December 2023



The River Blend: St. Mary and Milk

The International St. Mary and Milk Rivers Study Board publishes this semi-annual newsletter to help keep the public informed about the International St. Mary and Milk Rivers Study. This is the second of the series. For more information on the study, see the <u>first newsletter</u> in the series.

For over a century, the United States and Canada have shared the waters of the St. Mary and Milk Rivers through agreements negotiated by both countries. Over time, changing conditions in the watershed including climate and the state of the infrastructure used to store and move water have impacted the extent to which each country can access their share. The International St. Mary and Milk Rivers Study is a four-year effort (2021-2025) to determine if improvements can be made. The Study will present its report to the International Joint Commission in June 2025. The Commission will review the report and make recommendations to the governments of both countries for their consideration.

Since the International St. Mary and Milk Rivers Study Board published its last newsletter in June, they have been busy with in-person and virtual study meetings, workshops, and progressing the work of the Technical Working Groups (TWGs). The Board is eager to continue progress on the study.

International Joint Commission Fall Semi-Annual Meeting

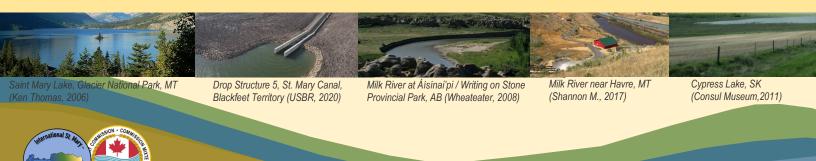
Ottawa, Ontario, Canada

In October 2023 the International St. Mary and Milk Rivers Study Board attended the International Joint Commission's Fall Semi-Annual meeting, which was hosted in Ottawa, Ontario. The Semi-Annual meeting provides a greater opportunity for IJC Boards to meet and interact with the Commission to discuss the work being undertaken by boards and their advisory groups. During these meetings, the Study Board provided an update on its work, including communication efforts to date, public and Indigenous engagement, progress of its technical work, and discussed future meetings and workshops.



Study Board members and study team attending the IJC's Fall Semi-Annual Meeting

(Credit: IJC Staff)



In-Person Study Meetings

Great Falls, Montana, United States

The Study Board held a series of in-person meetings in Great Falls, Montana from October 31 to November 2, 2023. The Study Board met collectively with its advisory groups, which includes the Public Advisory Group (PAG), Indigenous Advisory Group (IAG), and the Government Forum (GF). This was one of the first opportunities for the study board and its advisory groups to gather in-person.

The Study Board and advisory groups spent time getting to know each other as they shared perspectives from the basin, taking the time to learn what the basin means to each other. While the



Study Board and advisory groups were able to interact with one another, each advisory group also had a separate breakout session, where they were able to discuss work specific to their group in greater detail.

Study Board meeting in Great Falls, Montana (Credit: ECCC Staff)

The Study Board and advisory groups also discussed and provided feedback on the work of the TWGs and the Communications Committee. The TWGs and Options Formulation and Evaluation Group (OFEG) presented technical work being done; and the Study Board and advisory groups

had the opportunity to provide feedback on the proposed administrative and structural options and scenarios that will be modelled, as well as the performance indicators that will be used by the Board to evaluate model results. The Communications Committee then led a discussion on communication efforts that are planned for the next several months, inclusive of future meetings and communication products.



Technical Working Group presentations in Great Falls, Montana (Credit: ECCC Staff)

The Study Board is looking forward to the next set of in-person meetings, which are tentatively scheduled for June 2024 in Lethbridge, Alberta.



Technical Working Group (TWG) Workshop

Calgary, Alberta, Canada

From November 14 to 16, 2023, the Options Formulation and Evaluation Group (OFEG), the group responsible for overseeing and coordinating the work of the TWGs, held a workshop in Calgary, AB. There was participation from all the TWGs inclusive of the Water Management Modelling TWG, the Climate and Hydrology TWG, the Infrastructure Options TWG, the Water Apportionment and Administrative Options TWG, the Socio-Economic Analysis TWG, and the Aquatic Ecosystems TWG.

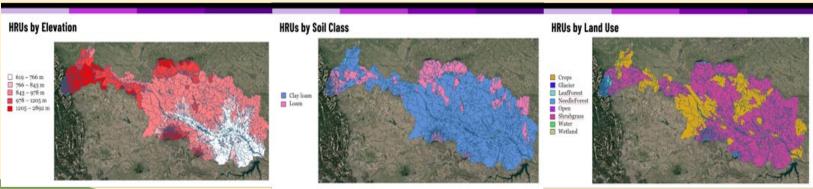
The purpose of these meetings was to review achievements to date and consider the feedback received from the Study Board and advisory groups during the Great Falls, Montana meetings. This workshop gave the TWGs the opportunity to coordinate their work amongst themselves and further define the options and scenarios to be modelled. They will begin producing and evaluating model results for Board consideration early in the new year.

The Climate and Hydrology (CH) TWG's Workshop

Calgary, Alberta, Canada

On September 26th and 27th, 2023, the Climate and Hydrology (CH) TWG, gathered at the University of Calgary for an intensive workshop where the performance of several models was compared and evaluated to determine which models are most appropriate to simulate the hydrology of the St. Mary and Milk Rivers basin. The focus of the workshop was assessing a framework that ensures consistency in hydrological model inputs and allows for direct comparison of outputs. Objectives for the framework include reducing setup time, increasing transparency, and fostering collaboration among modelling teams. The workshop covered the configuration of four hydrology models and a "Hydrathon" was conducted to validate each model's ability to use the framework to generate an 8-year model simulation for the St. Mary and Milk Rivers basin for the study.

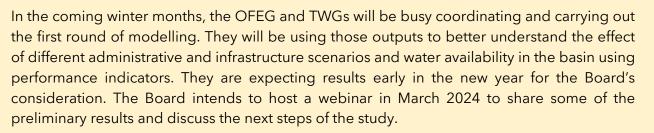
Output from the CH TWG modelling will be foundational to the work of other TWGs, and it will provide an improved scientific understanding of the water balance in the basin and how it may be affected under different future climate scenarios.



Visualization of inputs to the Raven hydrological model; [Hydrologic Response Units (HRUs)] (Credit: Presentation and graphics by Madeline Gabriela Tucker (University of Waterloo))



The Road Ahead...



While the TWGs are busy with the technical work, the Board looks forward to getting back to the basin as they are planning the next set of in-person meetings, which are tentatively scheduled to be in Lethbridge, Alberta in June 2024.





Want to learn more?

Have comments or questions?

Scan the QR Code for quick access to the study board's <u>website</u> and fact sheets:

- <u>SMMR Study Overview</u>
- <u>Work Plan</u>
- <u>Apportionment</u>
- Geography and Infrastructure
- What is a Performance Indicator?
- TWG One Page Summary OFEG

- TWG One Page Summary AE
- TWG One Page Summary CH
- TWG One Page Summary IO
- TWG One Page Summary SEA
- TWG One Page Summary WAAO
- TWG One Page Summary WMM

Ideas for additional fact sheets? Contact the Study Board directly via email: smmr@ijc.org





Writing-on-Stone Provincial Park, Milk River, Alberta (Credit: IJC Staff) Lake Sherburne Reservoir, Montana (Credit: ECCC Staff) St. Mary Diversion Canal siphons, Montana (Credit: ECCC Staff)

