

# What We Heard: Elevated Selenium Concentrations in Schist Lake Fish Tissue

## Community Engagement Summary Report

Manitoba Métis Federation

August 2024



# Introduction

The Manitoba Métis Federation (MMF) has been asked to provide input on the recent finding of elevated selenium concentrations in fish tissue taken from Schist Lake in Manitoba. Schist Lake is within the MMF's The Pas Region. There are several mining operations in the area, including two very near Schist Lake which were operated by Hudson Bay Mining and Smelting, now succeeded by Hudbay Minerals (Hudbay).

Effluent discharge from the tailings facility releases selenium into Schist Lake, which bioaccumulates in fish tissue. At elevated levels, selenium can be dangerous to human health. When elevated selenium levels were found, the Government of Manitoba released a consumption guideline for fish from Schist Lake. The purpose of this report is to inform Hudbay of the specific concerns and potential impacts to the Red River Métis and identify mitigation and accommodation measures.

This report includes sensitive information shared with the MMF by Red River Métis Citizens, including areas of land use and occupancy. Red River Métis Citizens have entrusted the MMF, as the democratically elected National Government of the Red River Métis, to safeguard and appropriately use this information on their behalf.

The information in this report is the property of the MMF and Red River Métis Citizens and cannot be duplicated or distributed without the MMF's written consent. The information in this report is considered "high-level:" it is based on the data available at the time of writing and is a partial overview of Red River Métis land and resource use within Schist Lake and surrounding areas.



# The Red River Métis and the MMF

## The Red River Métis

The Red River Métis is an Indigenous collectivity and Aboriginal People within the meaning of section 35 of the *Constitution Act, 1982*. Based on our emergence as a distinct Indigenous People in the Northwest prior to effective control by Canada and the creation of the province of Manitoba, the Red River Métis holds rights, interests, and claims throughout and beyond the Province of Manitoba.

Since 1982, Métis Rights have been recognized and affirmed by section 35 and protected by section 25 of the *Constitution Act, 1982*. These rights were further confirmed and explained by the Supreme Court of Canada (“SCC”) in *R. v. Powley*, 2003 SCC 43. Manitoba Courts also have recognized Red River Métis Rights in *R. v. Goodon*, 2008 MBPC 59. These decisions have affirmed that the Métis hold existing Aboriginal Rights throughout their traditional territories. Our Citizens and harvesters, rely on and use the lands, waters, and resources of our traditional territory throughout the Province of Manitoba and elsewhere within the historic Northwest, including in and around the area of the project, to exercise their constitutionally protected rights and to maintain their distinct Red River Métis customs, traditions, and culture.

## Red River Métis’ Rights, Claims, and Interests

Based on its emergence as a distinct Indigenous People in the Northwest prior to effective control by Canada and the creation of the province of Manitoba, the Red River Métis holds rights, claims, and interests throughout and beyond the province of Manitoba consistent with the United Nations Declaration on the Rights of Indigenous Peoples, including the right to self-determination.

The MMF is mandated to promote, protect, and advance the collectively held Aboriginal Rights of the Red River Métis. Through this mandate, the MMF engages with governments, industry, and others about potential impacts of projects and activities on our community. In 2007, the MMF Annual General Assembly adopted Resolution No. 8, which provides the framework for engagement, consultation, and accommodation with the Red River Métis. Designed by Métis, for Métis, Resolution No. 8 sets out the process that is to be followed by governments, industry, and other proponents when developing plans or projects that have the potential to impact the section 35 rights, claims, and interests of the Red River Métis. It was unanimously passed by MMF Citizens and mandates a “single-window” approach to consultation and engagement with the Red River Métis through the MMF Home Office.<sup>1</sup>

In engaging the MMF, on behalf of the Red River Métis, the Resolution No. 8 Framework calls for the implementation of five phases:

- Phase I: Notice and Response;



- Phase II: Research and Capacity;
- Phase III: Engagement and Consultation;
- Phase IV: Partnership and Accommodation; and
- Phase V: Implementation.

This project has the potential to impact Red River Métis Rights, claims, and interests and as such, engagement and consultation with the MMF, through the process set out above, must be followed. The project is located within the traditional territory of the Red River Métis, and in the heart of our Homeland. At one time, this was the “postage stamp province” of Manitoba. This is the birthplace of the Red River Métis and where we currently have an outstanding claim flowing from the Federal Crown’s failure to diligently implement the land grant provision of 1.4 million acres of land promised to the Red River Métis as a condition for bringing Manitoba into Confederation and set out in section 31 of the *Manitoba Act, 1870* in accordance with the honour of the Crown.<sup>2</sup>

Red River Métis section 35 rights are distinct from First Nation’s rights and must be respected. The Manitoba Métis Federation is the national government of the Red River Métis.

Prior to the creation of Manitoba, the Red River Métis had always exercised its inherent right of self-determination to develop its own self-government structures and institutions centred around the Red River Settlement and throughout the Northwest. As described by Louis Riel in his 1885 memoirs, Métis self-government was well-established and functioning when Canada came to the Red River Métis in the late 1800s:

*When the Government of Canada presented itself at our doors it found us at peace. It found that the Métis people of the North-West could not only live well without it... but that it had a government of its own, free, peaceful, well-functioning, contributing to the work of civilization in a way that the Company from England could never have done without thousands of soldiers. It was a government with an organized constitution whose junction was more legitimate and worthy of respect, because it was exercised over a country that belonged to it.*

Métis self-government has evolved and changed over time to better meet the needs of the Red River Métis. Today, the MMF is the recognized, democratically elected, self-government representative of the Red River Métis and on July 6, 2021, it signed along with the Government of Canada, the Manitoba Métis Self-Government Recognition and Implementation Agreement.

Since 1967, the MMF has been authorized by the Red River Métis through a democratic governance structure at the Local, Regional, and national levels. As part of this governance structure, the MMF maintains a Registry of Red River Métis Citizens.<sup>3</sup> By applying for Red River Métis Citizenship, individuals



are confirming the MMF is their chosen and elected representative for the purposes clearly set out in its Constitution,<sup>4</sup> including as related to the collective rights, claims, and interests of the Red River Métis.<sup>5</sup>

The MMF Constitution confirms that the MMF has been created to promote the political, social, cultural, and economic rights and interests of the Red River Métis. The MMF is authorized to represent the Red River Métis' collective rights, interests, and claims. This authorization is grounded in the MMF's democratic processes that ensures the MMF is responsible and accountable to the Red River Métis.

The MMF governance structure includes a centralized MMF President, Cabinet, Regions, and Locals. There are seven (7) Regions and approximately 135 Locals throughout Manitoba (Figure 1). There are more than three thousand Citizens who live outside of Manitoba. All MMF Citizens are Members of a Local. Locals and Regions work together to authorize and support the MMF Cabinet, and the MMF's various departments and offices. Through elections held every four years, Citizens choose and elect the MMF Cabinet consisting of the MMF President, who is the leader and spokesperson for the MMF, a Vice-President of each Region, and two Regional Executive Officers from each Region. The MMF Cabinet also includes the spokeswoman from the Infinity Women Secretariat.



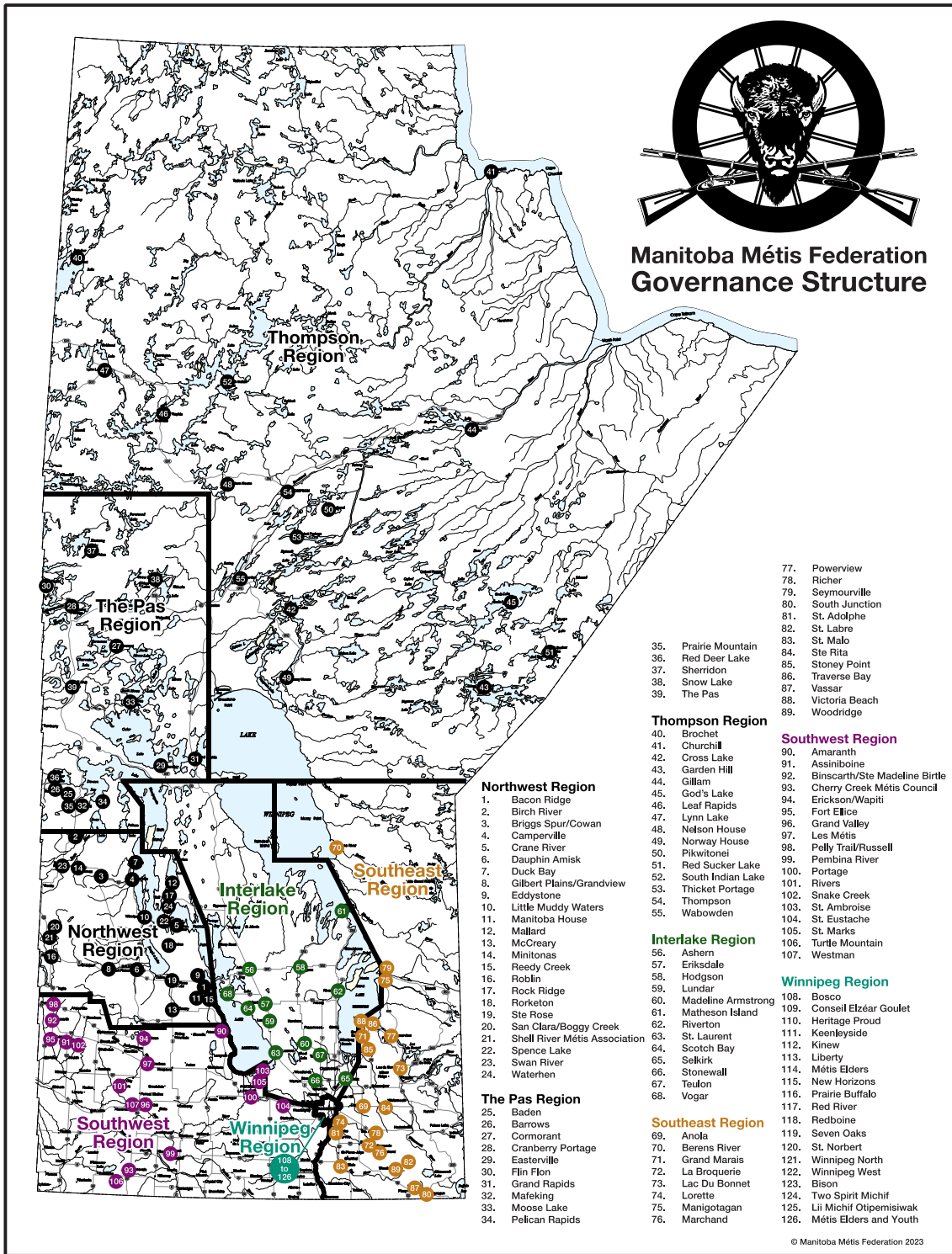


Figure 1: Manitoba Métis Federation (MMF) Regions.



The MMF, as the duly authorized representative of the Red River Métis, has been recognized by both the federal and provincial governments in agreements, policies, and legislation. For example, in 2002, *The Child and Family Services Authorities Act* recognized the MMF for the devolution of child and family services to MMF institutions. This act establishes a series of Child and Family Services Authorities to administer and provide the delivery of services to various distinct Indigenous communities in Manitoba. It creates a Métis Authority, the directors of which is appointed by the MMF.

In 2008, the courts in Manitoba further recognized that “[t]he Métis community today in Manitoba is a well organized and vibrant community. Evidence was presented that the governing body of Métis people in Manitoba, the Manitoba Métis Federation, has a membership of approximately 40,000, most of which reside in southwestern Manitoba.”<sup>6</sup> In 2010, the Manitoba Government adopted a Manitoba Métis Policy, and stated that:

*The Manitoba Métis Federation is a political representative of Métis people in Manitoba and represents in Manitoba the Métis who collectively refer to themselves as the Métis Nation.... Recognition of the Manitoba Métis Federation as the primary representative of the Métis people is an important part of formalizing relationships.*<sup>7</sup>

In 2012, the *MMF-Manitoba Harvesting Agreement (2012)* negotiated between the MMF and the Manitoba Government recognized some of the collective section 35 harvesting rights of the Red River Métis and relied on the Citizenship processes of the MMF as proof of belonging to a rights-holding Aboriginal community:

*For the purposes of these Points of Agreement, Manitoba will recognize as Métis Rights-Holders, individuals who are residents in Manitoba and who hold a valid MMF Harvesters Card, issued according to the MMF’s Laws of the Hunt. [... and will] consult with the MMF prior to implementing any changes to the current regulatory regime that may infringe Métis Harvesting Rights.*<sup>8</sup>

In 2013, the SCC recognized the “collective claim for declaratory relief for the purposes of reconciliation between the descendants of the Métis people of the Red River Valley and Canada.” It went on to grant the MMF standing as the “body representing the collective Métis interest” in the *MMF Case*.<sup>9</sup> Additionally, in 2016, the *MMF-Canada Framework Agreement* stated:

*the Supreme Court of Canada recognized that the claim of the Manitoba Métis Community was “not a series of claims for individual relief” but a “collective claim for declaratory relief for the purposes of reconciliation between the descendants of the Métis people of the Red River Valley and Canada” and went on to grant the MMF standing by concluding “[t]his collective claim merits allowing the body representing the collective Métis interest to come before the court.*



*[and that] Canada is committed to working, on a nation-to-nation, government-to-government basis, with the Métis Nation, through bilateral negotiations with the MMF.<sup>10</sup>*

On July 6, 2021, the MMF and Canada signed the Manitoba Métis Self-Government Recognition and Implementation Agreement which immediately recognized the MMF as the national government of the Red River Métis.





# Community Engagement Approach

The MMF held a community consultation and engagement meeting on July 10, 2024, in Flin Flon, Manitoba. The objective was to inform Red River Métis Citizens of the recent finding of elevated selenium levels in fish tissue in Schist Lake and the associated consumption guidelines announced by Manitoba, and hear citizens' thoughts, perceptions, and concerns about the potential impacts on Red River Métis use of the lands and waters in the area. If the area is no longer suitable for harvesting fish, there will be impacts to traditional Harvesting Rights of the Red River Métis, protected under Canada's constitution.

Staff from the MMF's Energy, Infrastructure, and Resource Management (EIRM) department facilitated the community meeting, which included a presentation from Hudbay. EIRM staff provided Red River Métis Citizens with a hard copy survey, designed to gather further information about their land use within and around Schist Lake, and about specific concerns related to elevated selenium levels in fish tissue. A total of 17 Red River Métis Citizens attended the meeting and 16 completed the paper survey.

## Summary of Red River Métis Interests and Concerns

This section provides a summary of what the MMF has heard from Red River Métis Citizens with regards to specific concerns and potential mitigation measures discussed by survey participants.

### Red River Métis Land Use and Occupancy

Schist Lake is within the National Homeland of the Red River Métis. The Red River Métis have historically and continue to exercise our section 35 rights throughout this area, supporting our traditional and contemporary ways of life through subsistence harvesting, commercial harvesting, accessing culturally and historically significant sites, and passing Red River Métis Knowledge on to younger generations. Given these deep connections to the land, the Red River Métis also hold unique knowledge of the area including knowledge of wildlife and plant populations and health, ecologically or culturally sensitive areas, and more. Information gathered from survey participants indicates that the Red River Métis have historically and contemporarily used Schist Lake and the surrounding area for fishing, swimming, and gathering drinking water.

#### Fishing in Schist Lake

Several survey respondents said that they fish in Schist Lake, ranging from a weekly to monthly basis. Other respondents shared how they used to fish there regularly in the past, 30 to 50 years ago.



Most respondents said they do not consume fish from Schist Lake, although one survey respondent reported consuming fish from Schist Lake less than monthly, and another shared how they used to consume fish from Schist Lake regularly in the past, 30 to 50 years ago.

### **Swimming in Schist Lake**

One survey respondent currently swims in Schist Lake, and two additional respondents said they used to swim in Schist Lake regularly, between 10 and 50 years ago.

### **Drinking water from Schist Lake**

No survey respondents currently consume drinking water from Schist Lake, though one respondent used to, 30 to 40 years ago.

Hudbay needs to understand the current and historic presence and activities of the Red River Métis around Schist Lake to avoid potential impacts on the Red River Métis. Further investigation as to why some Citizens have stopped harvesting or using the areas will be needed, as it is possible that harvesting and use activities have declined due to ongoing mining activities.

Based on the information currently available; the historical and ongoing use of Schist Lake by Citizens indicates the potential for elevated selenium levels to impact Red River Métis ways of life and Harvesting Rights. Any impact on these rights needs to be adequately and appropriately assessed and, if necessary, accommodated or mitigated. The MMF will work with Hudbay to develop mitigation, accommodation, and compensation measures for management of selenium levels in Schist Lake related to existing mines as well as future exploration work.

## **Concerns Regarding Manitoba Fish Consumption Guidelines and Selenium in Fish Tissue**

When high levels of selenium were found in fish in Schist Lake, the recommendation from the Government of Manitoba was to limit consumption of all species of fish, caught anywhere in Schist Lake, to a maximum of four meals per month. Survey respondents had concerns about this guideline and its failure to consider several key factors.

For example, several respondents were concerned that the guidelines do not take into account other exposures to selenium, particularly drinking water, gathered plant foods, and harvested meat. Red River Métis Citizens may already be at higher risk for elevated selenium levels because of other country foods they may consume regularly. Manitoba's consumption guidelines for Schist lake, which looks only at fish, fails to consider the full risk of elevated selenium to Red River Métis Citizens.

Similarly, respondents were concerned that the guidelines do not consider long-term effects. Citizens who have been consuming fish from Schist Lake on a regular basis for a long time may already be experiencing elevated selenium levels, and the guidelines don't necessarily take this into consideration.



When asked about the potential of future impacts, respondents noted that a recommended consumption guideline is a short-term solution that does not adequately consider long-term effects of elevated selenium levels on fish health, water quality, or in turn, on the health of humans.

One survey respondent suggested that individuals be given the option to test for selenium in their annual bloodwork. This would allow Citizens, on an individual basis, to better understand the potential risk from elevated selenium, and make informed decisions about how much fish they choose to consume. A follow-up fish consumption survey would be of benefit to the MMF to more fully understand how Citizens are changing their consumption when these types of reports are released.

Several respondents were concerned that the testing which led to this recommendation was not comprehensive, and that the recommendation was based on limited information that does not capture the full extent of the issue. They expressed concern that only one arm of Schist Lake was sampled and spoke about the need for testing in all areas of the lake as well as areas downstream, considering how fish move throughout Schist Lake and Lake Athapapuskow. Citizens were concerned that elevated selenium is a bigger problem, that could extend beyond Schist Lake. The MMF understands that to date there has not been enough information shared as to how far beyond Schist Lake water or fish with high selenium could be found. If this information is not available, appropriate studies need to be completed to ensure a fulsome evaluation of the safety of fish consumption.

Some Citizens said that they find the guidelines confusing. One survey respondent was confused by the apparent discrepancy between Manitoba's consumption guideline and other sources of information which provide a recommended daily dosage of selenium. Another respondent spoke about how the consumption guideline is somewhat vague and suggested that the guideline be in grams of fish per month per person. A couple of respondents felt they simply needed more information and suggested further education and awareness efforts about selenium in fish and consumption guidelines.

In addition to the guidelines being confusing, several survey respondents said they needed more information about exposure to and consumption of selenium in general. They raised questions such as how much selenium is okay to consume, and what happens if selenium content increases in water or in fish tissue.

This data indicates the need for more comprehensive testing, guidelines that adequately consider additional exposures and long-term effects, clearer messaging, and additional education and awareness outreach.

## Concerns Regarding Hudbay

Red River Métis Citizens had several concerns about Hudbay and their mining operations around Schist Lake.



One survey respondent talked about the difference between following regulations and having the social license to do mining work in the area. They were concerned that Hudbay will believe they did nothing wrong so long as they are in compliance with regulations and emphasized the need for Hudbay to be proactive and handle this issue seriously to maintain their social license with the Red River Métis community. Another survey respondent said that it seems that Hudbay is taking responsibility for contaminating Schist Lake, and they were hopeful to see them working to find solutions.

Several survey respondents shared concerns about how transparent Hudbay is being on this issue. One Citizen noted that the tailings may have shifted. The MMF understands that this may be at least partially responsible for the elevated selenium found in Schist Lake and is a concern that needs to be properly addressed. Another survey respondent shared concerns that reporting selenium concentration in fish tissue does not paint a full picture of the issue. They wanted to know the total amounts of discharge from the tailings facility into the environment to better understand potential impacts.

Red River Métis Citizens also had questions about how long Hudbay intends to commit to monitoring the contamination. They wanted to ensure that monitoring continues until selenium levels are within safe limits for “many many years.”

This data indicates that there is a strong need for Hudbay to be transparent, engage meaningfully with the MMF, and commit to fully addressing this issue and all of its potential impacts to Red River Métis Citizens and the lands and waters throughout the National Homeland of the Red River Métis.

## **Impacts to Red River Métis Rights**

The elevated selenium levels in Schist Lake, as well as the response from Hudbay and the Government of Manitoba, have potential to impact the current and future harvesting rights of the Red River Métis.

Several survey respondents were concerned that the consumption guidelines from the Government of Manitoba limit the amount of country foods that can be consumed, resulting in an impact to their Rights to harvest and maintain their Red River Métis way of life. Citizens also noted that the impacts would be greater if this continues long-term, and that limiting consumption indefinitely without taking other measures to reduce selenium levels entering Schist Lake would be a significant impact to the Red River Métis.

Another survey respondent talked about the potential for additional significant impacts to Red River Métis Rights if waterfowl are affected by the release of selenium into Schist Lake. While the consumption guidelines only look at fish at this time, it is possible that waterfowl using Schist Lake might also have elevated selenium in their tissue. A concern was voiced by survey respondents that Red River Métis Citizens who consume waterfowl harvested around Schist Lake may also be at risk of elevated selenium, and the current response to the issue does not consider this.



Many other survey respondents thought the guidelines were a reasonable measure to protect their health and felt the guidelines do not impact their rights. One survey respondent noted that the guidelines are just that, and individuals are still able to make their own decisions.

One survey respondent wanted to ensure that the Red River Métis are being engaged to the same extent as locally impacted First Nations, and that Red River Métis Rights, claims, and interests are being equally considered during this process.

This data indicates the need for Hudbay and the Government of Manitoba to thoroughly consider Red River Métis Rights, claims, and interests in their handling of this issue.

## **Mitigation and Accommodation Measures**

The survey asked Citizens to share their thoughts on what mitigation and accommodation measures would be needed to minimize potential impacts on Red River Métis Rights. Overall, survey respondents emphasized that Hudbay needs to proactively make improvements to the tailings facility and undertake comprehensive and continued monitoring. It was also requested that Hudbay and the Government of Manitoba continue to engage with the Red River Métis via the MMF, as their democratically elected National Government.

Several Citizens spoke about the need for Hudbay to prevent further addition of selenium to Schist Lake and address the high concentrations already present. They suggested Hudbay take proactive measures to improve their tailings facility and recommended that any actions to remove selenium from Schist Lake avoid dredging, to avoid the risk of releasing more contaminants to the water.

Through survey responses, Red River Métis Citizens also recommended comprehensive and ongoing monitoring of both water quality and selenium concentrations in fish tissue throughout Ross Creek, Ross Lake, all parts of Schist Lake, and downstream Lake Athapapuskow.

Many survey respondents emphasized the need for continued inclusion of the MMF in decision-making around this issue, as well as direct involvement in the data collection and analysis processes related to monitoring. They spoke about the unique knowledge held by Red River Métis Citizens about Schist Lake and the surrounding environment and emphasized the need for this knowledge to be valued. Information sharing and meaningful engagement and consultation must continue until the issue of selenium in Schist Lake is fully resolved.

One survey respondent suggested a formal consultation process with involvement from the Government of Manitoba, the federal Department of Fisheries and Oceans, and Environment and Climate Change Canada.

The mitigation and accommodation measures suggested by participants are incorporated into the conclusion and recommendations section below.



# Conclusion and Recommendations

The Red River Métis have historical and contemporary land use and occupancy in and around Schist Lake. The data and input provided by survey respondents indicates that elevated selenium concentrations in Schist Lake, as well as Hudbay and the Government of Manitoba's response to the issue, have the potential to impact Red River Métis Rights and that they must work to mitigate such impacts.

MMF staff have considered the information provided by Hudbay and the Government of Manitoba. This, in combination with our analysis of information and comments from our Citizens, has resulted in a series of comments and recommendations that will require continued conversation and response from Hudbay. These are listed below:

**Comment 1:** Red River Métis need to have more information to make their own decisions regarding harvesting and use of the area. Testing only fish, and only fish found in one part of Schist Lake, is insufficient.

**Recommendation 1a:** Test water, plants, waterfowl, sediment, and benthic invertebrates in addition to fish to better understand the movement of selenium through the food chain.

**Recommendation 1b:** Test a larger area including Ross Creek, Ross Lake, all of Schist Lake, Lake Athapuskow, and further downstream. All areas should be sampled using the methods in recommendation 1a, to identify areas of higher selenium concentration and inform targeted mitigation and/or restoration initiatives.

**Recommendation 1c:** Selenium accumulates in fish ovaries and causes defects or death in the fish that hatch from those eggs (Lemly, 2002). To account for this, we request additional information on how selenium levels in fish eggs specifically will be tested and reported on.

**Comment 2:** Consumption guidelines fail to consider the Red River Métis way of life and country food consumption.

**Recommendation 2a:** In development of consumption guidelines, take into consideration other country foods eaten. Funding for a comprehensive traditional food study needs to be provided to the MMF to ensure all wild foods consumed are considered together.

**Recommendation 2b:** In development of consumption guidelines, take into consideration the length of time some Red River Métis Citizens may have been consuming fish, plants, waterfowl, and/or water from Schist Lake and surrounding areas, and how much they may be consuming in the future.

**Recommendation 2c:** Ensure that fish tissue sampling methods are informed by Red River Métis food preparation methods. The parts of the fish that are consumed, as well as how they are prepared, may impact the selenium concentration and should be considered in the development of consumption



guidelines. For example, selenium levels in fish eggs needs to be reported on individually as selenium tends to have the highest accumulation in fish eggs.

**Recommendation 2d:** Provide information on how individuals can get selenium testing done as part of their personal bloodwork.

**Comment 3:** Citizens are confused by consumption guidelines and have remaining questions about selenium.

**Recommendation 3a:** Develop clearer consumption guidelines that we can provide to our Citizens.

**Recommendation 3b:** Provide funding and resources to the MMF to conduct additional outreach to raise awareness and provide more opportunities for education and discussion around selenium and human health risks.

**Comment 4:** Hudbay needs to be transparent about its mining operations, tailings management, and effluent discharge.

**Recommendation 4a:** The MMF requests that all results of Hudbay's sampling programs be shared with the MMF quickly and consistently. The results of all fish tissue samples, water quality monitoring, sediment samples, and benthic samples from the Environmental Effects monitoring program be shared every three years as is required by the Metal and Diamond Mining Effluent Regulations.

**Recommendation 4b:** The MMF requests that Hudbay provides funding for the MMF to host regular meetings with Red River Métis Citizens to inform them of the monitoring results.

**Recommendation 4c:** Ensure ongoing communication with the MMF as additional information becomes available.

**Comment 5:** Hudbay needs to commit to fully resolving the impacts from any mine that they have acquired or are responsible for in the area.

**Recommendation 5a:** Implement comprehensive monitoring efforts and continue monitoring until selenium levels are within safe limits for an extended period of time.

**Recommendation 5b:** Improve the tailings facility to prevent further environmental impacts.

**Recommendation 5c:** Work with the MMF to identify options for removing selenium from Schist Lake. Hudbay would be required to provide funding for any operations necessary.

**Comment 6:** MMF needs to be fully involved in the management of this issue.

**Recommendation 6a:** Ensure that the Red River Métis are being engaged to the same extent as locally impacted First Nations.



**Recommendation 6b:** Directly involve the MMF in data collection and analysis processes, including the incorporation of Red River Métis Knowledge, and Traditional Harvestings Practices.

We look forward to further discussions regarding the recommendations provided above and the next steps concerning:

1. The co-development of comprehensive environmental monitoring plans.
2. Consultation regarding consumption guidelines which appropriately consider Red River Métis ways of life.
3. Hudbay tailings facility improvement and management plans.
4. An approach to consultation and engagement with Red River Métis which provides equal opportunities to the MMF as is given to First Nations.

