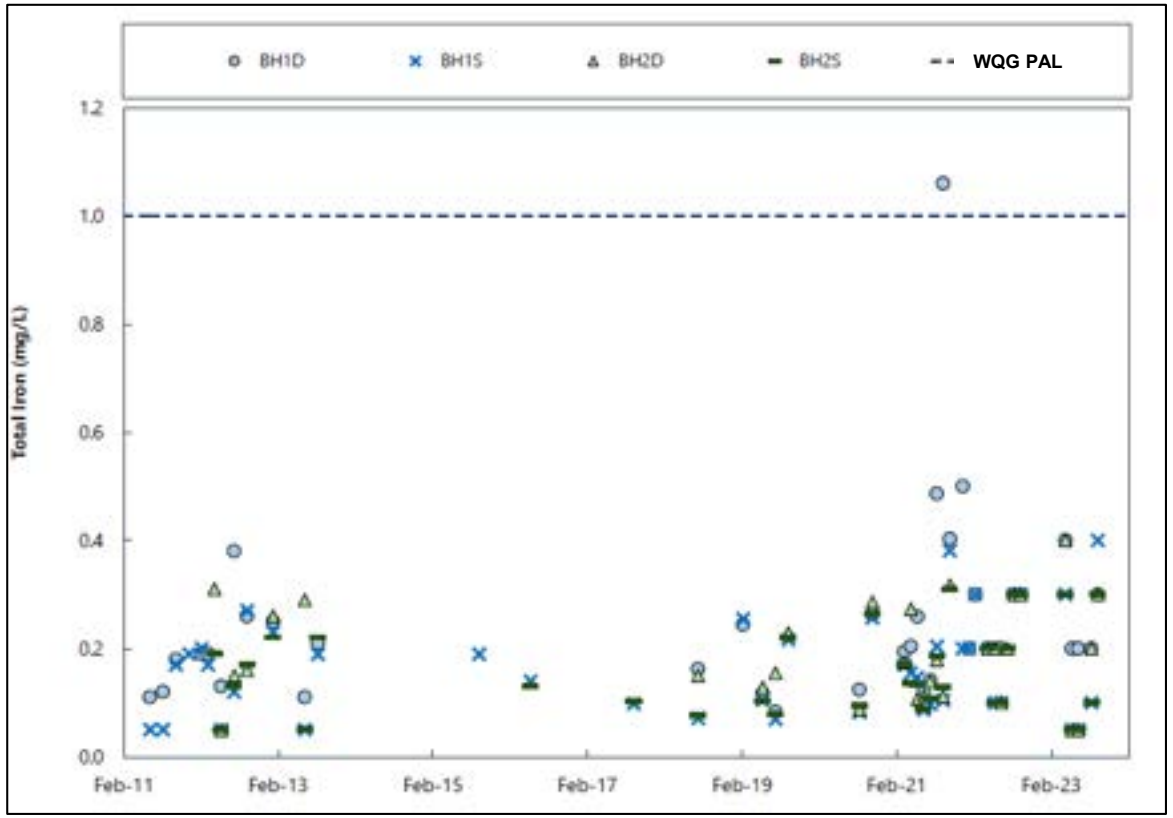
- 45 wells currently sampled three times per year
- 7 water level monitoring only

Quarterly level logger readouts and manual water level measurements in conjunction with water quality sampling

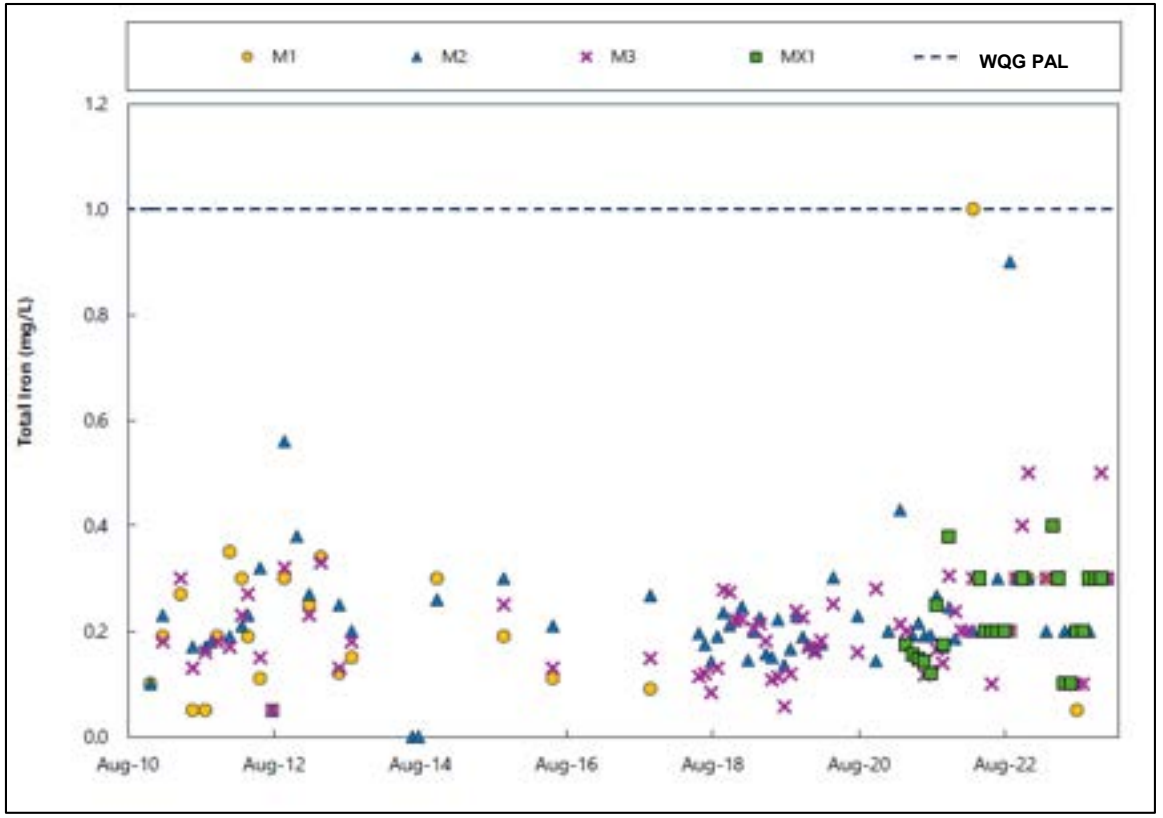
# SURFACE WATER AND GROUNDWATER QUALITY: BASELINE STUDIES

## How results are typically presented

**Beaverhouse Lake Sampling Stations**




**Misema River Sampling Stations**




**WQG PAL: Water Quality Guideline for the Protection of Aquatic Life**

# SURFACE WATER AND GROUNDWATER QUALITY: BASELINE STUDIES

AGNICO EAGLE

**Table 4-1: Beaverhouse Lake Water Quality**

| Station | | BH1S | | | | BH1D | | | | BH2S | | | | BH2D | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | WQG PAL | Count | 25th | Average | 75th | Count | 25th | Average | 75th | Count | 25th | Average | 75th | Count | 25th | Average | 75th |
| Field pH (S.I. units) | 6.5 - 8.5 | 43 | 7.23 | 7.52 | 7.80 | 38 | 7.14 | 7.37 | 7.68 | 35 | 7.20 | 7.40 | 7.70 | 31 | 7.05 | 7.37 | 7.60 |
| Hardness (as CaCO3) | - | 42 | 25.0 | 28.0 | 30.7 | 37 | 25.5 | 29.0 | 32.3 | 33 | 23.1 | 26.3 | 29.0 | 31 | 23.3 | 26.2 | 29.1 |
| Alkalinity, Total (as CaCO3) | - | 41 | 21.0 | 24.5 | 28.0 | 36 | 22.00 | 26.69 | 31.25 | 34 | 17.00 | 25.09 | 26.00 | 31 | 19.00 | 23.55 | 26.50 |
| Total Suspended Solids | - | 43 | 1.00 | 3.31 | 5.00 | 38 | 2.00 | 4.29 | 5.00 | 34 | 1.25 | 4.68 | 5.00 | 31 | 2.00 | 4.56 | 5.00 |
| Dissolved Organic Carbon | - | 21 | 11.0 | 12.1 | 13.1 | 21 | 10.6 | 11.5 | 11.9 | 19 | 10.8 | 11.8 | 12.7 | 19 | 10.6 | 11.8 | 12.9 |
| Ammonia, Total (as N) | 1.5 | 43 | 0.0100 | 0.0296 | 0.0500 | 38 | 0.010 | 0.032 | 0.045 | 33 | 0.010 | 0.033 | 0.050 | 31 | 0.010 | 0.030 | 0.050 |
| Chloride | 120 | 21 | 0.210 | 0.293 | 0.300 | 21 | 0.24 | 0.28 | 0.32 | 19 | 0.19 | 0.24 | 0.26 | 19 | 0.21 | 0.27 | 0.28 |
| Cyanide, Total | - | 43 | 0.001 | 0.0023 | 0.0025 | 38 | 0.001 | 0.0022 | 0.0025 | 34 | 0.001 | 0.0022 | 0.0025 | 31 | 0.001 | 0.0022 | 0.0025 |
| Cyanide, Free | 0.005 | 43 | 0.001 | 0.0013 | 0.001 | 38 | 0.001 | 0.0013 | 0.001 | 34 | 0.001 | 0.0014 | 0.001 | 31 | 0.001 | 0.0013 | 0.001 |
| Fluoride | 0.12 | 21 | 0.025 | 0.025 | 0.025 | 21 | 0.0250 | 0.0252 | 0.0250 | 19 | 0.0250 | 0.0253 | 0.0250 | 19 | 0.0250 | 0.0253 | 0.0250 |
| Nitrate (as N) | 3 | 22 | 0.025 | 0.093 | 0.1175 | 22 | 0.0525 | 0.1093 | 0.1575 | 20 | 0.0250 | 0.0660 | 0.0800 | 20 | 0.0250 | 0.0740 | 0.1000 |
| Nitrite (as N) | 0.06 | 22 | 0.01 | 0.015 | 0.0225 | 22 | 0.010 | 0.015 | 0.023 | 20 | 0.010 | 0.015 | 0.025 | 20 | 0.010 | 0.015 | 0.025 |
| Sulphate | - | 43 | 0.75 | 1.6 | 2.225 | 38 | 1.00 | 1.78 | 2.36 | 34 | 1.00 | 1.66 | 2.04 | 31 | 1.23 | 1.91 | 2.17 |
| Phosphorus | 0.02 | 9 | 0.0030 | 0.0178 | 0.0080 | 7 | 0.0030 | 0.0076 | 0.0100 | 8 | 0.0030 | 0.0079 | 0.0100 | 7 | 0.0030 | 0.0099 | 0.0100 |
| Aluminum | 1.1 | 41 | 0.071 | 0.099 | 0.12 | 36 | 0.101 | 0.126 | 0.145 | 31 | 0.071 | 0.101 | 0.130 | 29 | 0.077 | 0.108 | 0.140 |
| Aluminum (dissolved) | 0.075 | 41 | 0.0710 | 0.0990 | 0.120 | 38 | 0.0443 | 0.0658 | 0.0873 | 33 | 0.0390 | 0.0609 | 0.0810 | 31 | 0.0460 | 0.0642 | 0.0805 |
| Antimony | 0.02 | 28 | 0.00045 | 0.000502 | 0.0005 | 27 | 0.000475 | 0.000500 | 0.0005 | 25 | 0.00045 | 0.00052 | 0.0005 | 25 | 0.00045 | 0.00052 | 0.0005 |
| Arsenic | 0.005 | 43 | 0.0005 | 0.000674 | 0.0005 | 38 | 0.0005 | 0.0007 | 0.0007 | 34 | 0.0005 | 0.0008 | 0.0010 | 31 | 0.0005 | 0.0008 | 0.0013 |
| Barium | - | 28 | 0.0047075 | 0.015020 | 0.025 | 27 | 0.0050 | 0.0159 | 0.0250 | 25 | 0.0040 | 0.0157 | 0.0250 | 25 | 0.0047 | 0.0156 | 0.0250 |
| Beryllium | 0.011 | 28 | 0.0000165 | 0.000207 | 0.00025 | 27 | 0.00013 | 0.00021 | 0.00025 | 25 | 0.00001 | 0.00022 | 0.00025 | 25 | 0.00001 | 0.00022 | 0.00025 |
| Boron | 0.02 | 28 | 0.005 | 0.004786 | 0.005 | 27 | 0.0045 | 0.0047 | 0.0050 | 25 | 0.0050 | 0.0049 | 0.0050 | 25 | 0.0050 | 0.0051 | 0.0050 |
| Cadmium | 0.0001 | 43 | 0.000008 | 0.000034 | 0.00005 | 38 | 0.000008 | 0.000029 | 0.000050 | 34 | 0.000008 | 0.000040 | 0.000050 | 31 | 0.000008 | 0.000027 | 0.000050 |
| Chromium | 0.0089 | 28 | 0.000385 | 0.000743 | 0.0012 | 27 | 0.00048 | 0.00097 | 0.00125 | 25 | 0.00050 | 0.00081 | 0.00150 | 25 | 0.00050 | 0.00082 | 0.00150 |
| Cobalt | 0.0078 | 28 | 0.0000465 | 0.000165 | 0.00025 | 27 | 0.00008 | 0.00020 | 0.00025 | 25 | 0.00004 | 0.00011 | 0.00025 | 25 | 0.00005 | 0.00012 | 0.00025 |
| Copper | 0.005 | 43 | 0.001 | 0.001670 | 0.00165 | 38 | 0.00105 | 0.00175 | 0.00195 | 34 | 0.00100 | 0.00140 | 0.00160 | 31 | 0.00110 | 0.00165 | 0.00185 |
| Iron | 0.8 | 43 | 0.097 | 0.167 | 0.210 | 38 | 0.167 | 0.250 | 0.291 | 34 | 0.100 | 0.157 | 0.214 | 31 | 0.120 | 0.193 | 0.280 |
| Lead | 0.001 | 43 | 0.00005 | 0.00021035 | 0.00025 | 38 | 0.00010 | 0.00116 | 0.00050 | 34 | 0.00006 | 0.00021 | 0.00025 | 31 | 0.00010 | 0.00052 | 0.00050 |
| Molybdenum | 0.04 | 43 | 0.00025 | 0.00043372 | 0.0005 | 38 | 0.00025 | 0.00046 | 0.00050 | 34 | 0.00025 | 0.00048 | 0.00088 | 31 | 0.00025 | 0.00053 | 0.00100 |
| Nickel | 0.025 | 43 | 0.0005 | 0.00100698 | 0.0015 | 38 | 0.00050 | 0.00109 | 0.00150 | 34 | 0.00050 | 0.00112 | 0.00150 | 31 | 0.00050 | 0.00119 | 0.00150 |
| Selenium | 0.1 | 31 | 0.00011 | 0.00058935 | 0.001 | 27 | 0.000185 | 0.0004 | 0.0005 | 27 | 0.000105 | 0.000497 | 0.00075 | 25 | 0.00012 | 0.0004132 | 0.0005 |
| Silver | 0.0001 | 28 | 0.000025 | 0.000032 | 0.00005 | 27 | 0.000025 | 0.000032 | 0.000050 | 25 | 0.000025 | 0.000034 | 0.000050 | 25 | 0.000025 | 0.000034 | 0.000050 |
| Strontium | 2.5 | 28 | 0.01575 | 0.01901429 | 0.022 | 27 | 0.0165 | 0.0189 | 0.0211 | 25 | 0.0150 | 0.0167 | 0.0180 | 25 | 0.0150 | 0.0175 | 0.0190 |
| Thallium | 0.0003 | 28 | 0.0000025 | 0.0000632 | 0.0001125 | 27 | 0.000026 | 0.000065 | 0.000125 | 25 | 0.000003 | 0.000069 | 0.000150 | 25 | 0.000005 | 0.000069 | 0.000150 |
| Vanadium | 0.006 | 28 | 0.00038 | 0.00059 | 0.00100 | 27 | 0.00045 | 0.00060 | 0.00100 | 25 | 0.00050 | 0.00072 | 0.00100 | 25 | 0.00040 | 0.00063 | 0.00100 |
| Zinc | 0.02 | 43 | 0.002 | 0.00311163 | 0.0025 | 38 | 0.0020 | 0.0053 | 0.0077 | 34 | 0.0020 | 0.0036 | 0.0025 | 31 | 0.0020 | 0.0055 | 0.0066 |
| Mercury | 0.000026 | 30 | 0.0000049 | 0.0000256 | 0.00005 | 26 | 0.00000440 | 0.00002526 | 0.00005000 | 23 | 0.00000380 | 0.00002164 | 0.00005000 | 21 | 0.00000310 | 0.00001913 | 0.00005000 |
| Mercury, Methyl | 0.000004 | 10 | 0.00000006 | 0.00000012 | 0.00000015 | 10 | 0.00000010 | 0.00000014 | 0.00000015 | 13 | 0.00000009 | 0.00000014 | 0.00000020 | 13 | 0.00000011 | 0.00000029 | 0.00000022 |
| Mercury, Ultra-low Level | 0.000026 | 15 | 0.0000017 | 0.00000267 | 0.00000365 | 15 | 0.00000180 | 0.00000289 | 0.00000400 | 18 | 0.00000183 | 0.00000260 | 0.00000300 | 18 | 0.00000233 | 0.00000320 | 0.00000415 |

Notes:
All units are mg/L (unless otherwise indicated)
All reported values are for total concentrations, unless indicated otherwise (dissolved)
- indicates data not available
WQG PAL: Water Quality Guideline for the protection of aquatic life as identified in Table 3.5
Grey highlighted values are greater than WQG PAL

# SURFACE WATER AND GROUNDWATER QUALITY: TYPICAL MITIGATION MEASURES

**To minimize effects on water quality:**

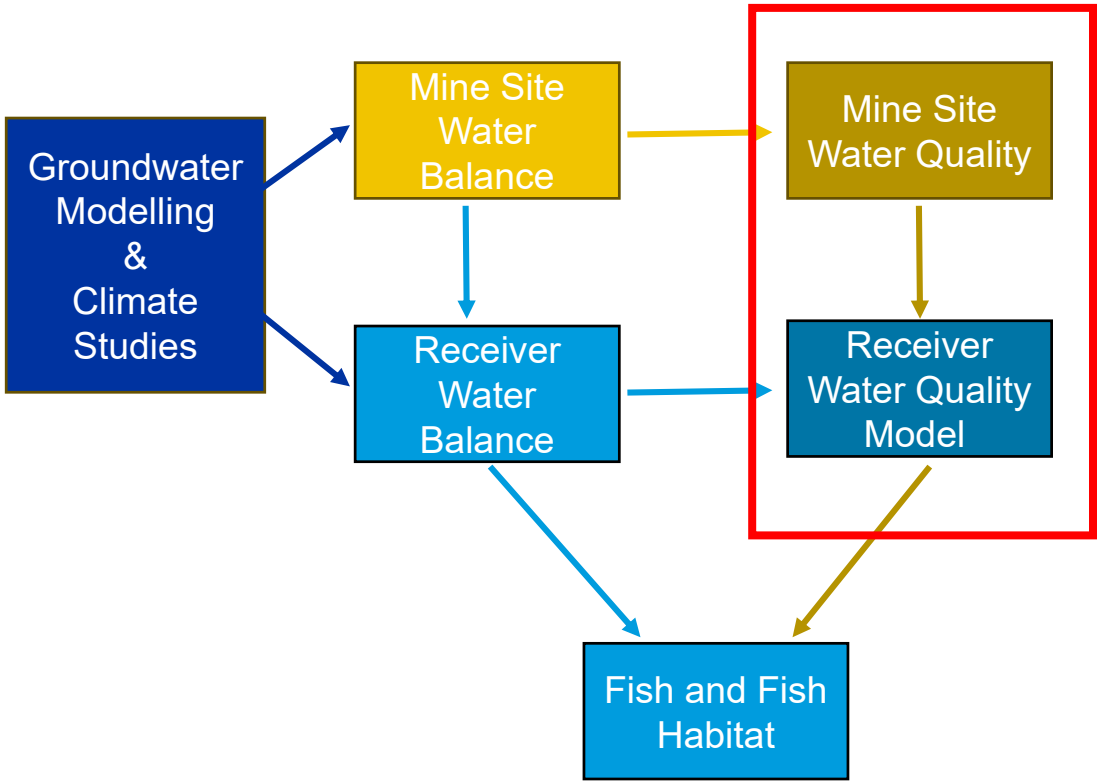
- Collection and control all water that contacts the mine footprint
- Minimize water taking and discharge requirements through recirculation of water for Industrial use when possible
- Water Treatment – discharge will meet required provincial and federal regulations to protect surface water and aquatic life
- Progressive reclamation and revegetation
- Refilling of the open pit during closure

Mitigation measures will vary between projects, site-specific data

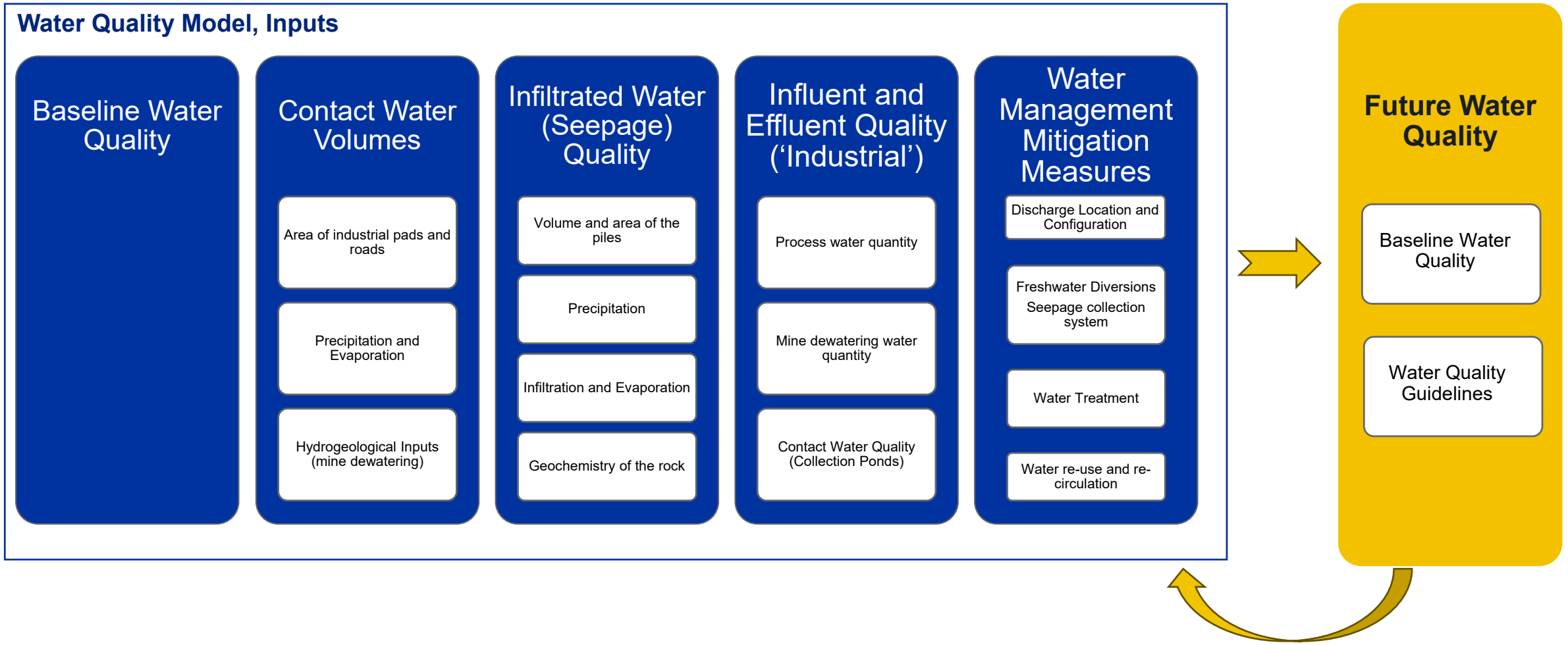
# SURFACE WATER AND GROUNDWATER QUALITY: EFFECTS ASSESSMENT

## Water Quality Modelling

- Will incorporate findings from baseline studies, project description, water balance modelling results, geochemical test work.
- Objectives:
  - **Predict future water quality**: estimate how water quality might change over time because of Project activities
  - **Identify potential risks:** find areas or parameters (like metals or nutrients) that could be of potential concern, to target mitigation and management measures
  - **Plan water treatment and mitigation**: help design treatment systems
  - **Support regulatory approvals**: Regulators often require predictions of water quality to make sure the project meets environmental standards.



# SURFACE WATER AND GROUNDWATER QUALITY: EFFECTS ASSESSMENT



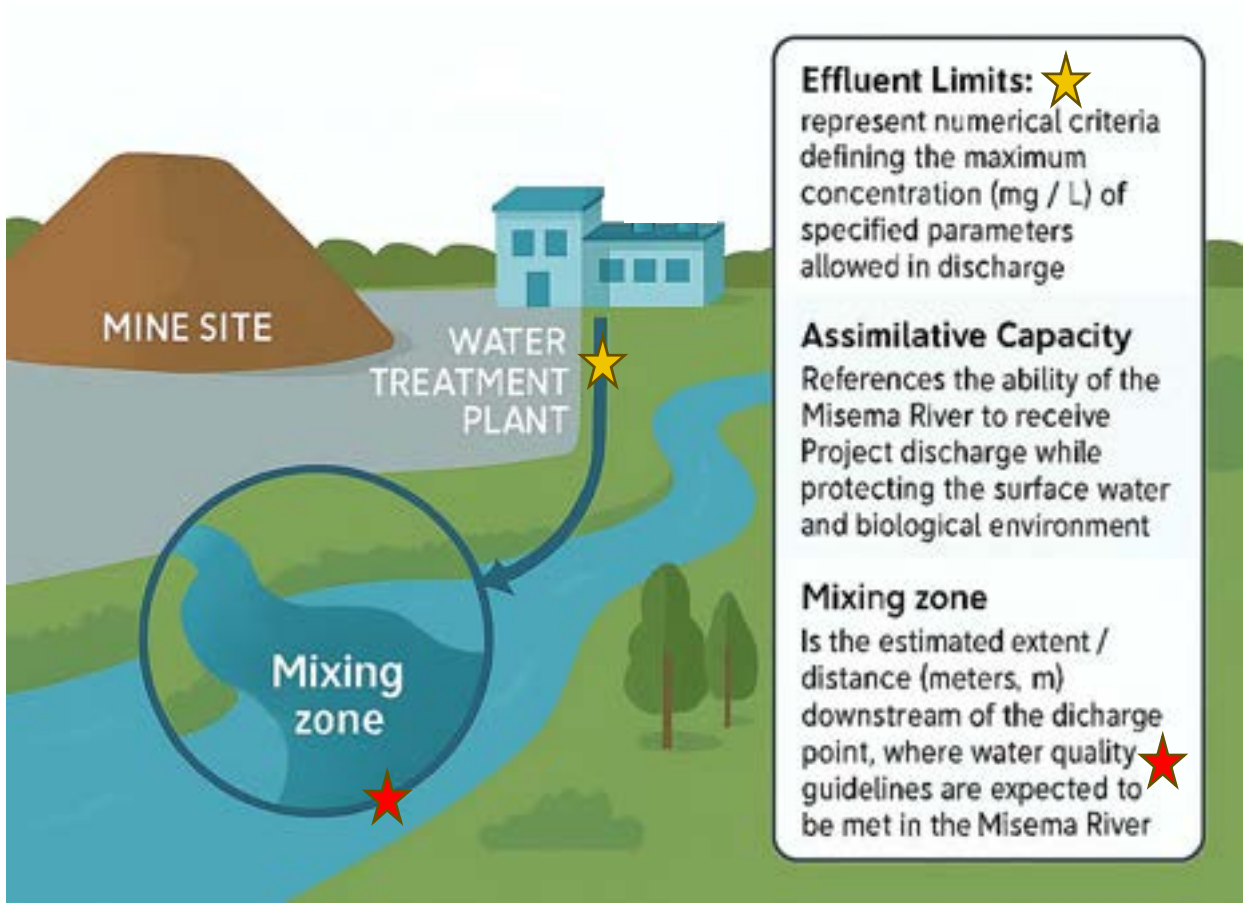

The model is used to predict how Project activities may affect water quality, identify and target appropriate mitigation measures, and evaluate their effectiveness through an iterative process.

# SURFACE WATER AND GROUNDWATER QUALITY: EFFECTS ASSESSMENT

**One key outcome of water quality modelling is to calculate appropriate effluent limits and identify parameters of potential concern**

- The Project will be subject to the Metal and Diamond Mining Effluent Regulations (MDMER), which establish limits for certain parameters and requires effluent toxicity testing.

- As part of the provincial approvals process, any discharge to the Misema River must be managed to ensure that *Water Quality Guidelines for the Protection of Aquatic Life* (or baseline equivalents) are met



# SURFACE WATER AND GROUNDWATER QUALITY: EFFECTS ASSESSMENT

| Parameter | Unit | Effluent Limits | | Influent Water Quality | | |
|---|---|---|---|---|---|---|
| | | MDMER | Calculated | 25th | Average | 95th |
| Sulphate | mg/L | - | 445 | 532 | 557 | 1380 |
| Aluminum (dissolved) | mg/L | - | 0.6 | 0.05 | 0.06 | 0.10 |
| Antimony | mg/L | - | 0.04 | 0.08 | 0.09 | 0.26 |
| Arsenic | mg/L | 0.1 | 0.01 | 0.009 | 0.010 | 0.030 |
| Beryllium | mg/L | - | 0.023 | 0.00038 | 0.00040 | 0.0012 |
| Cadmium | mg/L | - | 0.0002 | 0.00010 | 0.00011 | 0.00032 |
| Chromium | mg/L | - | 0.017 | 0.00065 | 0.00068 | 0.00179 |
| Cobalt | mg/L | - | 0.0015 | 0.006 | 0.006 | 0.017 |
| Copper | mg/L | 0.1 | 0.01 | 0.07 | 0.08 | 0.20 |
| Iron | mg/L | - | 1.3 | 0.097 | 0.11 | 0.17 |
| Lead | mg/L | 0.08 | 0.021 | 0.00013 | 0.00013 | 0.00037 |
| Mercury | mg/L | - | 0.00005 | 0.000036 | 0.000043 | 0.000048 |
| Molybdenum | mg/L | - | 0.15 | 0.56 | 0.60 | 1.8 |
| Nickel | mg/L | 0.25 | 0.05 | 0.005 | 0.005 | 0.015 |
| Phosphorus | mg/L | - | 0.05 | 0.04 | 0.04 | 0.11 |
| Selenium | mg/L | - | 0.004 | 0.005 | 0.005 | 0.015 |
| Silver | mg/L | - | 0.0005 | 0.00005 | 0.00005 | 0.00014 |
| Thallium | mg/L | - | 0.0015 | 0.000047 | 0.000048 | 0.00012 |
| Uranium | mg/L | - | 0.03 | 0.005 | 0.006 | 0.017 |
| Vanadium | mg/L | - | 0.25 | 0.002 | 0.002 | 0.005 |
| Zinc | mg/L | 0.4 | 0.04 | 0.006 | 0.006 | 0.016 |
| Total Ammonia-N | mg/L | - | 4.5 | 5.1 | 5.5 | 16 |
| Nitrite-N | mg/L | - | 0.11 | 0.15 | 0.15 | 0.35 |
| Nitrate-N | mg/L | - | 6.1 | 9.1 | 9.8 | 29 |
| Total Cyanide | mg/L | 0.5 | 0.008 | 0.03 | 0.05 | 0.09 |

Preliminary results for **operations**, **before treatment**

Preliminary results of the Mine Site Water Quality model used to predict influent water quality (mg/L) and identify need for potential additional management or water treatment

Parameters identified by modelling to date that are targeted for additional mitigation or treatment before discharge are highlighted in grey (as being above theoretical calculated effluent criteria):

Typical parameters, expected to be elevated in mining; standard mitigation and treatment measures

Models continue to be refined as data collection continues, engineering advances, and feedback is received from ongoing consultation activities

# SURFACE WATER AND GROUNDWATER QUALITY: FOLLOW-UP MONITORING PROGRAM

Monitoring programs are carried out throughout the life of the Project, baseline through closure.

As part of the regulatory approvals process, follow-up monitoring will be required and will include:

- Metals (e.g. copper, nickel, mercury).
- Nutrients (e.g., nitrate, phosphorus)
- E.coli
- Biological monitoring (fish, benthos)
- Toxicity testing

Monitoring will occur at waterbodies in the Project area, including Beaverhouse Lake, Ava Lake and Victoria Creek

Follow-up water quality monitoring will:

- Confirm if the water quality model predictions were accurate.
- Ensure environmental protections are effective.
- Allows for quick corrective action if effects were underestimated.
- Methods will mirror those used to collect baseline data, with some adjustments for monitoring locations and frequencies.

*Winter groundwater monitoring well sampling*

## EXAMPLE OF MONITORING PROGRAM – ADVANCED EXPLORATION PROJECT

| WTP* | Receiver Environment | Peripheral Waterbodies | Groundwater (MW) | |
|---|---|---|---|---|
| Thrice (3x) Weekly<br>Weekly<br>Monthly | Monthly & Quarterly | Monthly & Quarterly | Thrice Yearly | Number of samples/year **~430**<br>Number of discrete data points/year **~12 000** |
| 1 location | 7 locations | 14 locations | 25 locations | |

*Water Treatment Plant output: variable frequency depending the parameters.

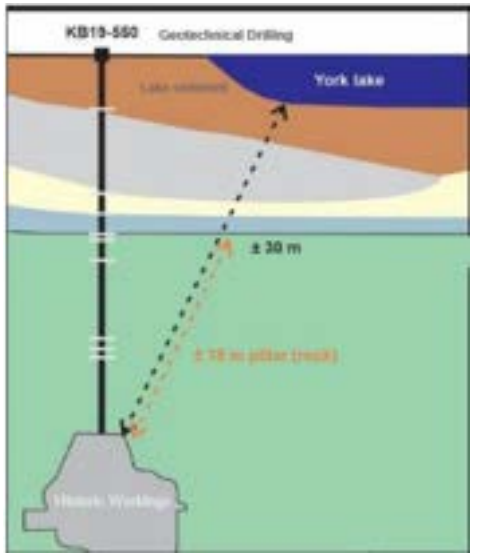
# WATER QUALITY

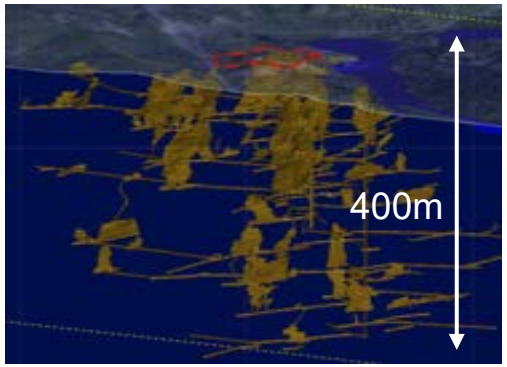

# WATER LEVELS & FLOWS

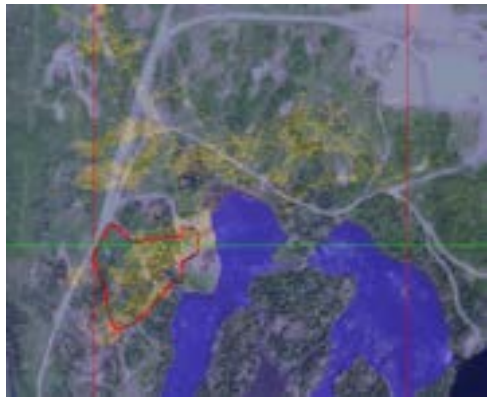
# WATER LEVELS AND FLOWS – DIVERSION SYSTEM

## Challenges associated with ground stability from historical mining underground development:

- Insufficient competent rock between the surface and the old mine workings (± 20 metres)
- Significant risk for future underground development work in this area and to the safety of workers as a breach could connect the workings with the lake and flood the mine
- Agnico Eagle had to adjust its project design accordingly to reduce the risks associated with these findings (for Advanced Exploration and Mine Production)



Historical Underground Workings (1912-1971)

**To manage risk associated with rock stability:**

- Diversion of York Lake/Misema River, removal of legacies and eliminate crown pillar stability concerns with the open pit
  - Open pit size determined by stability requirements, not ore availability
  - Extraction from the open pit in the first years only (4-5 years)

# WATER LEVEL AND FLOWS - DIVERSION SYSTEM

## Key Design Considerations:

- Safely divert water around the Open Pit
- Maintain upstream and downstream water levels under various flow conditions (high and low flow conditions) – mimic natural flow conditions
    - Range of flows considered in design: ~0.5 $m^3/s$ to >250 $m^3/s$.
- Maintain/improve fish passage (connectivity) between York Lake and Ava Lake
- Return flows through original channels upon closure - minimize long term risks by decommissioning the diversion system

# WATER LEVELS AND FLOWS - DIVERSION SYSTEM

Design Criteria:

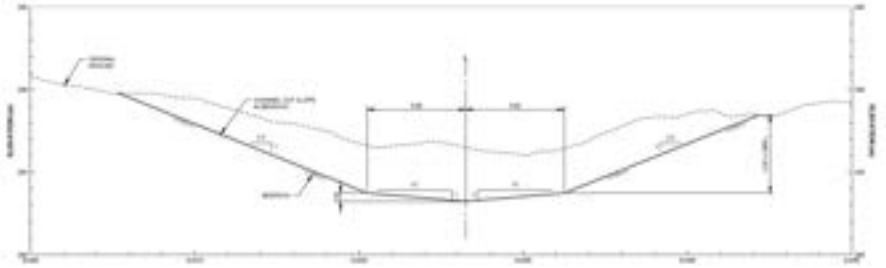
- Regulation and Guidelines
- Extreme climate situations and earthquakes

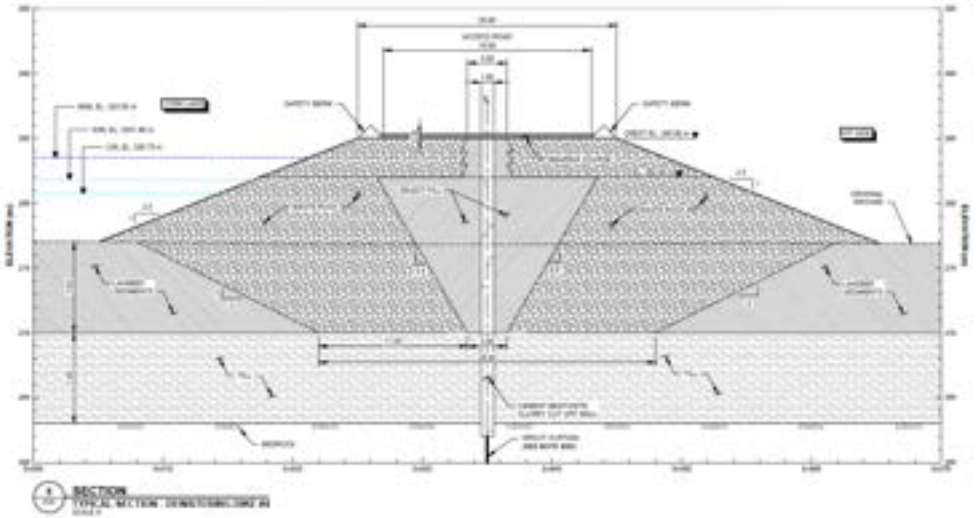
Design Data and Modelling:

- Flow and Water Level Data – Site Data and Water Survey of Canada
- Climate Data – Kirkland Lake Climate Station
- Geotechnical data – drilling and geophysics -dyke foundation and channel design
- Fish Community (Fish Passage) and Habitat – inform the Fish Habitat Offsetting and Compensation Plan
- Bathymetry and Survey Data

Monitoring

- Instrumentation
- Visual inspections





# WATER LEVELS & FLOWS - BASELINE STUDIES

## How does the hydrology baseline study work?

- Conduct a hydrology monitoring program to quantify surface water dynamics by measuring water levels and flows at strategic locations across the Project area and downstream receiving environment, establishing baseline conditions and tracking changes over time.

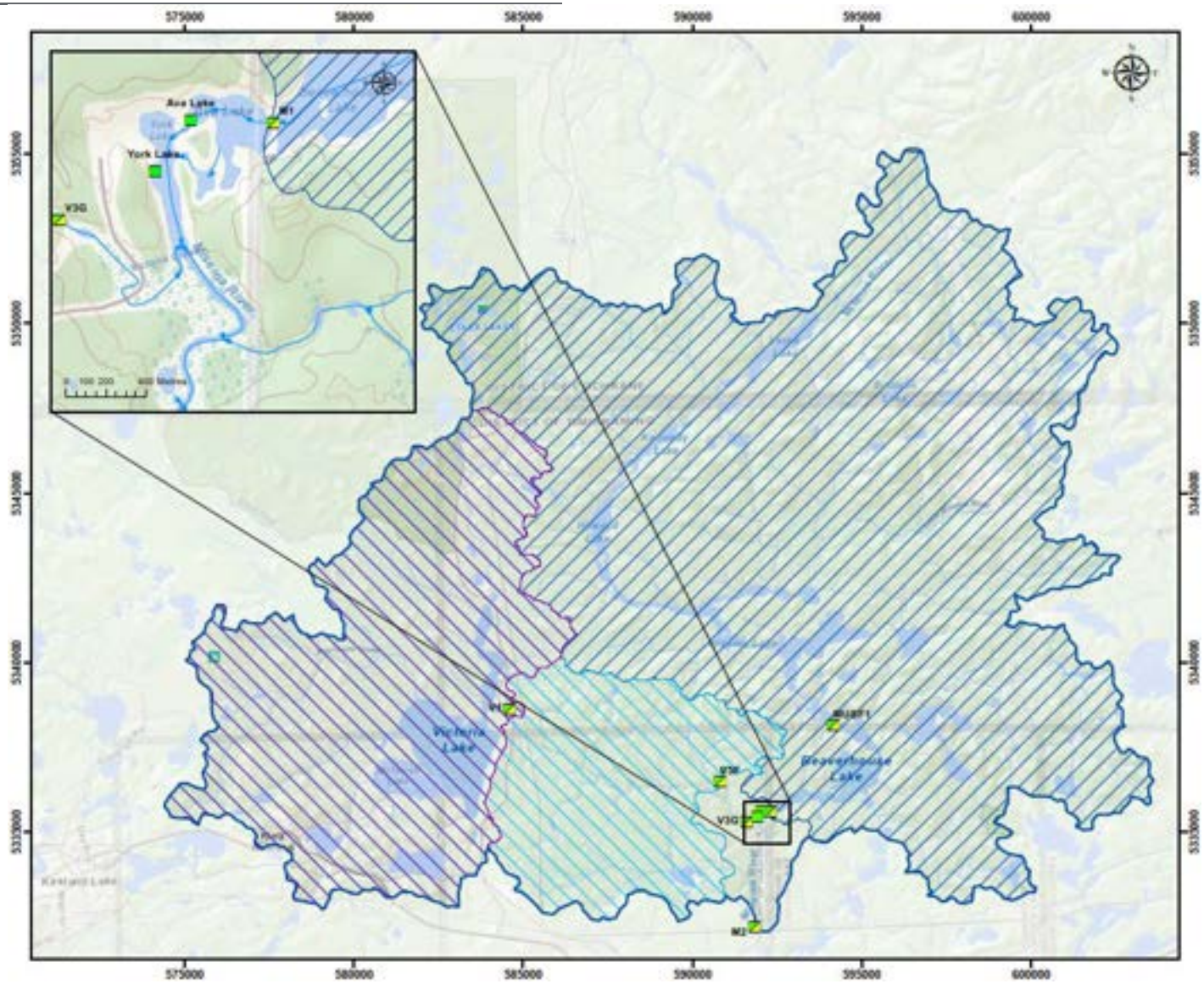
- Utilize reputable Water Survey of Canada (WSC) flow gauging data to allow for integration of long-term (greater than 50 years) regional hydrology data sets with on-site monitoring data.

## How to use hydrology baseline data?

- Define existing hydrological conditions using flow statistics (i.e., low flows, flood flows, and average flows, etc.) against which all future changes will be assessed.
- Support hydrological and water quality modelling to predict potential impacts from the Project.
- Inform the design of effective mitigation measures.
- Contribute to closure and rehabilitation planning.

Examples of Flow Monitoring

# WATER LEVELS & FLOWS – BASELINE MONITORING




**Legend**

**Hydrology Station Parameters**

- Flow and Water Level
- Water Level
- Watercourse and Flow Direction

- V1 Watershed
- V3F Watershed
- M1 Watershed
- M2 Watershed

A total of **8** hydrology monitoring stations were established on-site, including **6** flow monitoring locations and **2** water level monitoring locations.

The flow records for monitoring locations most cover a period of **4** years, with some extending up to **9** years, spanning the years 2011, 2012, and 2018 - 2024.

## Hydrology Baseline Study Analysis

Baseline data collected are translated into flows using the relationship developed from the measured water levels and flows.

This data helps provide critical hydrological insights, such as peak flows, low flows, seasonal patterns.

It can help quantify how mining could alter flow timing /magnitude, inform mitigation designs, and help visualize risks.

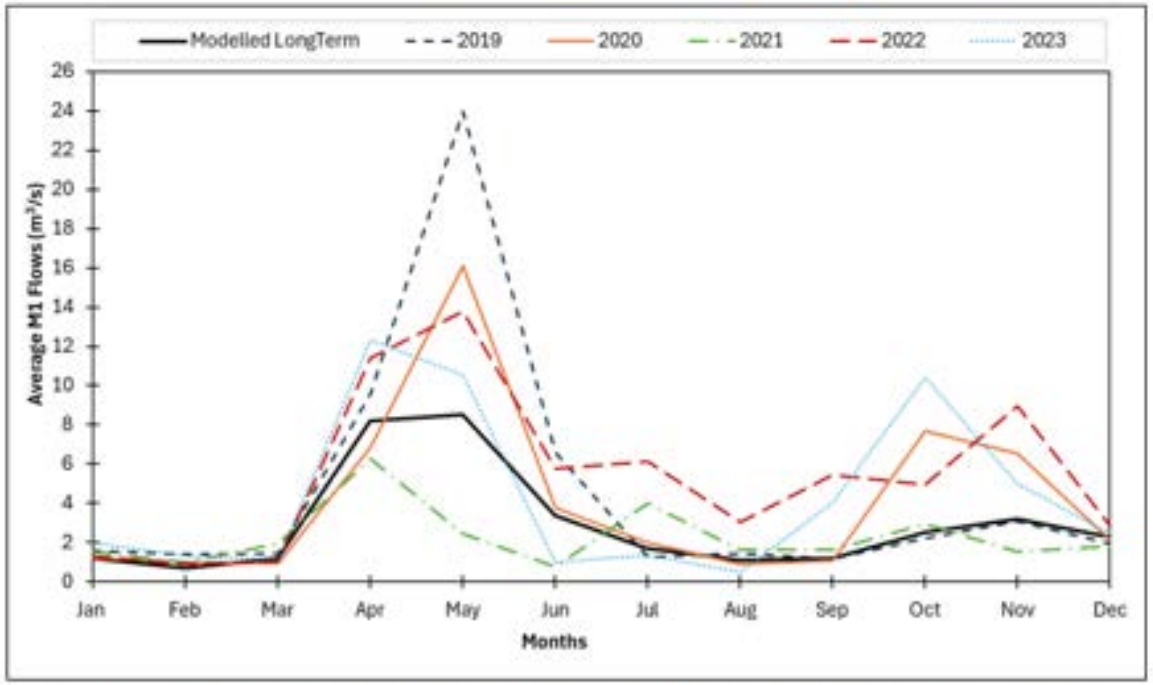



**Figure C1. M1 Long-Term Average Monthly Flows and 2019-2023 Average Monthly Flows**

# WATER LEVELS & FLOWS – POTENTIAL EFFECTS

| Project Components and Activities | Water Flows and Levels |
|---|---|
| **Construction Phase** | |
| • Upgrade the site access road, including installation of watercourse crossings | ✓ |
| • Additional land clearing, site excavation and grading | ✓ |
| • Construction of new site facilities and/or expansion of existing facilities, including the construction, stabilization and activation of the Ava Lake / Misema River diversion | ✓ |
| • Transfer of fish from York Lake and dewatering | ✓ |
| • Establishment of water management and treatment works | ✓ |
| **Operation** | |
| • Dewatering of the open pit and underground mine | ✓ |
| • Extraction and stockpiling of mine rock and ore from the open pit and underground mine | ✓ |
| • Ore processing | ✓ |
| • Storage of filtered tailings in the tailings management facility | ✓ |
| • Ongoing management and treatment of site water | ✓ |
| **Decommissioning and Closure** | |
| • Allow underground mine and open pit to refill | ✓ |
| • Regrade and establish final surface drainage | ✓ |
| • If appropriate, connect the refilled open pit to the Misema River system once the flooded pit lake quality meets regulatory requirements | ✓ |

**Key Pathways:**

- Changes in watershed areas
- Changes in groundwater conditions (i.e., zone of influence, infiltration rates)
- Water taking / discharges

# WATER LEVELS & FLOWS – TYPICAL MITIGATION MEASURES

To minimize effects on surface water flows and levels, the following mitigation measures may be considered and incorporated into the design of the Project, such as:

- → Development of a compact mine site to limit the extent of disturbance
- → Diversion of clean watersheds from entering mine site
- → Recirculation of water for industrial use when possible
- → Progressive reclamation and revegetation of overburden piles
- → Implementation of monitoring program

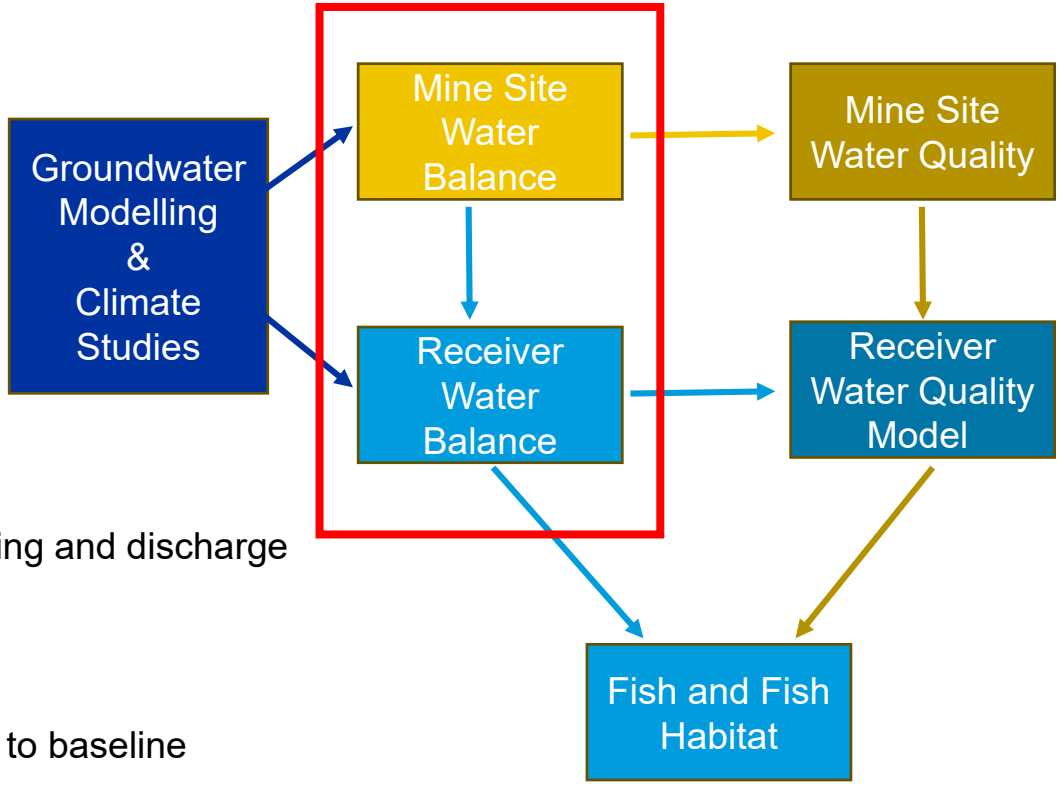
# WATER LEVELS & FLOWS – HOW WE DO THE ASSESSMENT

Hydrologic modelling will incorporate findings from baseline studies, climate studies, and groundwater modelling.

Key groundwater - surface water interactions:

- Groundwater contributions to surface water features (groundwater inflow into the open pit, reduction in baseflow in adjacent watercourses caused by the zone of influence created by a dewatered open pit etc.)
- Seepage pathways and rates from site features

Modelling will consider different climate conditions (extreme wet and dry conditions, as well as climate change), and all phases of the mine life.




**Mine Site Water Balance**

Simulates movement of water within the Project footprint and estimates water taking and discharge requirements .

**Receiver Water Balance**

Simulates flow in the local and downstream receiving environment and compares to baseline conditions.

# WATER LEVELS & FLOWS – HOW WE DO THE ASSESSMENT

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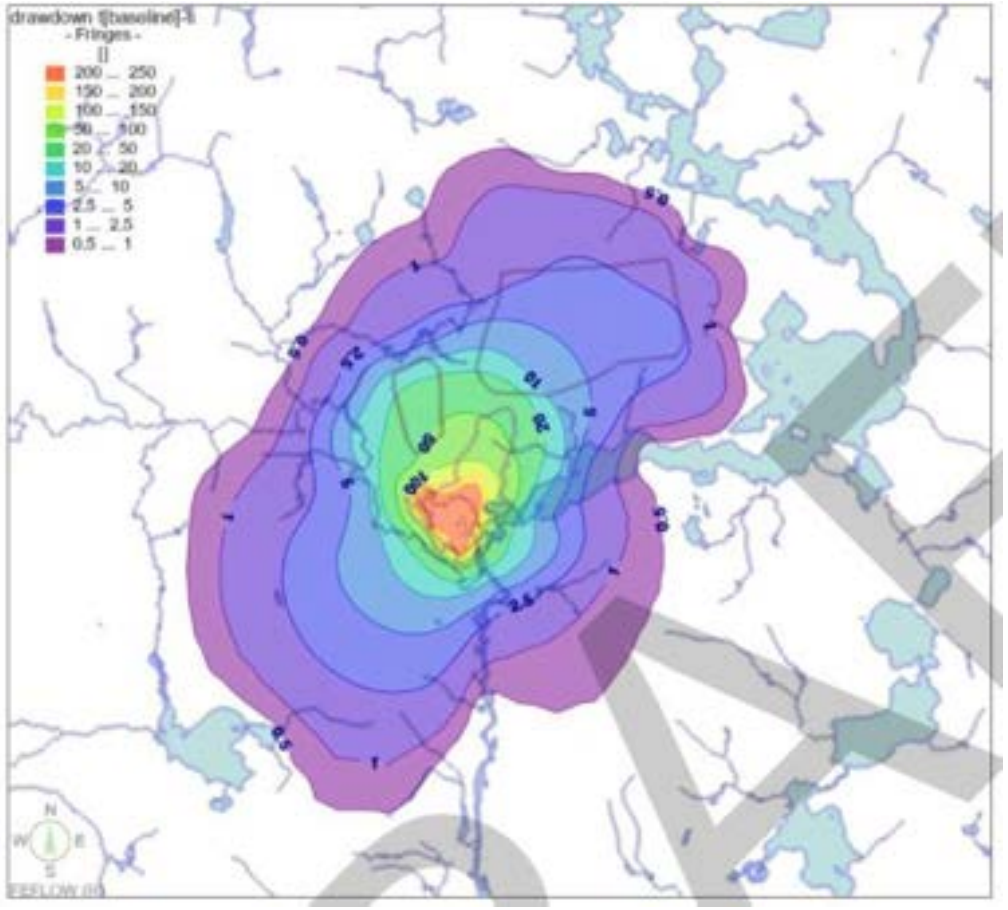
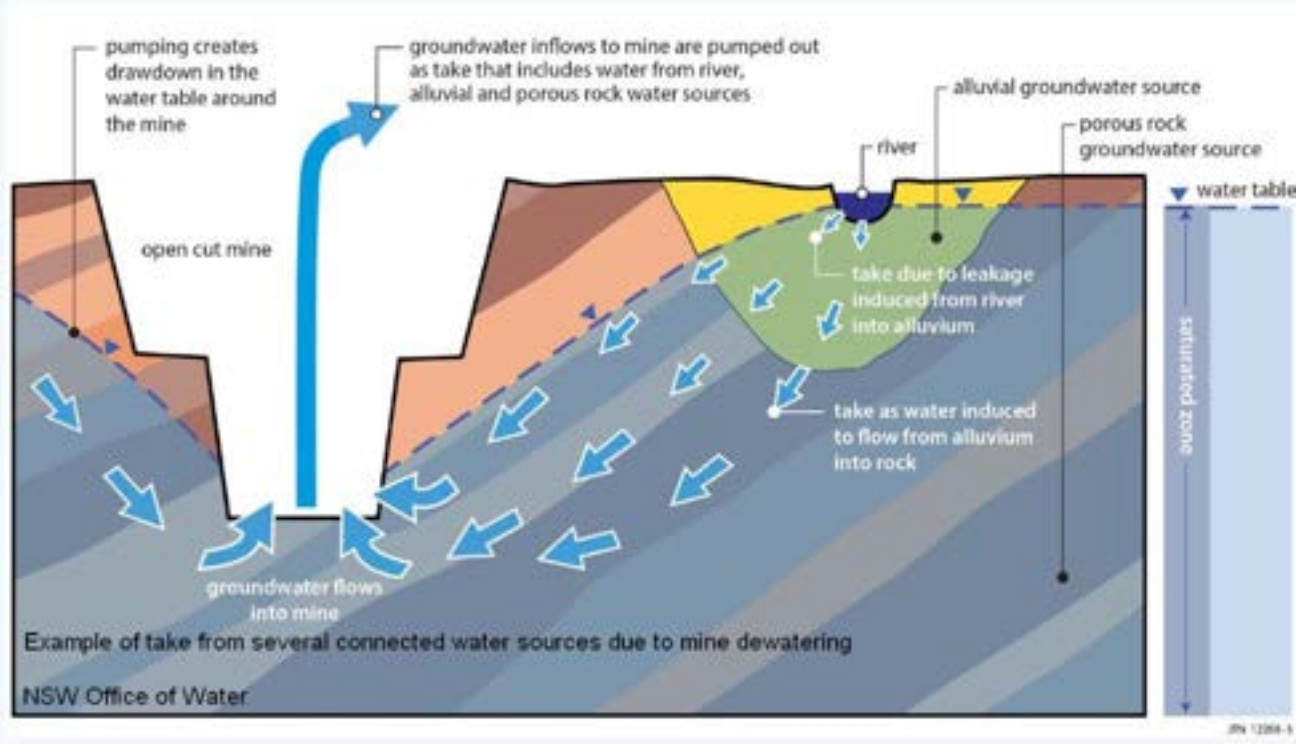
## Predicted drawdown of underground water levels

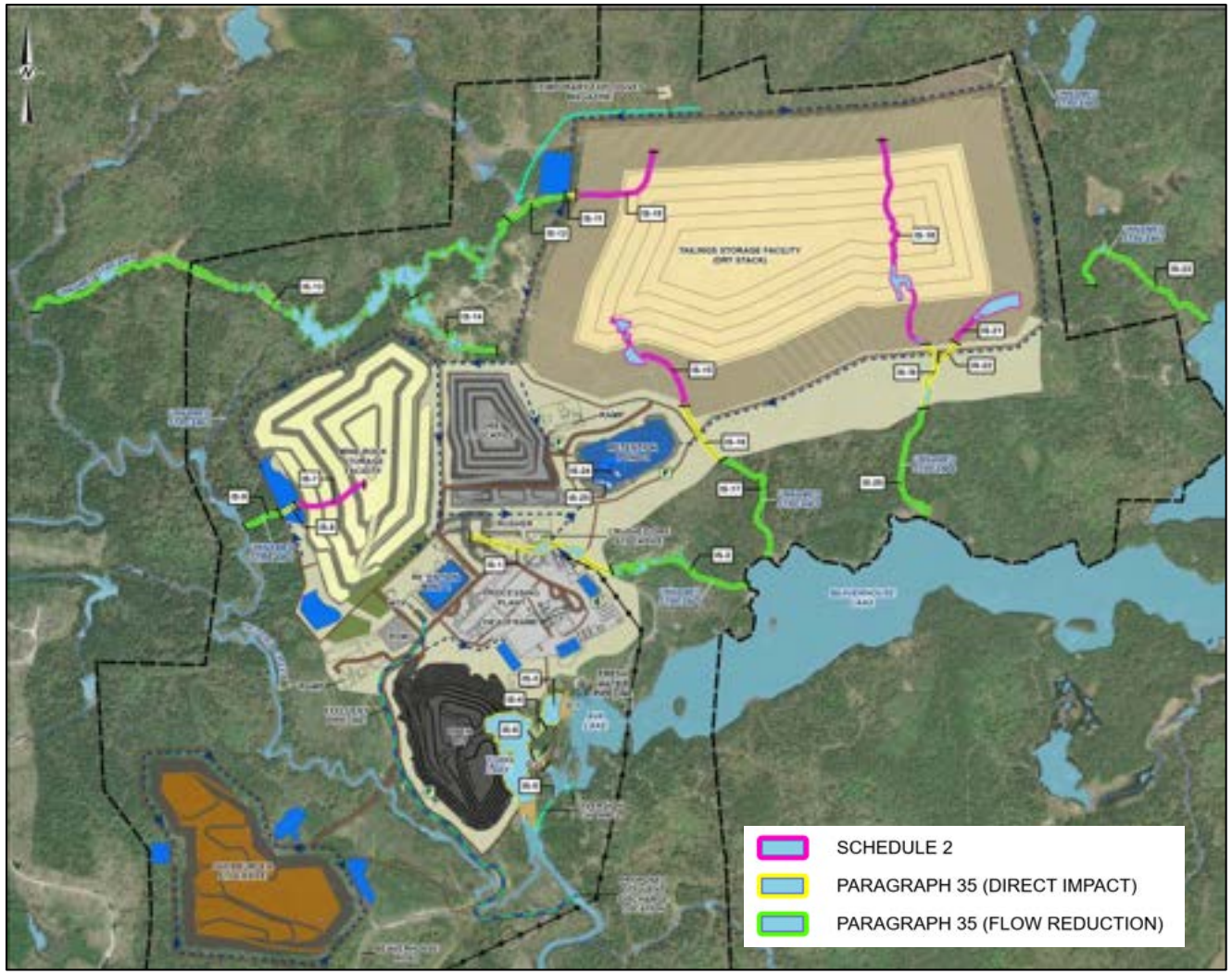



Removing water from the open pit and underground mine will lower the water table and reduce the groundwater flow contribution to the surface water, subsequently reduce the flows and water levels in watercourses/waterbodies.

# WATER LEVELS & FLOWS – PRELIMINARY RESULTS

- The Project site is situated within the Beaverhouse Lake and Victoria Creek watersheds, both of which drain into Misema River watershed.
- The Project footprint is approximately 360 ha, which is approximately 1% of the Misema River watershed approximately 3 km downstream of site.
- Some small watercourses may be overprinted by Project infrastructure. Water levels might change due to removal of mine water from open pit and underground mining.



# WATER LEVELS & FLOWS – FOLLOW-UP MONITORING PROGRAM

Monitoring programs are carried out throughout the mine life from baseline to closure.

As part of the regulatory approvals process, follow-up monitoring will be required and will include:

- Water levels in watercourses and waterbodies; and
- Flows in watercourses

Follow-up monitoring will:

- Confirms if the water balance model predictions were accurate.
- Ensures environmental protections are effective.
- Allows for quick corrective action if effects were underestimated.
- Methods will mirror those used to collect baseline data, with some adjustments for monitoring locations and frequencies.

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# WATER LEVELS & FLOWS


# FISH AND FISH HABITAT

# FISH AND FISH HABITAT: BASELINE STUDIES

## Aquatic Environment Baseline Studies

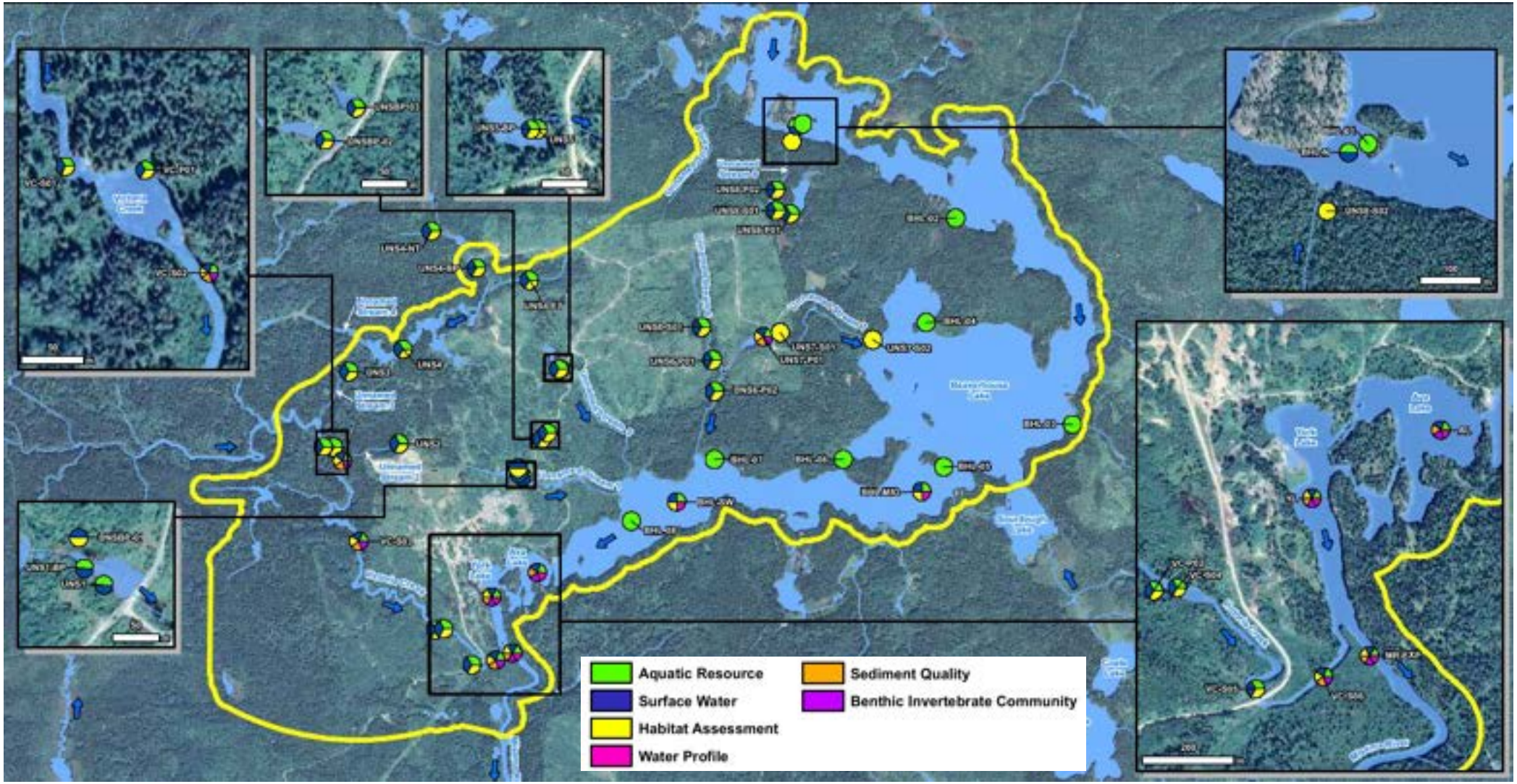
- Fish Community (types of fish and how many there are)
- Fish Habitat (bottom types, vegetation, cover, spawning areas)
- Fish Tissue (metal concentrations)
- Benthic Macroinvertebrate Community (indicators of ecosystem health)
- Sediment Quality (metals and particle size)

Necessary to characterize the aquatic environment to **establish the baseline existing conditions** and **understand the potential impacts** the project may cause.

Baseline data will be used to measure changes in future conditions. For example, benthic macroinvertebrate community will change over time based on conditions, and this data can support a Before-After and Control-Impact study framework.

# FISH AND FISH HABITAT: BASELINE STUDIES

- Study Area
- Representative sampling in lakes, ponds and watercourses
- Multiple seasons, multiple years
- Sampling consistently for comparison



# Target Fish Community

Misema River and associated onstream lakes (Beaverhouse, Ava Lake and York Lake) support a cool to warm water fish community, which includes:

Walleye

White Sucker

Lake Whitefish

Minnows, small (forage) fish

Northern Pike

No specialized fish habitat identified anywhere near the proposed water intake or discharge locations.

**Forage and Baitfish**

**Intermediate Sportfish**

| |
|---|
| Burbot |
| Cisco |
| Brown Bullhead |
| Yellow Perch |

**Top Trophic Level Sportfish**

| |
|---|
| Walleye |
| Lake Whitefish |
| Northern Pike |
| Smallmouth Bass |
| *Lake Sturgeon |

*Lake Sturgeon identified as present in Beaverhouse Lake by cottager but no indications of presence by others or through sampling efforts

## Offsetting and Compensation – Terminology

DFO refers to **MEASURES** as:

- Alternatives to **AVOID**
- Actions / activities to minimize (i.e., **MITIGATE**) and
- Works to **OFFSET** and **COMPENSATE**.

**DFO Offsetting Policy:** "The objective of **measures** to offset is to support the conservation and protection of fish and fish habitat by **counterbalancing the residual death of fish and/or harmful alteration, disruption or destruction of fish habitat** resulting from carrying on works, undertakings or activities authorized under the *Fisheries Act*".

**Compensation Plan** = Section 27.1(1) of the Metal and Diamond Mining Effluent Regulations (MDMER)

**Offset Plan** = Paragraphs 34.4(2)(b) and 35(2)(b) of the *Fisheries Act*

=

Both mean the same thing and are usually combined in one document

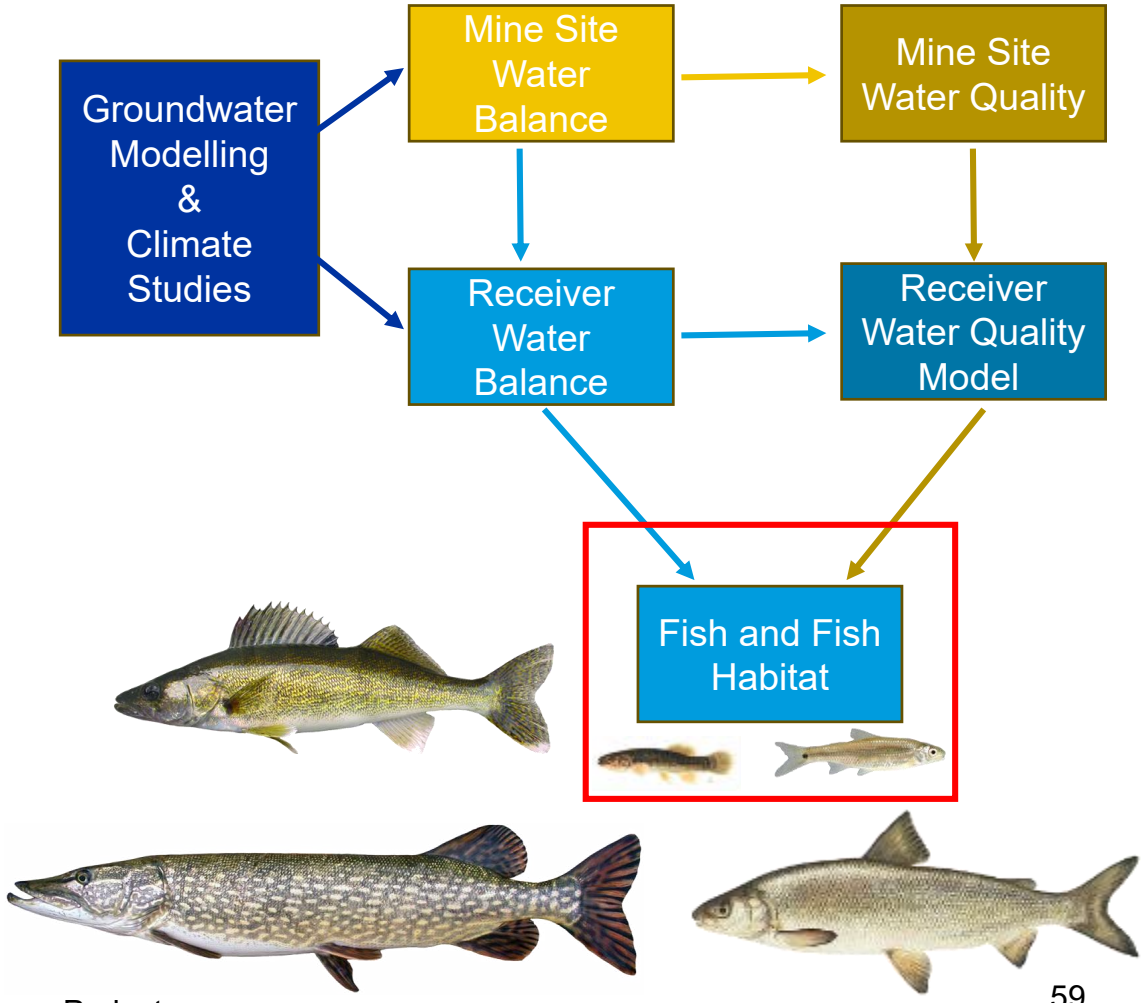
# FISH AND FISH HABITAT: ASSESSMENT METHODS

**Methods to predict effects on fish and fish habitat use a quantitative method to assess the change in fish habitat:**

- The areal extent of fish habitat affected by the Project was determined using geographic information system (GIS) mapping of disturbed or overprinted areas (e.g., bankfull width multiplied by length of stream overprinted).

- Flow reductions potentially affecting fish were based on predicted changes in the Receiver Water Balance, and areal extent determined with GIS.

- Receiver Water Quality Model predicts changes in water quality and compared the results to the applicable regulatory guidelines **for the protection of aquatic life**.



# FISH AND FISH HABITAT: PRELIMINARY FISH HABITAT IMPACTS

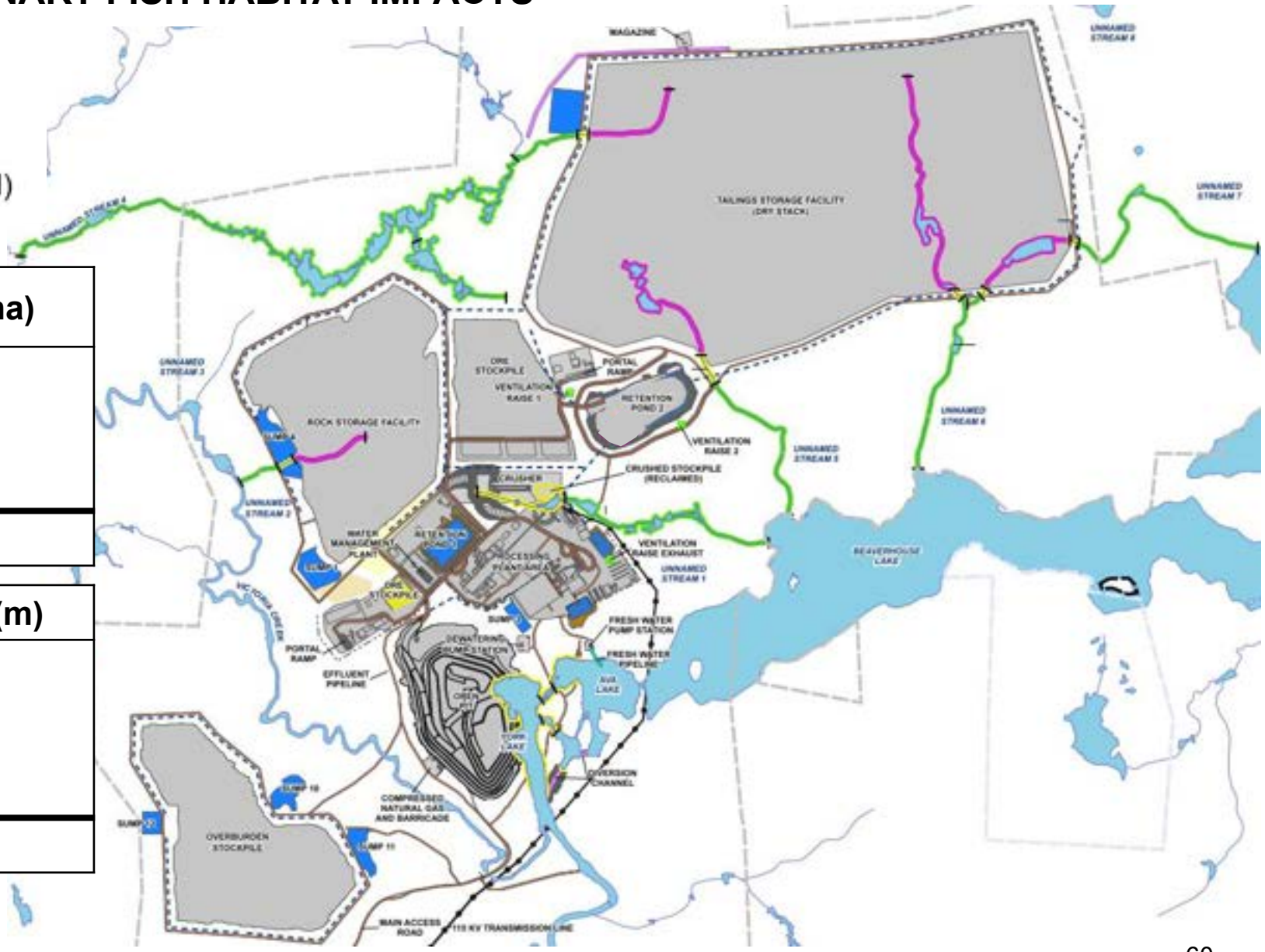
SCHEDULE 2

PARAGRAPH 35 (DIRECT IMPACT)

PARAGRAPH 35 (FLOW REDUCTION)

| Waterbodies | Area (ha) |
|---|---|
| Compensation (Schedule 2) | 1.26 |
| Offsetting – Direct Impact | 3.25 |
| Offsetting – Flow Reduction | 1.04 |
| **Total** | 5.56 |

| Watercourses | Length (m) |
|---|---|
| Compensation (Schedule 2) | 1,561 |
| Offsetting – Direct Impact | 511 |
| Offsetting – Flow Reduction | 3,208 |
| **Total** | 5,280 |



# FISH AND FISH HABITAT: MITIGATION MEASURES

**Habitat Avoidance and Minimization**
- Design infrastructure to avoid sensitive habitats and minimize stream crossings
- Maintain riparian buffers and avoid unnecessary vegetation clearing

**Use of Best Management Practices**
- Apply DFO Codes of Practice and others tailored to site-specific conditions

**Timing Restrictions**
- Schedule in-water work outside of sensitive periods such as spawning, incubation, and migration windows

**Fish Relocation and Rescue**
- Conduct fish salvage operations prior to dewatering or habitat alteration, ensuring humane handling and relocation to suitable habitats

**Erosion and Sediment Control**
- Install silt fences, sediment curtains, and other barriers to prevent sediment from entering waterbodies.
- Stabilize exposed soils promptly and maintain erosion control measures throughout construction

**Water Management**
- Implement construction water management plans to control runoff and maintain water quality
- Use sedimentation ponds or filtration systems where necessary

# FISH AND FISH HABITAT: COMPENSATION AND OFFSETTING

| Measures to offset may be grouped into four general categories | |
|---|---|
| ***Habitat Restoration and Enhancement*** | ▪ Add habitat features (boulder clusters, tree piles, spawning stone)<br>▪ Stabilize stream banks<br>▪ Remove barriers to fish migration created by people<br>    |
| ***Habitat Creation*** | ▪ Create new habitat inland or expand existing aquatic habitat |

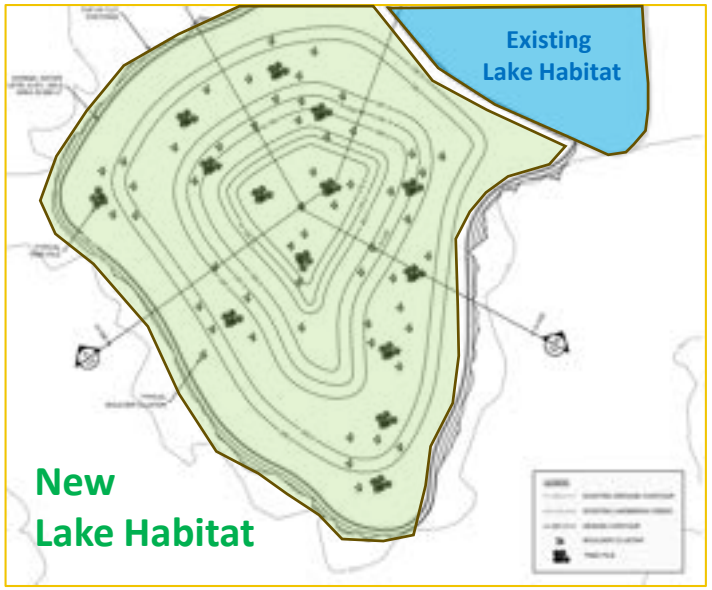
# FISH AND FISH HABITAT: COMPENSATION AND OFFSETTING

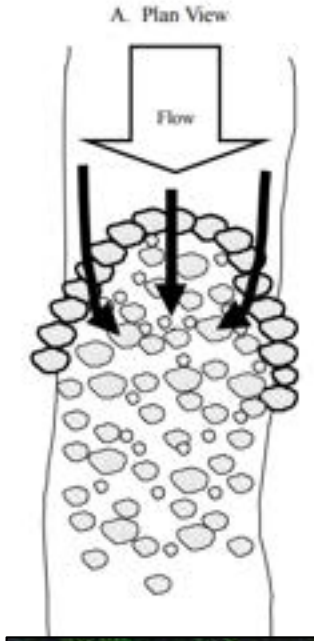
## Measures

- **Habitat Restoration and Enhancement**
  - Spawning Area Enhancement (riffles)
  - Habitat Structures
  - Riparian (edge of water) Planting

- **Habitat Creation**
  - Building new habitat where it wasn't before

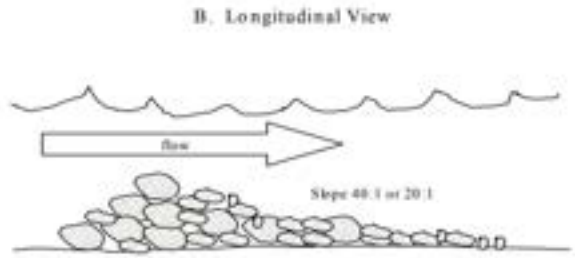
AEM has engaged with First Nation Communities and the Public to gather candidate compensation and offsetting ideas.




## Typical Riffle Design

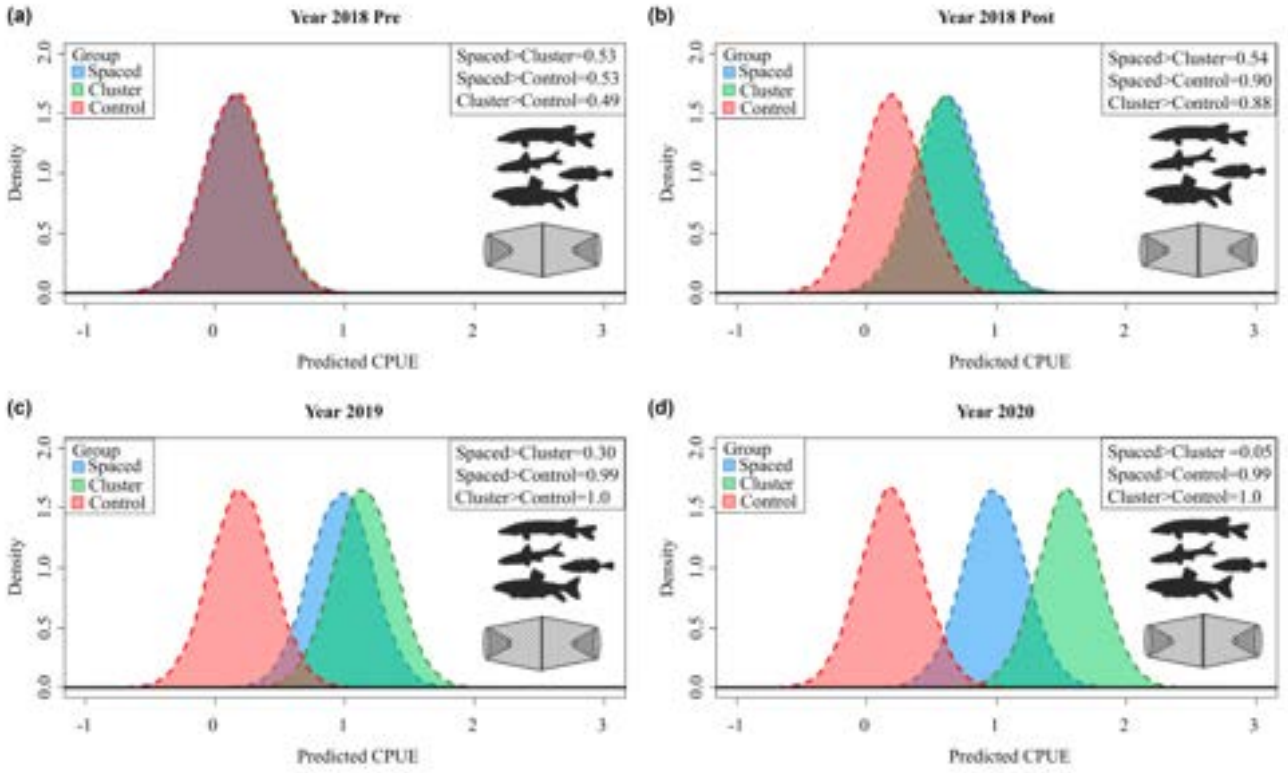
Minnesota Department of Natural Resources Investigational Report 502, 2003 evaluation of walleye spawning habitat improvement projects in streams Donna L. Dustin and Peter C. Jacobson




# UPPER BEAVER – COMPENSATION AND OFFSETTING

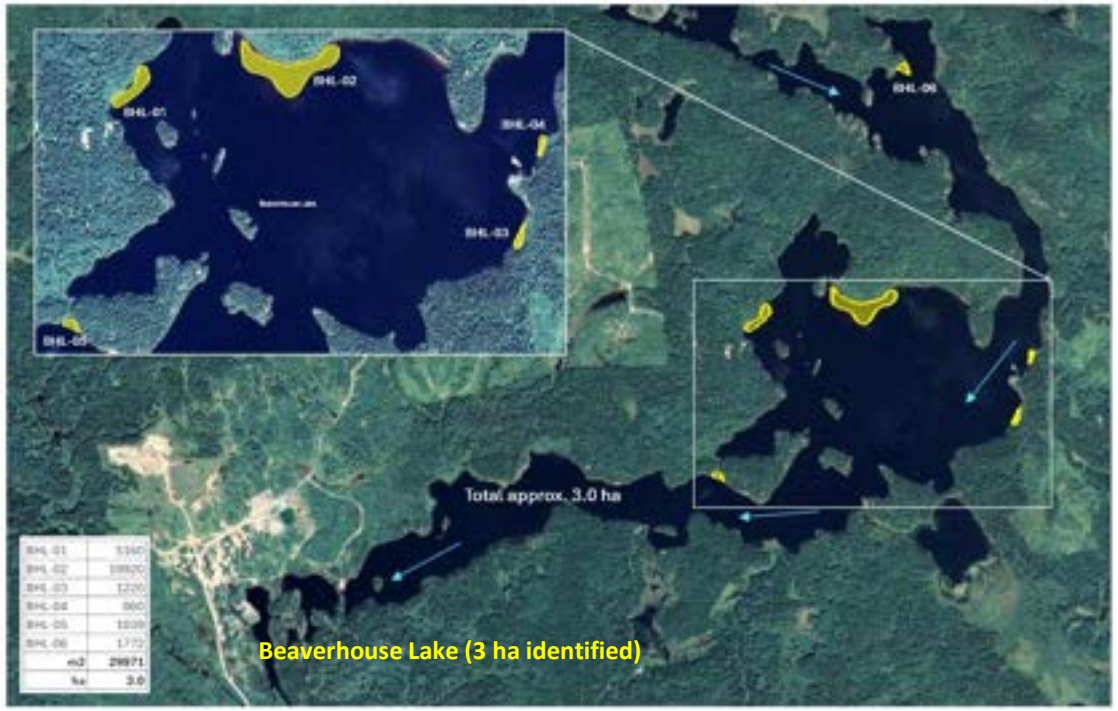
## Habitat Structures

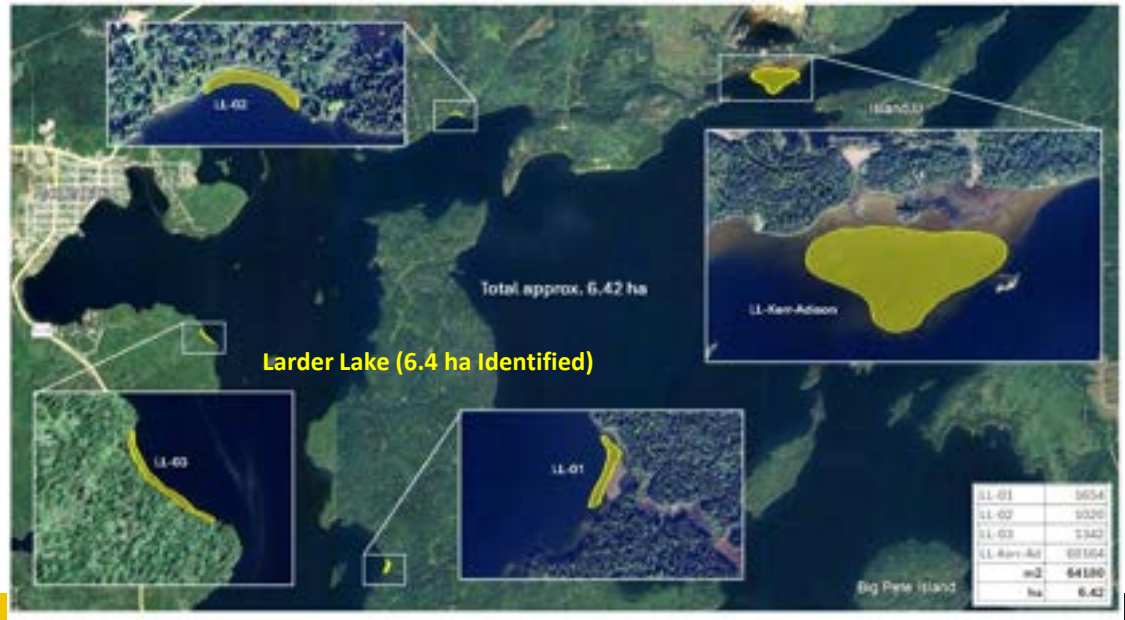
- Confidence that the littoral zone habitat structures improve fish habitat
- Propose area enhancements with rock piles and tree piles
- Monitoring would include Before-After Control-Impact (BACI) study design to demonstrate fish use of enhanced area




**Example of pre and post monitoring results**

Theis, S., Ruppert, J. L. W., & Poesch, M. S. (2023). Coarse woody habitat use by local fish species and structural integrity of enhancements over time in a shallow northern boreal lake assessed in a Bayesian modelling approach. Ecological Solutions and Evidence, 4, e12200.

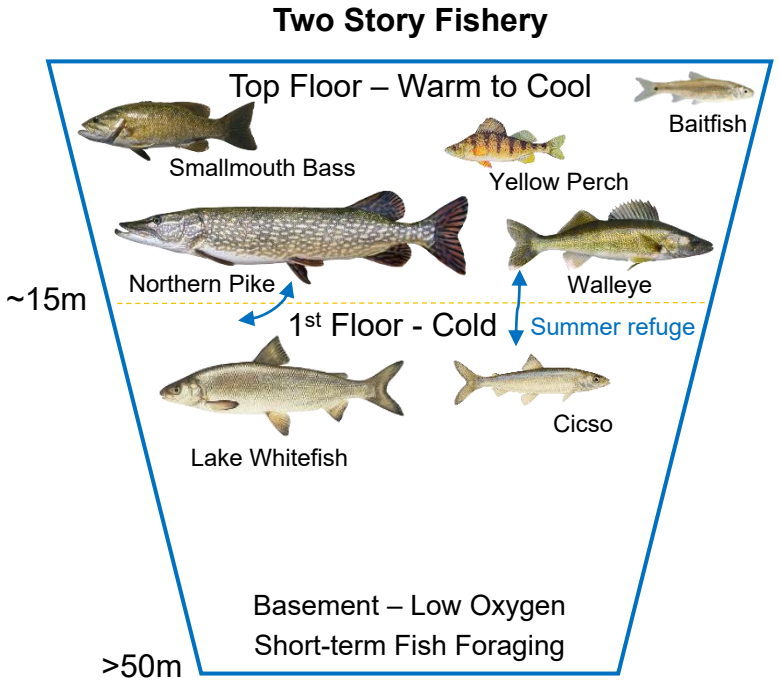


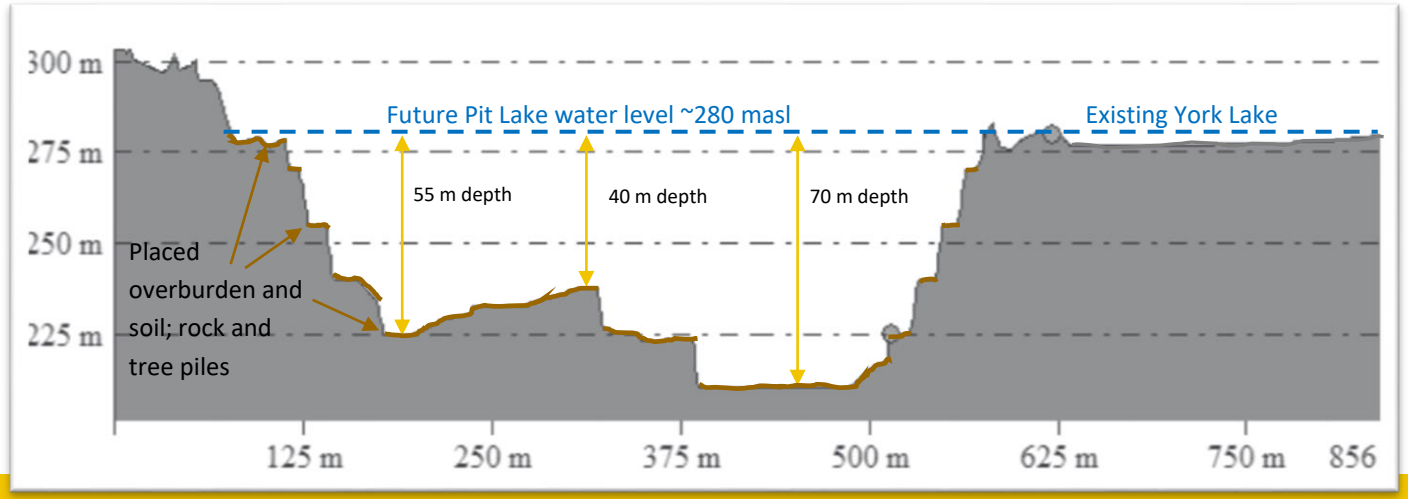



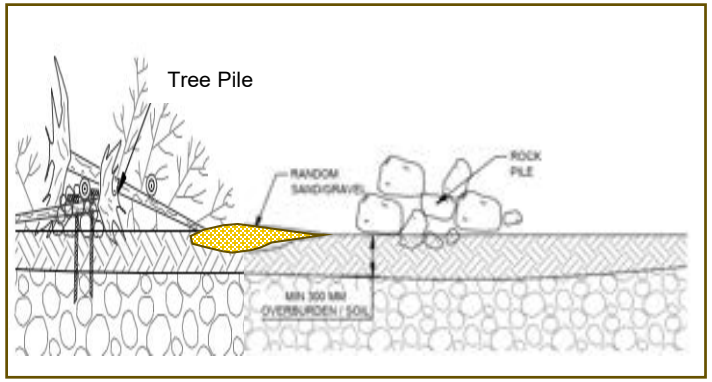
# FISH AND FISH HABITAT: COMPENSATION AND OFFSETTING

## York Lake

- Modeling shows lake will turn over (dimictic) consistent with other lakes in the system.
- Open pelagic zone will promote Lake Whitefish and Cisco and provide summer refuge for large Walleye and Northern Pike.
- Overburden / soil will be placed on gentle slopes and benches to promote vegetation and invertebrates
- Propose 10% to 15% of surface area will have area enhancement with rock piles and tree piles. Rock piles provide 4 x 4m of enhancement (16m$^2$) with tree piles providing 10 x 10 m of enhancement (100 m$^2$).



## Permitting and Approval Requirements

**Provincial**

- Environmental Compliance Approval Biological Monitoring Plan

**Federal**

- Metal and Diamond Mining Effluent Regulations (MDMER) – Environmental Effects Monitoring Program
- *Fisheries Act* Authorization – Performance Monitoring of Compensation and Offsetting measures

Typically, aquatic biological monitoring programs are **harmonized to minimize impact to fish and fish habitat** and follow standardized study designs for repeatability and comparison of results between study areas and study years throughout mine life (pre-construction, during construction, operations and closure).

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# FISH & FISH HABITAT


# 2025 PLANNED ENGAGEMENT ACTIVITIES

## Engagement Activities for Impact Assessment Preparation and Other Environmental Authorizations

### Workshops

Proposed workshops to discuss various project related topics, information available, potential impacts, mitigation measures and monitoring program:

**Atmospheric**

- Noise
- Air
- Vibration
- Ambient Light

April 16

**Land Use**

- Landscape
- Transmission Line
- Terrestrial
- Closure Concept

May 21

**Water**

- Surface Water
- Flows and Water level
- Groundwater
- Fish & Fish Habitat

June 19

**Any other topics you would like to see discussed?**

**Other engagement activities:**

- Update on the progress of Impact Statement preparation at the summer BBQ – July 19, 2025
- Impact Statement Overview Presentation(s) (end of 2025 or early 2026)

# HOW TO STAY INFORMED AND PARTICIPATE IN THE IA

**Stay informed**

- Attend Info sessions, Community BBQ
- Visit the Project Website https://upperbeaver.agnicoeagle.com/
- Subscribe to receive Newsletters and other communications related to the Project

**How to participate**

- Attend Workshops
- Complete Community Surveys
- Provide feedback through Evaluation Forms
- Communicate concerns, feedback, directly through relations.upperbeaver@agnicoeagle.com

**Other**

- Agency Consultation Process Upper Beaver Gold Project
- Ontario Environmental Registry

**Feedback Survey – Virtual Workshop on Land Use**

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# Thank you

**Trading Symbol:**
AEM on TSX & NYSE

**Investor Relations:**
416-847-8665
info@agnicoeagle.com

**agnicoeagle.com**

WORLD GOLD COUNCIL

# Water Levels & Flows – Rating Curves

Rating curves enable the continuous flow estimations from easily and continuously measured water level data, also help inform water management planning and engineering design.

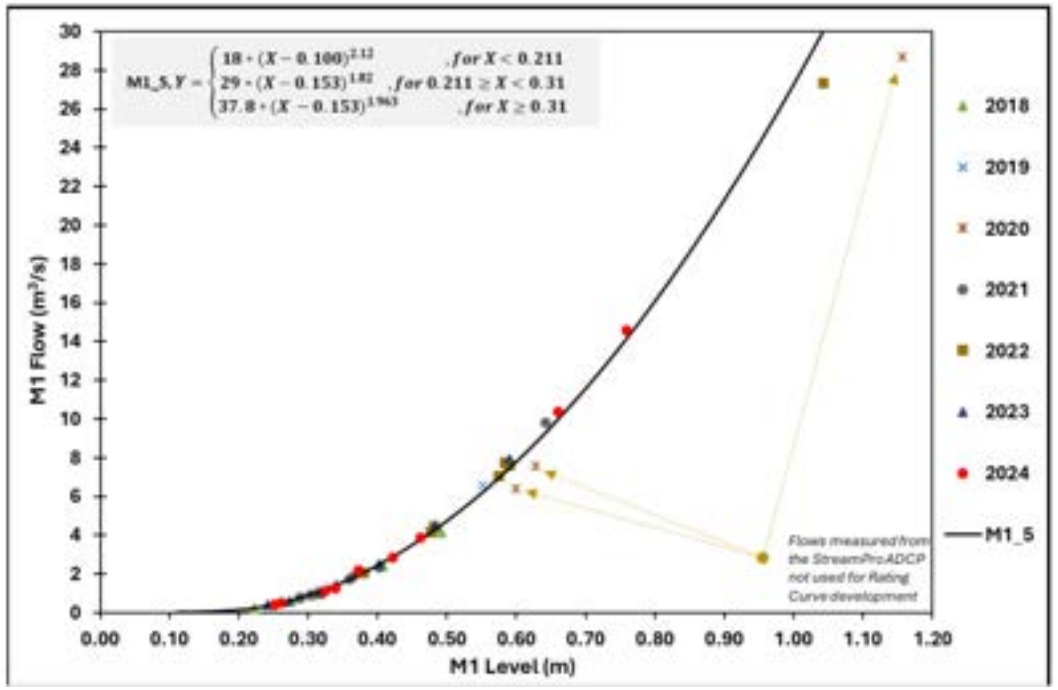


**Figure 1. Rating Curve for M1 Station, based on data from 2018 - 2024**

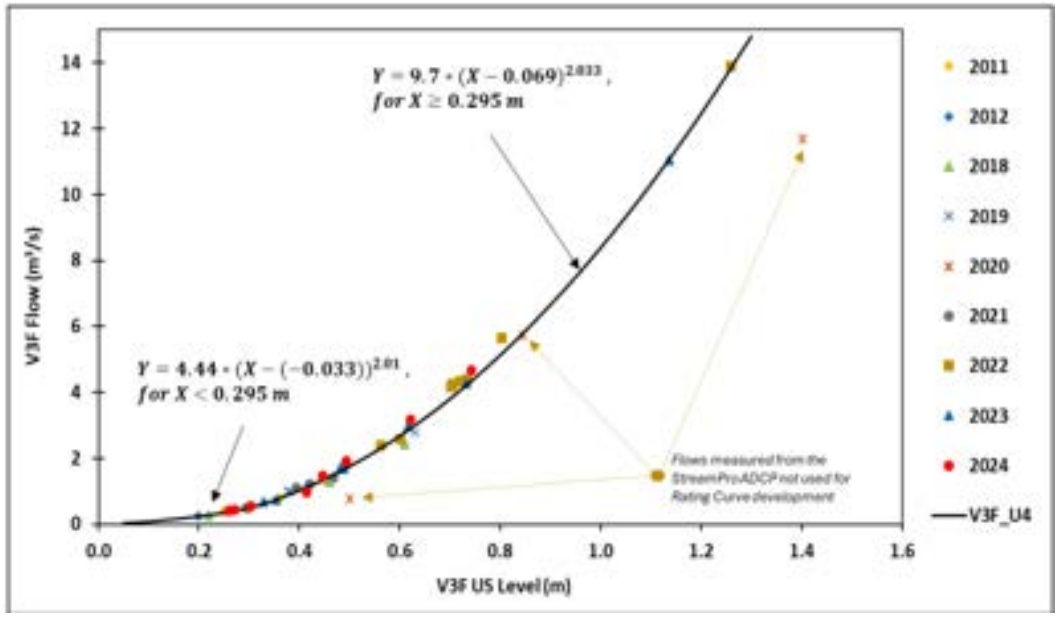


**Figure 2. Rating Curve for V3F Station, based on data from 2011 to 2024**