Elk River Watershed Qukin ʔamakʔis Collaborative Monitoring Program

Monitoring Working Group

13th Meeting – March 4, 2026 - Meeting Notes

Attendance

1. Abby Cousins, General Manager, *North Coal*
2. AJ Downie, SE Coal Mining Director, *BC ENV*
3. Alex McClymont, Aquatic Biologist, *ERA*
4. Betty Rebellato, National Fish Passage Program Improvement Coordinator, *CWF*
5. Allie Ferguson, Cumulative Effects Specialist, *Yaqit ʔa·knuqƛi'it First Nation*
6. Ashlee Jollymore, Consultant, *MacHydro*
7. Caitlin Henneker, Program Manager, *ERA*
8. Jeph Virtue, Chair, *CLEAR*
9. Jesse Huisman, Director of Engineering and Public Works, *District of Elkford*
10. Kara Przeczek, Environmental Impact Assessment Biologist, *BC ENV*
11. Nick Pennell, Manager of Engineering, *City of Fernie*
12. Ryan Seibel, Consultant, *Aquora Environmental*
13. Samantha Burke, PhD atmospheric chemistry student, *UBC*
14. Samantha Mertens, Land and Resource Specialist, *BC WLRS*
15. Stella Swanson, Consultant, *ERA*
16. Stewart Rood, Professor of Environmental Science, *University of Lethbridge*

Meeting outcomes

Elk Valley Water Quality Plan	AJ Downie (BC Ministry of Environment) presented on the Elk Valley Water Quality Plan (EVWQP), covering its origins, structure, and the recently approved 2025 amendment. The presentation outlined how water quality targets are set for mine-related contaminants across the watershed, and recent positive trends in selenium concentrations. Amendment two, focusing on the selenium target in Koocanusa Reservoir, is now underway for 2026.

	Action items - Caitlin to share slides with MWG members
UBC atmospheric chemistry lab support	Samantha Burke (UBC, PhD student) presented her research into atmospheric selenium transport from coal dust in the Elk Valley. She is seeking a deployment site for a particulate matter air sampler and welcomed suggestions from the group on suitable monitoring locations with weather station co-location. Action items - Samantha and Caitlin to link on sharing contact information for potential options.
Data overview report	Caitlin provided an update on the status of the data overview report and outlined a revised structure and timeline. The group discussed parameter selection, report scope, and the relationship between the report and the IJC. Action items - Caitlin and Ashlee to incorporate feedback from today's meeting and circulate a working draft to the group via Google Doc for review the week of March 16–20. - A second review round is planned for end of March, with the intention to share a preliminary version with the IJC in late March or early April, subject to group comfort. - Caitlin to add nitrate and phosphorus back to the parameter shortlist for consideration, and to flag relevant sections to Allie Ferguson for Indigenous knowledge input. - Stella Swanson to provide verbiage on stressor versus effects indicators for inclusion in the report. - Caitlin to share today's slides and a revised timeline with all members following the meeting.

Meeting minutes

Elk Valley Water Quality Plan	**[A. Downie]** presented on the Elk Valley Water Quality Plan (EVWQP). He described how, in the early 2010s, water quality data showed a slow but steady increasing trend in selenium across the watershed due to more than a century of coal mining and the accumulation of large waste rock volumes. By 2013, a ministerial order had been issued requiring what would become the first

	area-based management plan of its kind in BC. The plan was approved in 2014 and covers selenium, nitrate, sulfate, cadmium, and calcite across seven monitoring locations in the designated area. **[A. Downie]** explained the plan's regulatory role, noting that while it is not legally binding in itself, it has been enshrined in Ministry policy and must be considered in all decisions made under the Environmental Management Act. He emphasized that long-term targets are biologically based and protective. Short- and medium-term targets were designed to plot an achievable trajectory from 2012 conditions toward those long-term goals. **[C. Henneker]** asked whether the EVWQP covers forestry-related impacts. **[A. Downie]** clarified the plan is specific to mine-related contaminants and direct discharge-related activities (e.g. wastewater treatment). Forestry is not a prescribed activity under the Environmental Management Act and is instead regulated through the Ministry of Forests. He noted that nitrate from sewage treatment facilities may also be captured where relevant, but selenium and sulfate are largely mining-specific. **[S. Rood]** asked about recent selenium trends and the effectiveness of water treatment. **[A. Downie]** after years of increasing concentrations, selenium levels at most sites appeared to peak around 2021–2023 and have since begun to decline. This is a trend that aligns with the expanded use of saturated rockfill and active water treatment facilities. **[Alex]** asked whether site-specific targets are based on achievability or ecological protection. **[A. Downie]** clarified that long-term targets are fully protective and biologically derived. The short- and medium-term targets reflect what was achievable given treatment timelines. He noted one exception at the Lower Fording River, where the long-term target carries a slightly elevated level of risk, acknowledged in the plan's annexes. **[A. Ferguson]** asked about tributary management and the multi-generational outcomes carried into the 2025 plan. **[A. Downie]** acknowledged the gap. The current plan focuses on mainstem rivers and that tributaries aren't specifically regulated. He described the 2025 amendment's new focus area on tributaries as an important first step in signalling to decision-makers that protection

	should extend beyond the mainstem, particularly for unimpacted systems that support long-term outcomes. **[S. Swanson]** asked about the relationship between the EVWQP targets and the cumulative effects work under EVCEMF. **[A. Downie]** confirmed that alignment between the two frameworks is an active area of engagement, with the goal that EVWQP targets inform CEMF indicators rather than producing a conflicting parallel set. He noted CEMF will need a broader suite of indicators to reflect non-mining land uses. **[A. Downie]** concluded with a brief demonstration of the Elk Valley Water Quality Hub data dashboard, which was updated until the end of 2025. He highlighted how users can explore compliance points, long-term trend sites, and seasonal data patterns by parameter.
UBC chemistry support request	**[S. Burke]** described her research focus on coal dust as a potential vector for selenium transport through the atmosphere. Her first field project involves deploying a particulate matter air sampler in the Elk Valley, requiring access to electrical power and, ideally, co-location with a weather station to confirm wind direction and source attribution. She noted that the Sparwood Airport weather station had been explored but presented some technical compatibility issues. **[A. Jollymore]** suggested connecting with BC Hydro at the Sparwood Airport or, alternatively, reaching out to the SNOW program, which operates a snow weather station on Morrissey Ridge. She offered to make introductions to either. **[S. Rood]** flagged that prevailing westerly winds would carry dust toward Alberta, and that stations at sites such as Frank Slide could be useful for capturing that downwind signal. **[C. Heddle]** recommended Samantha reach out to Kayleigh Montgomery at EVR for support on site access and weather station connections. **[S. Swanson]** suggested also exploring Environment Canada weather infrastructure in the District of Sparwood, and **[S. Burke]** clarified that those stations are in fact operated by EVR in collaboration with the BC Ministry of Environment, and have only been publicly accessible since 2022. **[A. Ferguson]** offered Yaqït ʔa·knuqƛi 'it First Nation's weather station on Reserve as a potential background monitoring site for future deployments. **[C. Henneker]** also flagged

	the Nature Trust of BC's Big Ranch property and North Coal's landholdings between Sparwood and Elkford as possible private land options for sampler deployment.
Data overview report General business	**[C. Henneker]** provided an update on the data overview report, explaining that the writing team had identified a need for a more substantial revision to the report structure than originally anticipated. Rather than distributing a draft ahead of this meeting as planned, the team opted to use the meeting as a feedback and direction-setting session, with the intention to circulate a working draft for group review the week of March 16–20, followed by a second review round in late March.
IJC update	**[C. Henneker]** provided an update on the Collaborative's ongoing engagement with the IJC. She described how the Collaborative had presented its data consolidation and visualization work to the IJC's Water Quality Status and Trends Technical Working Group (TWG) in August. The Collaborative has since re-engaged, sharing its selected parameter list and the full surface water quality dataset with all four TWGs. **[S. Swanson]** provided additional context on the IJC timeline, noting that TWGs are awaiting a response from the IJC on a formal extension request. **[A. Ferguson]** asked about the IJC's use of DataStream as a data management platform and whether there were plans to keep it live after the study. **[S. Swanson]** confirmed the intention is for the data to remain evergreen and that the IJC has the capacity to store and manage the data going forward.
Figure and parameter adjustment	**[C. Henneker]** walked through the report's proposed approach to data quality figures. She noted that rather than producing these figures for all 18 parameters, the team plans to focus on one 'keystone' indicator per land use in the main report, with the full parameter set retained as an appendix. **[A. Jollymore]** and **[S. Swanson]** both supported a concise parameter list and emphasized the importance of being clear about what the visualizations can and cannot show. Stella reinforced that the report is not a cumulative effects assessment but rather a data presentation intended to raise questions and identify priorities for future monitoring. She recommended framing the selected parameters in terms of stressor

General feedback	indicators versus effects indicators, offering to provide text on the distinction for inclusion in the report. **[A. Ferguson]** raised a concern about the use of ‘cumulative effects framework’ language in the report structure, given ongoing work between Yaqit ʔa·knuqɬi 'it, KNC, and BC on EVCEMF. She suggested alternative wording such as ‘cumulative land use lens’ to avoid confusion. She also asked for clarification on the inclusion of benthic invertebrates, noting that they are currently working on a benthic indicator for EVCEMF. **[C. Henneker]** confirmed that benthic data in the report is sourced only from the CABIN database, given the report’s public-data-only scope, and that its inclusion is intended to highlight data gaps rather than draw conclusions. **[C. Heddle]** flagged the complexity of interpreting benthic invertebrate data, noting that natural variability from scouring and habitat heterogeneity introduces significant noise and recommended the team think carefully before including it, given the tight scope and timeline. **[S. Swanson]** agreed but noted that data from non-mine-affected tributaries should be retained to illustrate natural variability as a baseline context. **[B. Rebelatto]** suggested the team consider structuring the report with a short accessible front section and more technical detail in appendices, to serve both general audiences and technical readers like the IJC. **[C. Henneker]** endorsed this approach and described a longer-term plan to produce complementary formats like infographics, executive summaries, or video, once the main report is complete. **[S. Rood]** noted that the timeline looked ambitious and encouraged the team not to feel compelled to accelerate beyond a reasonable pace to meet the IJC deadline. **[C. Henneker]** confirmed that the team would not compromise scope or quality and would share only what is ready in draft form. **[C. Henneker]** noted that the IJC’s Water Quality TWG had requested data from smaller but significant monitoring data holders in the valley, including the City of Fernie, Districts of Elkford and Sparwood, and Fernie Alpine Resort. She confirmed the Collaborative had done substantial work to identify site ownership

	within the Environmental Monitoring System (EMS) database and would be able to support the IJC with this. **[A. Ferguson]** asked about EVR benthic monitoring sites not represented in CABIN and whether these would be referenced. **[C. Henneker]** confirmed that only publicly available data is shown in the visualizations, but the report will acknowledge that substantially more data exists outside public repositories. **[S. Swanson]** encouraged MWG members to share any specific indicator interests or knowledge of Koocanusa-related monitoring directly with Caitlin and Ashlee, particularly given the IJC's interest in land use stressors and effects across the full reference area.
Closing remarks	**[C. Henneker]** concludes with thanks to all participants. Committed to sharing presentation slides, revised timelines, and potential for calendar invites for data report review periods.