



Sio Vivian Silica Extraction Project

**INTERVENTION TO THE MANITOBA ENVIRONMENT
ACT LICENCING PROCEEDINGS**

Manitoba Métis Federation

May 30th, 2023



Executive Summary

The Sio Silica Extraction project (the Project) is an in-situ silica sand extraction mine proposed for the extraction of high-quality silica sand from the Winnipeg Sandstone aquifer within the Winnipeg Sandstone geological formation southwest of the hamlet of Vivian, Manitoba.

This Project is located within the National Homeland of the Red River Métis, as a result, actions and decisions made regarding this Project have potential impacts to the rights, interests, and claims of the Red River Métis.

The Manitoba Métis Federation (MMF) is the democratically elected National Government of the Red River Métis. The MMF is duly authorized by Red River Métis Citizens for the purposes of dealing with their collective Red River Métis rights, claims, and interests, including conducting consultations and negotiating accommodations (as per MMF Resolution No. 8). The MMF has retained Shared Value Solutions, to support in the development of this intervention to the Manitoba *Environment Act* Licencing proceedings regarding the Project.

In the review of the Project, the MMF raises concerns with the following aspects of the Project:

- Lack of Quantitative Baseline Assessment
- Insufficient Information Regarding Monitoring and Adaptive Management Planning
- No Closure, Reclamation, or End-use Planning Discussed
- Potential for Adverse Impacts of Water and Terrestrial Resources

Combined, this Project as proposed will have adverse impacts on the rights and interests of the Red River Métis. This is compounded by a lack of engagement from the Proponent and the failure to consult by Manitoba throughout the contemplation of this Project.

On November 15, 2021, the Minister of Conservation and Climate (now Environment, Climate and Parks) asked the CEC to undertake a technical review and public hearing regarding the CanWhite Sands Corporation *Environment Act* proposal for the sequential installation, operation and decommissioning of silica sand extraction wells to remove water and silica sand from groundwater at various locations on private land within the Rural Municipality of Springfield. This culminated in a series of hearings held in late-February and early-March 2023. However, the MMF again raises concern about the level of engagement it has received from both the Proponent and consultation from Manitoba throughout the CEC proceedings, resulting in the MMF being unable to participate meaningfully in oral hearings, as well the lack of meaningful consultation throughout the Manitoba *Environment Act* Licencing proceedings.

The MMF raises significant concerns about the technical merit of this Project, as well as the process that Manitoba has used to consider this Project. Ultimately, the MMF draws into question the Proponent's ability to effectively mitigate impacts to individual and collectively held rights of Red River Métis Citizens – as the Proponent has not appropriately characterized the existing environmental conditions and does not propose to implement effective follow-up monitoring.

The MMF recommends that additional environmental baseline characterization be conducted to appropriately consider the existing environment, in a manner that presents a clear understanding of existing conditions. This includes providing quantitative baselines for groundwater, and nearby surface



water quality and quantity, noise, air quality (including PM₁₀, PM_{2.5}, SO₂, NO_x), and species at risk and of cultural importance.

The MMF also recommends that the Proponent provide a baseline understanding of the number of users of groundwater from the Red River Carbonate, Winnipeg Shale aquifers. From this, we look for the Proponent to develop a targeted monitoring and management plan to ensure that there are no adverse impacts on those that will share the aquifer with the Project. Ultimately, we seek an increased level of confidence that this project will not adversely impact the quantity and quality of surface water resources.

The Proponent has failed to consider how the project may impact components of value, through direct disturbance (e.g., land modification, noise, habitat destruction), or indirect disturbance (e.g., perceived effects, contamination), both of which will adversely impact the rights of the Red River Métis. Manitoba in considering this project cannot turn a blind eye to the impacts that this Project will have on our citizens. Further, we urge Manitoba, and the Proponent to enter into a confidentiality agreement with the MMF such that we can confidentially share maps of traditional use near the project and allow for discussions on how to meaningfully mitigate impacts. This is a discussion that the MMF has not been afforded but urgently needs.

In the review of the Project, the MMF is alarmed that while on the cusp of the Minister responsible for the *Environment Act* making a decision about this project, fundamental concerns are just now being uncovered and raised. Too much of the Proponent-led assessment of this project has failed at appropriately characterizing the baseline environment, and as a result, effects and impacts are not able to be meaningfully contemplated in the assessment. What results from this breakdown is a project that appears to have minimal impacts, not as a result of benign project activities, but rather as a product of incomplete understanding.

Through this intervention, the MMF has raised several concerns, reviewing evidence presented through both the *Environment Act* licencing process and Clean Environment Commission hearings, as well as in consideration of direct feedback we heard from Red River Métis citizens. Highlighting these concerns, we view the overall lack of quantitative and detailed baseline assessment at the root, which has resulted in a project with incomplete monitoring and adaptive management plans, risks for adverse impacts to water and terrestrial resources, and a fundamental mischaracterization of land use in the region. The result of this is that the Proponent has not presented an accurate assessment of the project's effects on the environment and the subsequent impacts on the rights, interests, and claims of the Red River Métis.

This project will prevent Red River Métis citizens from harvesting, gathering, and conducting other traditional practices near the proposed project site. The Crown land taken up by the project footprint is an area that Red River Métis citizens have and continue to use to exercise rights. At its most simplistic level this project will prevent access to lands used by citizens, however, the concerns raised by Red River Métis citizens are much more complex and nuanced. As evidenced by section 4 of this intervention, citizens are indeed worried about access and an ability to exercise rights, however, it is the regional impacts beyond the footprint to groundwater quality and quantity, noise, vibration, shifts in wildlife habitat and patterns, among other potential effects that fundamentally were not considered by the Proponent in describing the potential impacts of the project.

Given the right conditions, the MMF supports responsible natural resource development and projects that, among other things, respect Red River Métis collective and individual rights, appropriately



characterize the baseline environment, plan and operate in a safe and responsible manner, effectively monitor the ongoing impacts of their operations, and include a meaningful closure plan. Further, in outlining the consultation framework, Manitoba identifies the objectives of:

- To ensure the Government of Manitoba informs itself and gains a proper understanding of the interests of First Nations, Métis communities and other Aboriginal communities, with respect to a proposed government decision or action;
- To seek ways to address and/or accommodate those interests where appropriate through a process of consultation while continuing to work towards the best interests of the citizens of Manitoba;
- To advance the process of reconciliation between the Crown and First Nations, Métis communities and other aboriginal communities.

This project does not meet these standards, nor does it meet the minimum expectations of the MMF for engagement by the proponent or consultation by Manitoba. The result is that the MMF speaking on behalf of the Red River Métis has not had a voice in the decision-making process, and fundamental concerns with this project have not been heard. The MMF offers this intervention to the proceedings to ensure our voice is heard. Failure to consider this intervention would be considered a wilful action by Manitoba to neglect its Duty to Consult.

The MMF objects to the process which has informed the decision which is being contemplated. Without, even a basic level of consideration for how this project will impact the rights and interests of the Red River Métis, the MMF opposes this project, and we call on the Minister to reject this project's authorization until the Crown and Proponent can demonstrate that they have fulfilled their respective obligations.

Manitoba must not continue to move forward with the approval of this Project until the outstanding concerns raised by the MMF are appropriately addressed, mitigated, or accommodated. Should Manitoba decide to approve this project, the MMF expects to participate in, and be meaningfully consulted on the development of licensing conditions, such that section 35 rights, claims and interests continue to be protected.



Contents

| | |
|--|----|
| Executive Summary | 1 |
| Contents..... | iv |
| 1.0 Introduction | 1 |
| 1.1 Project Description | 1 |
| 2.0 Red River Métis (Manitoba Métis) | 2 |
| 2.1 History and Identity | 2 |
| 2.2 Manitoba Métis Federation (MMF)..... | 3 |
| 2.3 MMF Resolution No. 8 | 6 |
| 2.4 Red River Métis Rights, Claims, and Interests | 6 |
| 3.0 Review Findings | 10 |
| 3.1 General Evaluation and Recommendations | 10 |
| 3.1.1 Lack of Quantitative Baseline Assessment | 10 |
| 3.1.2 Monitoring and Adaptive Management Planning | 11 |
| 3.1.3 Closure and Reclamation | 11 |
| 3.2 Consultation, Engagement, and Process Failings | 12 |
| 3.3 Impacts on Nearby Well Users | 12 |
| 3.4 Land Use, Harvest, and Exercise of Rights..... | 13 |
| 3.5 Technical Considerations..... | 14 |
| 3.5.1 Water Resources..... | 14 |
| 3.5.2 Terrestrial Impacts..... | 14 |
| 4.0 Red River Métis Citizen Engagement..... | 15 |
| 4.1 What We Heard | 15 |
| 4.1.1 Oversight and Governance | 15 |
| 4.1.2 Engagement and Consultation | 16 |
| 4.1.3 Securities and Accountability | 16 |
| 4.1.4 Technical Concerns | 17 |
| 4.1.5 Livelihood..... | 17 |
| 4.1.6 Rights | 17 |
| 4.1.7 Far Field Effects..... | 18 |
| 4.1.8 Long-Term Monitoring and the Role of the MMF | 18 |
| 5.0 Recommendations and Conclusions..... | 19 |



Appendix A: Comment Tracking Table22
Appendix B: Red River Métis Land Use Maps.....32



1.0 Introduction

The Sio Vivian Silica Extraction Project (the Project) – previously known as the CanWhite Sands Corp. Vivian Sand Extraction Project is an in-situ sand extraction project located in eastern Manitoba south of the hamlet of Vivian Manitoba. This Project is located within the National Homeland of the Red River Métis, as a result, actions and decisions made regarding this Project have potential impacts on the rights, interests, and claims of the Red River Métis.

The Manitoba Métis Federation (MMF) is the democratically elected National Government of the Red River Métis. The MMF is duly authorized by the Red River Métis Citizens for the purposes of dealing with their collective Red River Métis rights, claims, and interests, including conducting consultations and negotiating accommodations (as per MMF Resolution No. 8).

The MMF has retained Shared Value Solutions to support the development of this intervention to the Manitoba *Environment Act* Licencing proceedings regarding the Project. Specifically, the MMF raises several technical concerns with the Project and proposed monitoring and mitigation associated with it, however, of greater concern to the MMF is the lack of meaningful engagement from the Proponent, and the failure of Manitoba to adequately consult the MMF in their discharge of the Duty to Consult as per section 35 of the *Constitution Act, 1982*.

1.1 Project Description

The Sio Silica Extraction project is an in-situ silica sand extraction mine proposed to extract high-quality silica sand from the Winnipeg Sandstone aquifer within the Winnipeg Sandstone geological formation southwest of the hamlet of Vivian, Manitoba. Silica sand produced at this site will be used in the production of a variety of products including solar panels, fibre optics, electronic components, enhanced alloys, glass, and ceramics.

Sio (the Proponent – references to Sio and CanWhite Sands Corporation for this purpose of this intervention should be considered interchangeable) proposes to employ the use of in-situ extraction methods in which, a series of wells will be drilled into the Winnipeg Sandstone aquifer. Once in place, compressed air will be forced into the well, which will then fracture the sandstone, forcing a slurry of sand and water back up through the well to the surface. The sand-water slurry can then be separated to collect the silica sand, returning the water to the aquifer following treatment by ultraviolet polishing to reduce the risk of bacterial contamination.

The Project is proposed to have a 24-year life with an expected 396 wells drilled continuously and extracted annually between April and November, for a total of more than 9000 wells to be drilled and extracted over the life of the Project.

The Proponent issued an *Environment Act* Proposal on July 2, 2020, and received notice of *Environment Act* Licence on December 17, 2021. The issuance of this licence was done with the knowledge that the MMF had raised significant concerns regarding the level of consultation it received from Manitoba¹.

¹ MMF. 2020. Correspondence RE: CanWhite Sands Corp. Vivian Processing Facility – Notice of Environmental Act Proposal. https://www.gov.mb.ca/sd/eal/registries/6057canwhite/mmf_comments.pdf



On November 15, 2021, the Minister of Conservation and Climate (now Environment, Climate and Parks) asked the CEC to undertake a technical review and public hearing regarding the CanWhite Sands Corporation *Environment Act* proposal for the sequential installation, operation and decommissioning of silica sand extraction wells to remove water and silica sand from groundwater at various locations on private land within the Rural Municipality of Springfield. This culminated in a series of hearings held in late-February until early-March 2023. However, the MMF again raises concern about the level of engagement it has received from both the Proponent and consultation from Manitoba throughout the CEC proceedings, resulting in the MMF being unable to participate meaningfully in oral hearings.

The MMF offers this intervention to the Manitoba *Environment Act* Licencing proceedings to ensure our voice is heard. Failure to consider this intervention would be considered a wilful action by Manitoba to neglect its Duty to Consult.

2.0 Red River Métis (Manitoba Métis)

2.1 History and Identity

We have been known by many names throughout our history, such as Bois Brûlés, Flower Beadwork People, Otipemisiwak (The People Who Own Themselves), Riel’s People, Les Michif, and Manitoba Métis – from the beginning, they have all referred to the same people – the Red River Métis.

The Red River Settlement, which is present day Winnipeg, Manitoba was the birthplace of the Red River Métis and continues to be the heart of the Red River Métis Homeland. This proud independent Red River Métis population constituted a historic rights-bearing community in present day Manitoba and beyond within the Northwest. Since the early 1800s, the Red River Métis has asserted themselves as a distinct Indigenous collective with rights and interests in its Homeland. The Red River Métis share a language, national symbols, and culture – including music, dance, and dress.

“In early times, the Red River Métis were mostly nomadic. Later, they established permanent settlements centred on hunting, trading and agriculture” (*Alberta v. Cunningham*, at para. 5). The Red River Métis were employed by both of the fur trade’s major players, the Hudson’s Bay Company and the Northwest Company. At the same time, however, the Red River Métis became extensively involved in the buffalo hunt.

With respect to the Red River Métis and their rights as a distinct Indigenous People — the Supreme Court of Canada wrote the following in the *MMF v. Canada* case:

“[21] The story begins with the Aboriginal peoples who inhabited what is now the province of Manitoba—the Cree and other less populous nations. In the late 17th century, European adventurers and explorers passed through. The lands were claimed nominally by England which granted the Hudson’s Bay Company, a company of fur traders’ operating out of London, control over a vast territory called Rupert’s Land, which included modern Manitoba. Aboriginal peoples continued to occupy the territory. In addition to the original First Nations, a new Aboriginal group, the Métis, arose [...]

[23] In 1869, the Red River Settlement was a vibrant community, with a free enterprise system and established judicial and civic institutions, centred on the retail stores, hotels, trading undertakings and saloons of what is now downtown Winnipeg. The Métis were the dominant demographic group in the



Settlement, comprising around 85 percent of the population [approximately 10,000 Métis], and held leadership positions in business, church and government.”

The fur trade was vital to the ethnogenesis of the Red River Métis and was active in Manitoba from at least the late 1770s, and numerous posts and outposts were established along cart trails and waterways throughout the North-West. These trails and waterways were crucial transportation networks for the fur trade (Jones 2014; 2) and were the foundation of the Red River Métis’ extensive use of the lands and waters throughout the province. In the early 20th century, the Red River Métis continued to significantly participate in the commercial fisheries and in trapping activities, which is well documented in Provincial government records.

2.2 Manitoba Métis Federation (MMF)

On July 6, 2021, Canada and the MMF signed the *Manitoba Métis Self-Government Recognition and Implementation Agreement* (MMSGRIA) which acknowledged the Red River Métis “was established with its own identity, language, culture, institutions, and way of life centred in the Red River Valley, and whose Citizens and individuals entitled to become Citizens are today located within what is now Manitoba as well as elsewhere inside and outside of Canada.” This Agreement will be followed by a Treaty between the MMF and Canada and ensures that the MMF will continue to provide responsible and accountable self-government.

The MMF is the democratically elected National Government of the Red River Métis. The MMF is duly authorized by the Red River Métis Citizens for the purposes of dealing with their collective Red River Métis rights, claims, and interests, including conducting consultations and negotiating accommodations (as per MMF Resolution No. 8).

While the MMF was initially formed in 1967, its origins lie in the 18th century with the birth of the Red River Métis and in the legal and political structures that developed with it. Since the birth of the Red River Métis in the Red River Valley, the Red River Métis has asserted and exercised its inherent right of self-government. For the last 50 years, the MMF has represented the Red River Métis at the provincial and national levels.

During this same period, the MMF has built a sophisticated, democratic, and effective Red River Métis governance structure that represents the collective Red River Métis, regardless of their residency. The MMF was created to be the self-government representative of the Red River Métis—as reflected in the Preamble of the MMF’s Constitution (also known as the MMF Bylaws):

“WHEREAS, the Manitoba Métis Federation has been created to be the democratic and self-governing representative body of the Manitoba Métis Community;”

In addition, the following is embedded within the MMF’s objectives, as set out in the MMF Constitution as follows:

- “1. To promote the history and culture of the Manitoba Métis, also known as the Red River Métis, and otherwise to promote the cultural pride of its Citizenship.
2. To promote the education of its Citizens respecting their legal, political, social, and other rights.



3. To promote the participation of its Citizens in community, municipal, provincial, federal, Aboriginal, and other organizations.
4. To promote the political, social, and economic interests of its Citizens.
5. To provide responsible and accountable governance on behalf of the Manitoba Métis, also known as the Red River Métis, using the constitutional authorities delegated by its Citizens.”

The MMF is organized and operated based on centralized democratic principles, some key aspects of which are described below.

President: The President is the leader and spokesperson of the MMF. The President is elected in a national Election every four years and is responsible for overseeing the day-to-day operations of the MMF.

Cabinet: The MMF Cabinet leads, manages, and guides the policies, objectives, and strategic direction of the MMF and its subsidiaries. All 23 Cabinet Members are democratically elected by Red River Métis Citizens.

Regions: The MMF is organized into seven regional associations or "Regions" throughout the province (Figure 3): The Southeast Region, the Winnipeg Region, the Southwest Region, the Interlake Region, the Northwest Region, the Pas Region, and the Thompson Region. Each Region is administered by a Vice-President and two Regional Executive Officers, all of whom sit on the MMF Cabinet. Each Region has an office which delivers programs and services to their specific geographic area.

Locals: Within each Region are various area-specific "Locals" which are administered by a chairperson, a vice-chairperson, a secretary, and a treasurer (or a secretary-treasurer, as the case may be). Locals must have at least nine Citizens and meet at least four times a year to remain active. There are approximately 140 MMF Locals across Manitoba.

The MMF has created an effective governance structure to represent the Red River Métis. It is important to bear in mind that there is only one large, geographically dispersed, Red River Métis. Red River Métis Citizens live, work, and exercise their section 35 rights throughout and beyond the provincial boundaries of Manitoba.



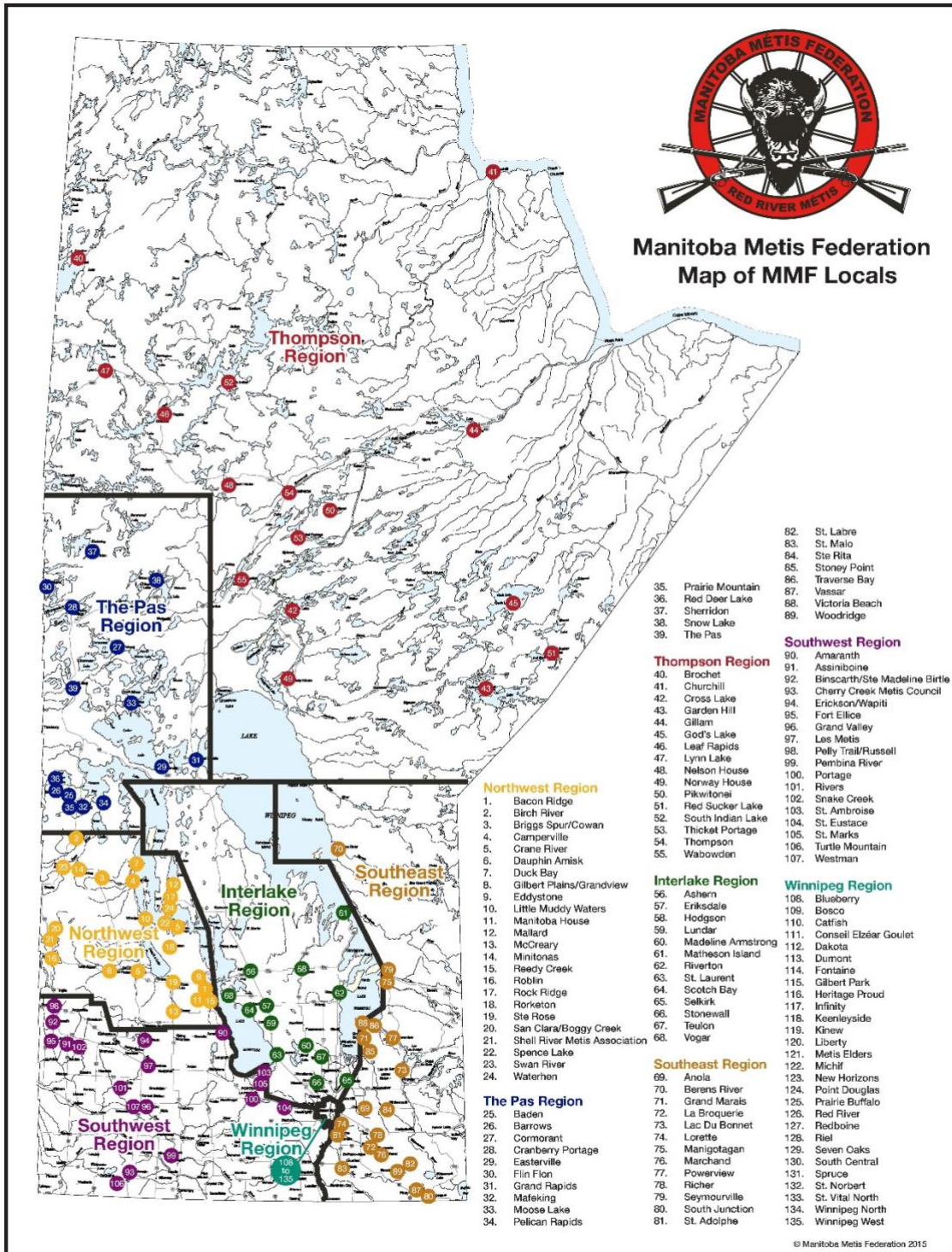


Figure 2-1: Manitoba Métis Federation (MMF) Regions.



2.3 MMF Resolution No. 8

Among its many responsibilities, the MMF is authorized to protect the Aboriginal rights, claims, and interests of the Red River Métis, including those related to harvesting, traditional culture, and economic development, among others.

In 2007, the MMF Annual General Assembly unanimously passed and adopted Resolution No. 8 that sets out the framework for engagement, consultation, and accommodation to be followed by Federal and Provincial governments, industry, and others when making decisions and developing plans and projects that may impact the Red River Métis. Under MMF Resolution No. 8, direction has been provided by the Red River Métis for the MMF Home Office to take the lead and be the main contact on all consultation undertaken with the Red River Métis. Resolution No. 8 reads, in part that:

...this assembly continue[s] to give the direction to MMF Home Office to take the lead and be the main contact on all consultations affecting the Red River Métis and to work closely with the Regions and Locals to ensure governments and industry abide by environmental and constitutional obligations to the Métis...

The MMF Home Office works closely with the Regions and Locals to ensure the rights, interests, and perspective of the Red River Métis are effectively represented in matters related to consultation and accommodation.

Resolution No. 8 has five phases:

Phase 1: Notice and Response

Phase 2: Research and Capacity

Phase 3: Engagement or Consultation

Phase 4: Partnership and Accommodation

Phase 5: Implementation

Each phase is an integral part of the Resolution No. 8 framework and proceeds logically through the stages of consultation.

2.4 Red River Métis Rights, Claims, and Interests

The Red River Métis possess Aboriginal rights, including pre-existing Aboriginal collective rights and interests in lands recognized and affirmed by section 35 of the Constitution Act, 1982. The Manitoba court recognized these pre-existing, collectively held Métis rights in *R. v. Goodon* (at paras. 58; 72):

I conclude that there remains a contemporary community in southwest Manitoba that continues many of the traditional practices and customs of the Métis people. I have determined that the rights-bearing community is an area of southwestern Manitoba that includes the City of Winnipeg south to the U.S. border and west to the Saskatchewan border.



As affirmed by the Supreme Court of Canada, such rights are “recognize[d] as part of the special aboriginal relationship to the land” (R. v. Powley, 2003 SCC 43, at para. 50) and are grounded on a “communal Aboriginal interest in the land that is integral to the nature of the Métis distinctive community and their relationship to the land” (MMF v. Canada, at para. 5). Importantly, courts have also recognized that Métis harvesting rights may not be limited to Unoccupied Crown Lands (R. v. Kelley, 2007 ABQB 41, para. 65).

The Crown, as represented by the Manitoba government, has recognized some aspects of the Red River

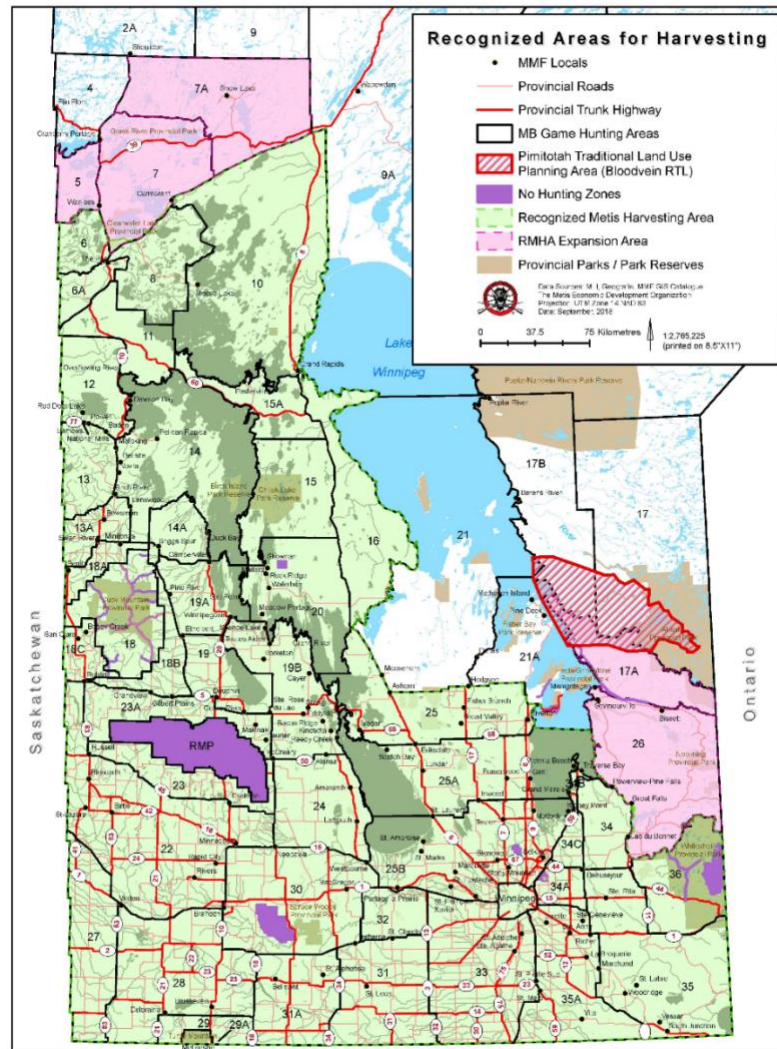


Figure 2-2: MMF-Manitoba Harvesting Agreement Recognized Manitoba Métis Harvesting Zones.

Métis’ harvesting rights through a negotiated agreement: The MMF-Manitoba Points of Agreement on Métis Harvesting (2012) (the MMF-Manitoba Harvesting Agreement). This Agreement was signed at the MMF’s 44th Annual General Assembly and “recognizes that collectively held Métis harvesting rights, within the meaning of section 35 of the Constitution Act, 1982, exist within the [Recognized Métis Harvesting Zone], and that these rights may be exercised by Red River Métis Rights Holders consistent with Métis customs, practices and traditions...” (MMF-Manitoba Harvesting Agreement, section 1). In



particular, the MMF-Manitoba Harvesting Agreement recognizes that Métis rights include “hunting, trapping, fishing and gathering for food and domestic use, including for social and ceremonial purposes and for greater certainty, Métis harvesting includes the harvest of timber for domestic purposes” throughout an area spanning approximately 169,584 km² (the “Métis Recognized Harvesting Area”) (MMF-Manitoba Harvesting Agreement, section 2; Figure 4). The MMF further asserts rights and interests exist beyond this area, which require consultation and accommodation as well.

Beyond those rights already established through litigation and recognized by agreements, the Red River Métis claims commercial and trade-related rights. Courts have noted that Métis claims to commercial rights remain outstanding (R. v. Kelley at para. 65). These claims are strong and well-founded in the historical record and the customs, practices, and traditions of the Red River Métis, and it is incumbent on the Crown and Proponents to take them seriously.

As noted above, the Red River Métis has its roots in the western fur trade (R. v. Blais, 2003 SCC 44 at para. 9 [Blais]; R. v. Goodon at para. 25). The Red River Métis are descendants of early unions between Aboriginal women and European traders (MMF v. Canada at para. 21). As a distinct Métis culture developed, the Métis took up trade as a key aspect of their way of life (R. v. Powley at para. 10). Many Métis became independent traders, acting as middlemen between First Nations and Europeans (R. v. Goodon at para. 30). Others ensured their subsistence and prosperity by trading resources they themselves hunted and gathered (R. v. Goodon at para. 31, 33, & 71). By the mid-19th century, the Red River Métis had developed the collective feeling that “the soil, the trade and the Government of the country [were] their birth rights.” (R. v. Goodon at para. 69(f)). Commerce and trade are, and always have been, integral to the distinctive culture of the Red River Métis. Today, the Red River Métis have an Aboriginal, constitutionally protected right to continue this trading tradition in modern ways to ensure that their distinct community will not only survive, but also flourish.

Unlike First Nations in Manitoba, whose commercial rights were converted and modified by treaties and the Natural Resources Transfer Agreement (NRTA) (R. v. Horseman, [1990] 1 SCR 901), the Métis’ pre-existing customs, practices, and traditions—including as they relate to commerce and trade—were not affected by the NRTA (R. v. Blais) and continue to exist and be protected as Aboriginal rights. First Nations’ treaty rights in Manitoba are, for example, inherently limited by the Crown’s power to take up lands (Mikisew Cree First Nation v Canada (Minister of Canadian Heritage), [2005] 3 SCR 388 at para 56). Métis rights, in contrast, are not tempered by the “taking up” clauses found in historic treaties with First Nations. Métis rights must be respected as they are, distinct from First Nations’ rights and unmodified by legislation or agreements.

In addition to the abovementioned rights to land use that preserve the Métis culture and way of life, the Red River Métis have other outstanding land related claims and interests with respect to lands. These include claims related to the federal Crown’s constitutional promise to all Aboriginal peoples, including the Red River Métis, as set out in the Order of Her Majesty in Council Admitting Rupert’s Land and the North-Western Territory into the Union (the “1870 Order”) which provides that, upon the transference of the territories in question to the Canadian Government, the claims of the Indian tribes to compensation for lands required for purposes of settlement will be considered and settled in conformity with the equitable principles which have uniformly governed the British Crown in its dealings with the aborigines.

The manner in which the federal Crown implemented this constitutional promise owing to the Red River Métis—through the Dominion Lands Act and the resulting Métis scrip system—effectively defeated the



purpose of the commitment. Accordingly, the MMF claims these federal Crown actions constituted a breach of the honour of the Crown, which demand negotiations and just settlement outside of the ‘old postage stamp province’ within Manitoba as well.

The MMF also claims that the Dominion Lands Act and the resulting Métis scrip system were incapable of extinguishing collectively held Métis title in specific locations where the Red River Métis are able to meet the legal test for Aboriginal title as set out by the Supreme Court of Canada. These areas in the province, which the Red River Métis exclusively occupied—as an Indigenous people—prior to the assertion of sovereignty, establish a pre-existing Métis ownership interest in these lands.

The Red River Métis also have an outstanding legal claim within what was the ‘old postage stamp province’ of Manitoba relating to the 1.4 million acres of land promised to the children of the Métis living in the Red River Valley, as enshrined in section 31 of the Manitoba Act, 1870 (MMF v. Canada at para 154).

This land promised was a nation-building, constitutional compact that was meant to secure a “lasting place in the new province [of Manitoba]” for future generations of the Métis people (MMF v. Canada at para 5). This “lasting place” was to have been achieved by providing the Red River Métis a “head start” in securing lands in the heart of the new province (MMF v. Canada at paras 5-6).

Instead, the federal Crown was not diligent in its implementation of section 31, which effectively defeated the purpose of the constitutional compact.

In March 2013, the Supreme Court of Canada found that the federal Crown failed to diligently and purposefully implement the Métis land grant provision set out in section 31 of the Manitoba Act, 1870 (MMF v. Canada at para 154). This constituted a breach of the honour of the Crown. In arriving at this legal conclusion, the court wrote:

“What is at issue is a constitutional grievance going back almost a century and a half. So long as the issue remains outstanding, the goal of reconciliation and constitutional harmony, recognized in section 35 of the Constitution Act, 1982 and underlying section 31 of the Manitoba Act, remains unachieved. The ongoing rift in the national fabric that section 31 was adopted to cure remains unremedied. The unfinished business of reconciliation of the Métis people with Canadian sovereignty is a matter of national and constitutional import (MMF v. Canada at para 140).”

This constitutional breach is an outstanding Red River Métis claim flowing from a judicially recognized common law obligation which burdens the federal Crown (MMF v. Canada at paras 156; 212). It can only be resolved through good faith negotiations and a just settlement with the MMF (see for example: R v Sparrow, [1990] 1 SCR 1075 at paras 51–53; R v Van der Peet, [1996] 2 SCR 507 at paras 229, 253; Haida at para 20; Carrier Sekani at para 32). Lands both within the ‘old postage stamp province’ as well as in other parts of Manitoba—since little Crown lands remain within the ‘old postage stamp province’—may need to be considered as part of any future negotiations and settlement in fulfillment of the promise of 1.4 million acres, together with appropriate compensation. It should also be noted that the Aboriginal rights of the Red River Métis and the claims referred to above are not necessarily restricted to the province of Manitoba.

On November 15, 2016, the MMF and Canada concluded a Framework Agreement for Advancing Reconciliation (the “Framework Agreement”). The Framework Agreement established a negotiation process aimed, among other things, at finding a shared solution regarding the Supreme Court of Canada’s decision in MMF v. Canada and advancing the process of reconciliation between the Crown and the Red



River Métis. It provides for negotiations on various topics including, but not limited to, the “quantum, selection and management of potential settlement lands.” Negotiations under the Framework Agreement are active and ongoing.

On July 6, 2021, the Manitoba Métis Federation and Canada signed the Manitoba Métis Self-Government Recognition and Implementation Agreement. The Agreement signed by Minister Carolyn Bennett and Manitoba Métis Federation President David Chartrand is Canada’s first Métis self- government agreement that gives immediate recognition to an existing Métis government. In doing so, the agreement recognizes the Manitoba Métis Federation as the national government of the Red River Métis and the only federally recognized Métis government. The Agreement also recognizes that the MMF is the national government for Red River Métis Citizens located anywhere inside and outside of Canada.

3.0 Review Findings

3.1 General Evaluation and Recommendations

In the review of the Environment Act Proposal Report, appendices, responses to information requests, and Clean Environmental Commission proceedings, the MMF has identified 35 comments and recommendations for this Project. While these comments and recommendations speak to various aspects of the Project and concerns which in our view must be addressed before this Project can proceed to authorization, we note that fundamental flaws in the development of the initial Environment Act Proposal Report, a lack of willingness to modify approaches based on feedback and concerns from the Technical Advisory Committee, and incomplete engagement and consultation on behalf of the Proponent and Manitoba have resulted in a project that **should not be approved at this time**.

Below we provide an overview of our primary concerns. Appendix A provides a full breakdown of our concerns and recommendations regarding this Project.

3.1.1 Lack of Quantitative Baseline Assessment

Throughout Section 4 of the Environment Act Proposal Report, the Proponent fails to offer a meaningful characterization of the existing environment. Section 4.2 Atmospheric Environment, Section 4.3 Surface Water and Drainage, Section 4.4.2 Wildlife, Section 4.4.3 Species of Conservation Concern, and much of Section 4.6 Socioeconomic Environment rely solely on qualitative desktop assessments of the existing environment, rather than establishing quantitative baselines of current conditions. As a result, there is insufficient information to understand what the existing environment is to then assess the potential impacts of the Project moving forward. This lack of information should not be considered satisfactory for an Environment Act Proposal and should not have passed initial screening as the report is incomplete.

Should this Project be approved, Manitoba as the regulator, would not be in a position to evaluate the performance of this Project or take enforcement action against regulatory exceedances as it does not have a sufficient understanding of current conditions. As a result, Manitoba would be compromised in ensuring this Project complies with existing legislation and possible approval conditions.



3.1.2 Monitoring and Adaptive Management Planning

The MMF is greatly concerned by the lack of information provided by the Proponent regarding ongoing monitoring and management of this Project. Specifically, while the Proponent makes commitments to develop and implement several monitoring and management oversight plans following the approval of this Project, there is insufficient information provided within the Environmental Act Proposal Report to assess the potential impacts on the rights of the Red River Métis. As outlined throughout this document, the MMF is concerned by the lack of quantitative baseline information provided characterizing the environment that surrounds the Project. This, combined with a lack of monitoring and management planning, mean that there is great uncertainty in evaluating whether the Proponent will be able to detect adverse impacts from this Project beyond what has been predicted in the Environmental Act Proposal Report. Specifically, an effective monitoring and management plan must have the ability to collect information about responsive endpoints, compare that data to baseline or other relevant guidelines, and then make targeted management decisions to rectify impacts through additional mitigation measures or changes to project activities.

Without a well-supported baseline, monitoring program, and mechanism for an adaptive response, this Project will be unable to determine whether it has impacts on the environment that surrounds it. Effectively, as presented, this Project outlines a project approach which benefits from its own ignorance, turning a blind eye to proactively collecting and assessing meaningful information about its impacts on the environment and those who rely on it.

The MMF urges in the strongest terms the need for the establishment of a quantitative baseline for sensitive endpoints and the development of meaningful follow-up and monitoring plans to allow for an appropriate consideration of impacts on the environment and the rights and interests of the Red River Métis.

3.1.3 Closure and Reclamation

The Proponent has not provided a Closure or Reclamation Plan for the Vivian site. At several junctures through the *Environment Act* Proposal and CEC hearing proceedings, reviewers have requested information on the Closure and Reclamation Plan for this site, however, the Proponent has repeatedly stated that as per the Information Bulletin – Environmental Act Proposal Report Guidelines it is not specifically obliged to prepare such a plan as part of the Environmental Act Proposal. The Proponent continues to state that “a Closure Plan, together with financial assurances, will be developed and submitted to the Manitoba Director of Mines in accordance with The Mines and Minerals Act, the Manitoba Mine Closure Regulation 67/99, and the General Closure Plan Guidelines. A copy of the Closure Plan will be submitted to the EAB by the required date or time frame specified in the EAL”. While this approach may be technically allowable, the MMF feels that this approach skirts around the spirit and intention of the Information Bulletin – Environmental Act Proposal Report Guidelines, which do note that an EA report typically contains “Description of environmental effects of the proposed development”, “Mitigation measures to protect the environment and human health, and residual environmental effects”, and “Follow-up plans, including monitoring and reporting”, any of which a Closure and Reclamation Plan could be viewed as essential to informing. Without adequate contemplation of closure, reclamation, and end-of-life scenarios, it is impossible to fully appreciate the residual effects of this Project.



The Proponent is acting within the *Minerals and Mining Act*, which does not specifically require a Closure Plan until 60 days prior to the commencement of construction of the work, however, the requirement represents the bare minimum expectation, and as a result, given the importance of the Closure and Reclamation Plan to the evaluation of this Project, it is requested that a first draft of the Closure Plan be required to be presented and considered before the issuance of approvals for this Project.

3.2 Consultation, Engagement, and Process Failings

The MMF understands that through the process of *Environment Act*, 1987 proposals, Manitoba delegates a significant portion of procedural aspects of the Duty to Consult to the proponent. While this is not specifically described in the act or subsequent regulations, this is best outlined in the document *Information Bulletin – Environmental Assessment Proposal Report Guidelines*. In this document, proponents are instructed to assess the potential impacts of the development on Indigenous communities, though are not instructed specifically to engage.

It has been the long-standing position of the MMF, that we prefer to engage directly with proponents through constructive collaborative discussions to identify and resolve concerns, as well as identify mutually beneficial opportunities. Therefore, we maintain an expectation that all proponents will engage proactively with the MMF through the entire life of a project, but with great emphasis on ensuring concerns are understood and addressed before and during the contemplation of regulatory approvals. The MMF notes that this has not been our experience with Sio or the Project's predecessor CanWhite Sands Corp., as engagement has been limited and no direct engagement has happened since before early 2020. Early requests were made by the MMF to the proponent to co-develop a work plan for community engagement sessions regarding the Project. However, an agreement was never made, and community engagement sessions never took place. We believe that this lack of engagement speaks volumes in the Environment Act Proposal Report, which fails from a fundamental level to consider the rights which are held by the Red River Métis, as well as the potential impacts of this Project on both collectively held rights and individual rights of Red River Métis Citizens who live and harvest in and around the Project Area.

Beyond the failings of the Proponent in engaging and appropriately considering the impacts of this Project on the rights of the Red River Métis, the MMF ultimately hold Manitoba Environmental Approvals Branch responsible for honourably discharging the Duty to Consult. In the two years preceding the CEC hearing on this Project, the MMF made numerous attempts to engage directly with Manitoba without a meaningful response. We point to the engagement record of both the Proponent and Manitoba which evidence a failure to consult.

3.3 Impacts on Nearby Well Users

The Proponent remains of the opinion that project activities will have a negligible impact on the quality and quantity of groundwater available for nearby well users that share the aquifer. At its root, there are outstanding questions as to whether or not the drilling and extraction will impact the integrity of the barrier which exists between the Red River Carbonate and Winnipeg Sandstone aquifers, essential to ensuring there is no mixing of aquifers leading to compromised groundwater. While the Proponent asserts



that measures for safe and responsible drilling will be implemented to minimize the risk of vertical mixing, the sheer number of wells to be drilled (9000), creates a significant risk of well failure.

Users of groundwater in the area of the Project must be assured that residential, commercial, or agricultural water is not adversely impacted as part of this Project. To ensure this is indeed the case, the MMF recommends that the Proponent develop a well testing program for nearby users, that monitors both water quality and quantity, as well as identifies a manner in which users may resolve disputes and be appropriately compensated if impacts are observed. Ultimately, for this Project to be approved, residents and nearby water users cannot be adversely impacted by this Project, and therefore an appropriate mitigation, monitoring, and compensation structure must be identified.

3.4 Land Use, Harvest, and Exercise of Rights

Within the Regional Project Area which is defined as a 10 km buffer surrounding the project footprint, extending westward to Richland, eastward to Hazel, south to the hamlet of Ross and northward beyond Vivian, the MMF has documented approximately 172 sites of cultural importance to the Red River Métis. This includes harvest sites for wildlife, fish, and plant materials including berries and firewood. The act of harvest by Red River Métis constitutes the exercise of section 35 rights, and any decision made by the Crown which adversely impacts these rights must be accommodated. Based on the information provided by the Proponent within the *Environment Act* proposal, the Proponent does not consider the impact its project will have on Indigenous peoples including the Red River Métis. Hunting and trapping will be adversely impacted by noise, vibration, and activity from the proposed project. Additionally, the loss of any woodland or naturalized habitat will further impact wildlife, and in turn the success of Red River Métis harvesters and/or their desire to harvest from this area, both of which are impacts on section 35 rights. Beaver, Muskrat, and Mink are also commercially harvested within the Regional Project Area, and as a result, project activities may adversely impact the livelihood of Red River Métis in the area.

Subsistence harvesting and collecting of food is also conducted nearby the project area, as species such as raspberries, black morels, saskatoon berries, cattail, wild asparagus, hazelnut, blueberries and cranberries are all harvested within the Regional Project Area.

Finally, the area is used to engage in gathering and cultural practice beyond harvest, with several areas within the Regional Project Area serving as campsites, and areas for the collection of sweetgrass which is used in ceremonial practice.

The Proponent has failed to consider how the project may impact these valued components, through direct disturbance (e.g., land modification, noise, habitat destruction), or indirect disturbance (e.g., perceived effects, contamination), both of which will adversely impact the rights of the Red River Métis. Manitoba, in considering this project, cannot turn a blind eye to the impacts that this Project will have on our citizens. Further, we urge Manitoba, and the Proponent to enter into a confidentiality agreement with the MMF such that we can confidentially share maps of traditional use near the project and allow for discussions on how to meaningfully mitigate impacts. This is a discussion that the MMF has not been afforded but urgently needs.



3.5 Technical Considerations

The MMF is concerned about the approach that has been employed for this Environment Act Proposal, however, we also raise concerns regarding the technical merit of how the Project is being proposed.

3.5.1 Water Resources

Given the nature of this Project, the MMF is greatly concerned about groundwater contamination. The Proponent contends that there will be no impacts on water quality, proposing only the need for an ultraviolet treatment system to ensure no bacteria are being reintroduced into the groundwater following the separation of sand from the sand/groundwater slurry. We are, however, concerned that the Proponent provides evidence of possible contaminant leaching and mobilization in Shake Flask Extraction tests conducted on the three rock formations that interact with this Project. Specifically, the Proponent notes that following Shake Flask Extraction tests samples of Red River Carbonate, Winnipeg Shale, and Winnipeg Sandstone demonstrate exceedances of applicable guidelines for selenium, mercury, aluminum, arsenic, uranium, and iron.

We recognize the limitations of extrapolating bench scale analysis to project scale impacts, however, the Proponent does not offer any form of treatment and solution for addressing the potential of groundwater contamination. Given the aggressive extraction technique to be implemented, we believe Shake Flask Extraction tests serve as a reasonable proxy for how dissolved contaminants may enter the groundwater. Once in the groundwater, contaminants may migrate into surface water or impact those nearby who draw from the same aquifer, including Red River Métis Citizens, who draw water for both agricultural and domestic purposes.

The Proponent takes a cavalier approach in considering other potential impacts of this Project on water resources. The Proponent fails to offer meaningful mitigation measures against surface spills of the slurry from line movement and failure, which would have damaging impacts on the environment. Additionally, given the numerous wells to be drilled, there is a significant risk of failure resulting in vertical mixing of the aquifers affecting the potable water source and human health.

3.5.2 Terrestrial Impacts

The Proponent considers the impacts of this Project on terrestrial resources to be minimal. This includes impacts from physical disturbance, such as earthworks and drilling, as well as atmospheric impacts from noise, vibration, a reduction in air quality, and impacts to wildlife habitat and populations as a result of project activities. It is noteworthy that for terrestrial considerations, much like other aspects of this Project, the Proponent has failed to properly characterize the existing environment, including providing a complete understanding of baseline conditions. This creates two key challenges, one in understanding how proposed activities will impact the environment now, and another to understand how the Proponent and regulator will oversee long-term monitoring to assess whether or not the Project does indeed have any adverse impacts. Further, by not performing appropriate studies to assess the impacts of the Project on the environment, the MMF is not well positioned to consider the impacts of this Project on the exercise of rights and interests in the area.



4.0 Red River Métis Citizen Engagement

On May 10, 2023, the MMF held a regional engagement and dialogue session regarding the proposed Sio Vivian project to present an overview of the project including opportunities, concerns, and the regulatory process that governs the prospective environmental approval. Citizens were also invited to engage in breakout groups where they were provided an opportunity to raise specific concerns they have as well as any questions from MMF staff about general aspects of the project. In total more than 50 Red River Métis citizens joined either in-person or online to contribute to the conversation. The following outlines a synthesis of what we heard from Red River Métis citizens.

4.1 What We Heard

The consensus among Red River Métis citizens was that there remain many outstanding concerns surrounding this project. Perhaps the greatest among these concerns, is that this project is being approved with little consideration for the potential environmental effects, and in turn, the impacts that it will have on both local and regional residents and land users. Consistently, the MMF heard from citizens that this project cannot go ahead without more assessment and consideration of impacts. Any decision to approve this project on its current merit would be in opposition to the feedback we have and continue to hear from citizens.

4.1.1 Oversight and Governance

Concern: There should be more involvement from the Federal government in the oversight and approval of this project, given the potential impacts on water supply, species at risk, and Métis rights.

Analysis: On September 8, 2020, the MMF on behalf of the Red River Métis citizens wrote to Minister Wilkinson, then responsible for the Impact Assessment Agency of Canada to request that this project be designated for assessment. This request joined four other individual requests for designation made between August 2020 and September 2021. Silica mining projects, similar to other aggregate, peat, and overburden extraction projects are not easily captured by the Physical Activities Regulations under the *Impact Assessment Act*, and therefore regardless of the scale of potential impacts, a project faces an uphill battle to be designated for assessment. Specifically, within the Minister's Decision Statements, it is noted that matters which fall under federal jurisdiction such as impacts to fish, transboundary waters, migratory birds, and the rights of Indigenous Peoples would be appropriately considered and addressed under provincial legislation. While these mechanisms do exist within the provincial *Environment Act*, among other regulatory instruments, the information provided in the *Environment Act* proposal, and subsequent Clean Environmental Commission proceedings have demonstrated that provincial legislation is insufficient to compel the Proponent to meaningfully assess the project's impacts to these elements. Therefore, as evidenced by the environmental approvals process to date, while Canada has relied on Manitoba to safeguard elements which fall under federal jurisdiction, Manitoba has failed to require meaningful analysis from the Proponent on these elements and therefore concerns remain unassessed and unaddressed.



4.1.2 Engagement and Consultation

Concern: Although this project has been progressing through the Manitoba Environment Act approval process since 2020, many Red River Métis citizens, including many who live near the proposed project feel caught by surprise that this project is on the cusp of approval.

Analysis: The MMF believes that both Manitoba and the Proponent have failed in their respective duties to consult and engage, which has led to a decision to be made on this project with many remaining outstanding questions to be answered. For both Manitoba and the Proponent, engagement on this file with the MMF has been extremely limited since 2021, with the MMF making several requests to Manitoba to provide updates on this project without a meaningful response. As a result, the MMF, in a feeling that is echoed by many Red River Métis citizens, has not had an appropriate and timely opportunity to provide input into this process, and based on the *Environment Act* proposal documents, further believes that this stems from a fundamental lack of understanding by both the Proponent and Manitoba on how this project could adversely impact the rights of Red River Métis. While this is no excuse for the Proponent, this oversight is unacceptable on the part of Manitoba which holds the ultimate duty to uphold section 35 of the *Constitution Act*. Manitoba cannot plead ignorance in failing to meaningfully consult with the MMF, and while there can be debate about what constitutes meaningful consultation, even the minimum threshold of this must recognize Manitoba's role in ensuring the MMF are made aware of opportunities to participate in a timely manner.

4.1.3 Securities and Accountability

Concern: Red River Métis citizens presented several concerns related to who was accountable in the long-term for this project if environmental impacts are felt. This includes a lack of understanding related to the regulatory requirements and conditions placed on this project, as well as unclear requirements for the Proponent to maintain financial responsibility for the project.

Analysis: The MMF recognizes that this project is bound by provincial and federal legislation, as well as any specific conditions tied to the authorization of this project, however, given the lack of information regarding Proponent-led environmental monitoring, and poorly characterized baseline information, regulators of this project would be challenged to meaningfully detect and enforce effects which violate applicable legislation and conditions. We therefore concur with the concern of citizens highlighting the risk that Manitoba will create in being able to enforce accountability on this project by the Proponent, by approving a project that does not have a meaningful understanding of pre-project conditions and a follow-up with an incomplete monitoring program.

The MMF also recognizes that the identification of security (financial assurance) is typically associated with a licence condition but given the potential scale of possible impacts and complexity of remediation opportunities, the MMF must have an opportunity to provide comment on the proposed financial assurance, which must be held by Manitoba. In examining how this has been approached in clause 57 of the existing Licence 3367, it is only after project approval that the Proponent is required to establish a Closure Plan and estimate closure costs. This is unacceptable and places a significant burden on the Manitoba tax base if this project is under-secured. Therefore, we find it necessary to request that Manitoba compel the Proponent to provide a draft closure plan and security estimate in advance of the approval decision, such that the MMF has an opportunity to provide meaningful comments.



4.1.4 Technical Concerns

Concern: The Proponent has suggested that the use of a UV purification system will be sufficient to safeguard water quality being returned to the aquifer, however, there is concern about the potential for trace metals and other contaminants being reintroduced to the aquifer.

Analysis: As noted elsewhere in this intervention, the MMF is concerned by the lack of contingency planning regarding the quality of water returned to the ground once separated from the extractable sand. The use of a UV system should only be considered one of several components of what effectively is an effluent discharge plan. A UV system on its own can only treat bacteria, and while effective in clear water, can be ineffective at polishing water that has elevated levels of turbidity or particulate matter. While it is in the Proponent's best interest to remove all sand and particulate material from the groundwater slurry before returning the water to the ground, predicted water quality has not been described by the Proponent to date. Therefore, a UV system may not even be effective at treating bacteria and pathogens.

Beyond the issue of bacteria and pathogens, the MMF is deeply concerned about the potential release and reintroduction of metals or other contaminants to the groundwater as a result of extraction and separation mechanisms, which may release contaminants as both particulate and dissolved materials. This notably was demonstrated in the release of selenium, mercury, uranium, and arsenic in shake flask experiments. The failure to identify contingency plans for holding and/or treating water presents a significant risk to the local and regional environment.

4.1.5 Livelihood

Concern: Farmers who draw from this aquifer rely on there being adequate water quality and quantity, to use for crops and livestock. Any action that threatens water quality and quantity will have direct impacts on farmers and agricultural operations.

Analysis: The MMF understands that in the Proponent's hydrology report, it is suggested that domestic and agricultural wells located near the proposed project site are only drilled into the upper Winnipeg Shale aquifer, and therefore should not be greatly impacted by project activities drilled into the deeper Winnipeg Sandstone aquifer. While these aquifers do not interact to a significant degree currently, the combination of existing connectivity and increased drilling may result in greater connectivity between the two aquifers. As a result, actions which influence water quantity and quality in the Winnipeg Sandstone aquifer may adversely impact these two characteristics in the Winnipeg Shale aquifer. Further, while the Proponent's assertion that most of the existing domestic and agricultural wells are drilled only as far as the Winnipeg Shale aquifer, there are indeed wells that draw from the Winnipeg Sandstone aquifer. In either instance, the Proponent must demonstrate that for all potentially impacted water users, a groundwater quality and quantity monitoring program is in place. Additionally, for any impacts that are felt, the Proponent must be positioned to appropriately mitigate and compensate for impacts.

4.1.6 Rights

Concern: The project will prevent access to an area that is used both historically and presently for harvest. The lack of access within itself represents an impact on Red River Métis Rights, however, any project that



destroys habitat, creates noise and other forms of disturbance will have much broader impacts on the regional ecosystem.

Analysis: The impacts of this project on the rights of the Red River Métis have not been adequately considered. Fundamentally, the Proponent has taken a position that there is no meaningful exercise of rights in the area, and that land that will be disturbed by this project does not hold significant ecological value and therefore impacts to rights will be negligible. This is incorrect. As outlined in Appendix B of this intervention, the entire region that surrounds this project including that which overlaps with the project footprint is actively used for hunting, fishing, trapping, and the gathering of firewood and plants, all of which constitute activities that are protected as Aboriginal rights under section 35 of the *Constitution Act*. The MMF raises great concern with how rights have been considered in the contemplation of this project, as it is clear that both the Proponent and Manitoba fundamentally misunderstand land use and the exercise of rights by Red River Métis. We contend that this lack of meaningful consideration represents yet another failing of the Crown's Duty to Consult and Accommodate, relying on insufficient and inaccurate land use data provided by the Proponent. Further, we view the potential impact to rights being an extension of the lack of communication from either the Proponent or Manitoba with the MMF throughout this process, as we are best positioned to share knowledge about the use and interactions this project may have with our rights.

While presenting new evidence relating to our land use and exercise of rights at this stage of the proceedings may be in breach of process, as this is our first opportunity to provide this evidence on the matter, we contend that the Minister must take this information into careful consideration when making a decision regarding this project.

4.1.7 Far Field Effects

Concern: The Winnipeg shale, and sandstone aquifers cover a large portion of southeastern Manitoba. Approximately 64,000 Manitobans rely on this aquifer, and further, this aquifer extends into the United States, exposing the project to the potential for transboundary impacts in the event of contamination.

Analysis: Within the information provided by the Proponent, the focus of analysis is on a 10 km radius surrounding the proposed project footprint. Therefore, impacts to groundwater beyond that radius are only inferred based on limited baseline monitoring. Groundwater and potential impacts from contamination are inherently difficult to map and understand completely. Therefore, at the root of the concern is the potential implications and extent of impact of possible contamination, and the possibility of contaminants migrating farther afield without a robust monitoring program in place.

4.1.8 Long-Term Monitoring and the Role of the MMF

Concern: Given the outstanding concerns about this project on Red River Métis citizens, it is essential that if this project were to be approved, the MMF must play a role in monitoring the project.

Analysis: The MMF supports Red River Métis citizens on a wide range of projects, including those which actively monitor environmental elements. If this project is to be approved, the MMF requests that environmental monitoring programs be co-developed with the MMF, and that capacity be provided to support joint-monitoring efforts.



5.0 Recommendations and Conclusions

The MMF raises significant concerns about the technical merit of this Project, as well as the process that Manitoba has used to consider this Project. Ultimately, the MMF draws into question the Proponent's ability to effectively mitigate impacts to individual and collectively held rights of Red River Métis Citizens – as the Proponent has not appropriately characterized the existing environmental conditions and does not propose to implement effective follow-up monitoring.

The MMF recommends that additional environmental baseline characterization be conducted to appropriately consider the existing environment, in a manner that presents a clear understanding of existing conditions. This includes providing quantitative baselines for groundwater, and nearby surface water quality and quantity, noise, air quality (including PM₁₀, PM_{2.5}, SO₂, NO_x), and species at risk and of cultural importance.

The MMF also recommends that the Proponent provide a baseline understanding of the number of users of groundwater from the Red River Carbonate, Winnipeg Shale aquifers. From this, we look for the Proponent to develop a targeted monitoring and management plan to ensure that there are no adverse impacts on those that will share the aquifer with the Project. Ultimately, we seek an increased level of confidence that this project will not adversely impact the quantity and quality of surface water resources.

The Proponent has failed to consider how the project may impact components of value, through direct disturbance (e.g., land modification, noise, habitat destruction), or indirect disturbance (e.g., perceived effects, contamination), both of which will adversely impact the rights of the Red River Métis. The Clean Environment Commission and Manitoba in considering this project cannot turn a blind eye to the impacts that this Project will have on our citizens. Further, we urge Manitoba, and the Proponent to enter into a confidentiality agreement with the MMF such that we can confidentially share maps of traditional use near the project and allow for discussions on how to meaningfully mitigate impacts. This is a discussion that the MMF has not been afforded but urgently needs.

In the review of the Project, the MMF is alarmed that while on the cusp of the Minister responsible for the *Environment Act* making a decision about this project, fundamental concerns are just now being uncovered and raised. Too much of the Proponent-led assessment of this project has failed at appropriately characterizing the baseline environment, and as a result, effects and impacts are not able to be meaningfully contemplated in the assessment. What results from this breakdown is a project that appears to have minimal impacts, not as a result of benign project activities, but rather as a product of incomplete understanding.

Through this intervention, the MMF has raised several concerns, reviewing evidence presented through both the *Environment Act* licencing process and Clean Environment Commission hearings, as well as in consideration of direct feedback we heard from Red River Métis citizens. Highlighting these concerns, we view the overall lack of quantitative and detailed baseline assessment at the root, which has resulted in a project with incomplete monitoring and adaptive management plans, risks for adverse impacts to water and terrestrial resources, and a fundamental mischaracterization of land use in the region. The result of this is that the Proponent has not presented an accurate assessment of the project's effects on the environment and the subsequent impacts on the right, interests, and values of the Red River Métis.



This project will prevent Red River Métis citizens from harvesting, gathering, and conducting other traditional practices near the proposed project site. The Crown land taken up by the project footprint is an area that Red River Métis citizens have and continue to use to exercise rights. At its most simplistic level this project will prevent access to lands used by citizens, however, the concerns raised by Red River Métis citizens are much more complex and nuanced. As evidenced by section 4 of this intervention, citizens are indeed worried about access and an ability to exercise rights, however, it is the regional impacts beyond the footprint to groundwater quality and quantity, noise, vibration, shifts in wildlife habitat and patterns, among other potential effects that fundamentally were not considered by the Proponent in describing the potential impacts of the project.

In considering authorization of this project the Minister responsible, cannot in good conscience conclude that the proponent has fulfilled their obligations under section 1(1) of Manitoba Regulation 163/88, nor the broader framework outlined in the *Environment Act*. Even within the Guidelines for *Environment Act* Proposals, Proponents are guided in ensuring they provide information regarding:

- Potential impacts of the development on Indigenous communities, including, but not necessarily limited to:
 - direct impacts on communities in the project area;
 - resource use, including hunting, fishing, trapping, gathering, etc.;
 - cultural or traditional activities in the project area.
- Potential impacts of the development on the environment, including, but not necessarily limited to:
 - impact on biophysical environment, including wildlife, fisheries, surface water, groundwater, and forestry resources;
 - type, quantity and concentration of pollutants (emissions, effluents and solid wastes) to be released, and the technologies proposed to contain or treat the waste streams;
- Proposed environmental management and risk mitigation practices to be employed to prevent or mitigate adverse implications from the impacts identified above, having regard to, where applicable:
 - mitigation incorporated at the planning and design stages;
 - containment, handling, monitoring, storage, treatment, and final disposal of pollutants;
 - conservation and protection of natural or heritage resources;
 - environmental restoration and rehabilitation of the site upon decommissioning; and
 - protection of environment and human health.
- Residual environmental effects remaining after the application of mitigation measures, to the extent possible expressed in quantitative terms relative to baseline conditions.

While this guidance is not specific to mining or any other sector and fails to provide a prescription for data quality, the spirit and intent of the guidelines are to ensure that the Proponent provides sufficient evidence to adequately understand existing conditions, assess project interactions, develop mitigation measures, and describe residual effects, such that Manitoba can make a decision regarding the project in the interests of all Manitobans. In this instance, the Proponent has failed to fulfill these obligations. The MMF is further concerned that Manitoba seemingly is prepared to make a decision based on insufficient evidence.



Given the right conditions, the MMF supports responsible natural resource development and projects that, among other things, respect Red River Métis collective and individual rights, appropriately characterize the baseline environment, plan and operate in a safe and responsible manner, effectively monitor the ongoing impacts of their operations, and include a meaningful closure plan. Further, in outlining the consultation framework, Manitoba identifies the objectives of:

- To ensure the Government of Manitoba informs itself and gains a proper understanding of the interests of First Nations, Métis communities and other Aboriginal communities, with respect to a proposed government decision or action;
- To seek ways to address and/or accommodate those interests where appropriate through a process of consultation while continuing to work towards the best interests of the citizens of Manitoba;
- To advance the process of reconciliation between the Crown and First Nations, Métis communities and other aboriginal communities.

This project does not meet these standards, nor does it meet the minimum expectations of the MMF for engagement either by the proponent or Manitoba. The result is that the MMF speaking on behalf of the Red River Métis has not had a voice in the decision-making process, and fundamental concerns with this project have not been heard. The MMF offers this intervention to the proceedings to ensure our voice is heard. Failure to consider this intervention would be considered a wilful action by Manitoba to neglect its Duty to Consult.

The MMF objects to the process which has informed the decision which is being contemplated. There is not even a basic level of consideration for how this project will impact the rights and interests of the Red River Métis. The MMF opposes this project, and we call on the Minister to reject this project's authorization, until the Crown and Proponent can demonstrate that they have fulfilled their respective obligations.

Manitoba must not continue to move forward with the approval of this Project until the outstanding concerns raised by the MMF are appropriately addressed, mitigated, or accommodated. Should Manitoba decide to approve this project, the MMF expects to participate in, and be meaningfully consulted on the development of licensing conditions, such that section 35 rights, claims and interests continue to be protected.



Appendix A: Comment Tracking Table

| Comment # | Reference | Comment | Recommendation |
|---|--|---|--|
| General Evaluation and Recommendations | | | |
| MMF-001 | EAP Section 6.1 Effects Assessment Methods | The Environmental Effects Assessment Criteria used is inherently flawed in evaluating the magnitude of the effect, as for many endpoints the Proponent has failed to provide a quantitative baseline, as a result considering magnitude based on a measurable or quantifiable change (e.g., <1%, 1 to 10%, >10%), is impossible | The MMF requests that for all identifiable endpoints that may be sensitive to project activities, the baseline conditions outlined in Section 4 be represented by measurable values. |
| MMF-002 | EAP Section 7.2 End Use | The Proponent fails to provide a meaningful Closure Plan. The Proponent suggests that “the Project Site will be returned to a natural state to the extent possible, with no known plans for residential, commercial or industrial development on the site at this time.” This end-use vision is aspirational and lacks any meaningful substance. | The MMF requests the Proponent engage with the MMF to co-draft an appropriate vision for end-use at the site in the development of the Closure Plan. |
| Atmospheric Environment | | | |
| MMF-003 | EAP Section 4.2.1 Air Quality | The Proponent fails to provide any effort to quantitatively assess baseline air quality conditions. Specifically, the extent to which the Proponent assessed the existing air quality is to identify a handful of possible local/regional sources of emissions. This approach does not constitute a valid assessment of baseline air quality in the existing environment, as it would not allow any future comparisons to be made to the existing environment. Therefore, there is no manner in which the Proponent or regulators can meaningfully estimate impacts to air quality as a result of this Project. | In order to appropriately consider the existing baseline air quality, the Proponent must provide a quantitative understanding of air quality for several parameters including particulate matter (PM _{2.5} and PM ₁₀), and gases expected to be released by project activities (e.g., NO _x , SO ₂ , CO), using a valid and certified air quality station (such as that which is found at 65 Ellen St. Winnipeg), or from an air quality station established specifically for the purpose of measuring baseline conditions at the Project Site Area. Without this information, the MMF cannot properly assess the existing conditions or predicted changes/impacts as a result of this Project. |
| MMF-004 | EAP Section 4.2.1 Air Quality | While the Proponent suggests that there will be no increase in particulate matter, including silica oxide/sand as a result of project activities, no baseline air quality for this parameter is identified. This limits the ability to distinguish project-related sources from background sources in the future if the Proponent’s assumptions are incorrect. | The MMF requests the Proponent provide information on baseline PM _{2.5} and PM ₁₀ as well as silica oxide at the Project Site Area and downwind throughout the Regional Project Area. |
| MMF-005 | EAP Section 4.2.2 | The Proponent suggest that drilling as a result of the Project is not expected to be a source | The MMF requests that the Proponent provide additional |



| Comment # | Reference | Comment | Recommendation |
|-----------|--|---|--|
| | Noise and Vibration | <p>of significant vibration considering there are many water wells that have been drilled throughout the Regional Project Area and there are no available records of public complaints regarding vibrations from previous well drilling activities. Therefore, vibrations are not considered further.</p> <p>This logic is deeply flawed. First, previous well drilling activities generally have been low density for agricultural and domestic water wells. The proposed drilling will include high density and continuous well drilling activity through much of the life of the Project. Therefore, these drilling activities are not comparable. Similar to other aspects of the Environment Act Proposal Report, the Proponent fails to quantify baseline noise and vibration conditions or provide any meaningful predictions about how proposed activities will increase this baseline. The Proponent uses assumptions rather than verifiable analysis to consider impacts of project activities.</p> <p>Combined, the Proponent fails to provide any meaningful analysis of noise and vibration as a result of their proposed activities, as a result the MMF cannot consider the potential impacts of these activities on rights or interests of the Red River Métis.</p> | <p>information on:</p> <ol style="list-style-type: none"> The quantifiable median and maximum baseline noise level at the Project Site Area and throughout the Regional Project Area, using appropriate and repeatable sound level monitoring equipment and techniques. The relative contributions of equipment and activities proposed to be used in this Project. Overall predicted impacts to median and maximum noise levels at the Project Site Area and throughout the Regional Project Area. The quantifiable median and maximum baseline vibration level at the Project Site Area and throughout the Regional Project Area, using appropriate and repeatable vibration level monitoring equipment and techniques. Overall predicted impacts to median and maximum vibration levels at the Project Site Area and throughout the Regional Project Area. The duration and timeline for use of each piece of equipment/activity contributing to noise and vibration. |
| MMF-006 | EAP Section 4.2.2 Noise and Vibration | The Proponent fails to consider the impacts to noise and vibration from all potential activities to be conducted. For example, the Proponent plans to inject high pressure air into the ground continuously, operate generators, water pumps, machinery, and sand processing equipment through the life of the Project, however, none of these factors are considered as they may contribute to vibration or the local/regional soundscape. | The Proponent must provide an updated assessment baseline and predicted noise and vibration conditions as a result of all proposed activities. This must include appropriate mitigations to minimize or avoid increasing noise and vibration above baseline. |
| MMF-007 | EAP Section 6.3.3 | The Proponent states: “Noise disturbances to wildlife are expected to be moderate in the vicinity of Project activities but are not expected to measurably affect wildlife populations within the Interlake Plain Ecoregion within which the Project is located.” While the Proponent assumes noise levels will not have a measurable affect on wildlife, and human receptors, they do not actually measure or analyze predicted change. | The Proponent must provide an appropriate breakdown of existing background noise and vibration conditions at the Project Area, and then provide a quantitative assessment of the addition project activities will make to the local and regional soundscape. It is further recommended that the |



| Comment # | Reference | Comment | Recommendation |
|---------------------------------------|---|--|---|
| | | | Proponent propose and implement noise monitoring to assess whether predictions are accurate. |
| Water and Geological Resources | | | |
| MMF-008 | EAP Section 6.2.1 Geology/Topography | <p>Surface and/or underground subsidence could have significant impacts on groundwater quality and more broadly on the rights and interest of the Red River Métis. While it is encouraging that the Proponent has conducted geotechnical assessment and will use a model to determine locations of extraction wells, without more information about the model, it is impossible for the MMF to fully understand the risks.</p> <p>The heterogeneity of underground geology can never be perfectly replicated on a model. Local underground geologic features such as fractures can be missed.</p> <p>The Proponent fails to fully examine the implications of underground or surface subsidence for the groundwater resources on a local and regional scale. Without this information, the MMF can not fully understand the potential impacts to the National Homeland of the Red River Métis.</p> <p>Surface subsidence could pose considerable impacts on the rights and interests of the Red River Métis including habitat fragmentation for culturally important species to the Red River Métis for harvest, and destruction of culturally sensitive areas such as gravesites.</p> | <p>a) The MMF requests that the Proponent provides all the geological assessments conducted for this Project to date.</p> <p>b) The MMF requests that the Proponent provides the following details regarding the model that will be used to determine well locations: What data will be used to ensure the model will be as accurate as possible? What will be the spatial resolution of the data? What conservative assumptions will be made during the mode design phase?</p> <p>c) The Proponent must provide a detailed description, supported by scientific evidence, of the consequences for groundwater on a local and regional scale in the event of underground or surface subsidence due to this Project.</p> |
| MMF-009 | EAP Section 6.2.3 Groundwater | <p>Red River Métis Citizens' private water wells may be impacted by this Project. The Proponent fails to properly evaluate the implications for nearby well owners. The Proponent has failed to present a plan to protect private wells. Such a plan should include:</p> <ul style="list-style-type: none"> • Establishing baseline water levels, pump tests and water quality before the Project is initiated. • Comprehensive adaptive monitoring plans including thresholds that would trigger adaptive actions. • Mitigation measures (noting that most pumps are already lowered to the bottom of the well in this region, so this is not an appropriate general recommendation). • Contingency plans for wells that are found to be impacted by the Project. | <p>a) The Proponent must provide the below details of the Groundwater Monitoring and Impact Mitigation Plan so that the MMF can evaluate how private water wells will be protected.</p> <ul style="list-style-type: none"> • Establishing baseline water levels, pump tests and water quality before the Project is initiated. • Comprehensive adaptive monitoring plan including thresholds that would trigger adaptive actions. • Mitigation measures (noting that most |



| Comment # | Reference | Comment | Recommendation |
|-----------|---|--|--|
| | | In other peer reviews of the EAP where these issues are raised, the Proponent states that the Groundwater Monitoring and Impact Mitigation Plan will address these concerns. Without the information, the MMF can't assess if the Groundwater Monitoring and Impact Mitigation Plan will be sufficient. Furthermore, there is no mention about how the MMF will be consulted to ensure the Plan is conservative enough for Red River Métis Citizens. | <p>pumps are already lowered to the bottom of the well in this region, so this is not an appropriate general recommendation).</p> <ul style="list-style-type: none"> Contingency plans for wells that are found to be impacted by the Project. <p>b) The Proponent must provide details about how the MMF will be consulted during the development of the Groundwater Monitoring and Impact Mitigation Plan</p> |
| MMF-010 | EAP Section 2.2.1 Extraction Method | The Proponent states that groundwater will be treated with ultraviolet (UV) light before re-injection. It is unclear if the turbidity levels of the groundwater will allow for effective treatment. Effective UV treatment is highly dependant on water clarity. The distance of the water return line may be substantial. Bacterial infestations could occur in the line, or contaminants could enter the return line during installation. For example, when installing the water return line to different wells, workers may touch the inside of the water line junctions or drop the line openings on the ground. What precautions and monitoring will occur to ensure that the treated groundwater does not come into contact with contaminants before reaching the re-injection site. | <p>a) The Proponent must provide evidence that the turbidity of the groundwater is low enough that UV treatment will be effective. Evidence should include estimated turbidity based on field samples and the effects of dewatering and separation processes. The Proponent should also include the design parameters of the UV treatment system and relate them back to expected turbidity levels.</p> <p>b) The Proponent must provide a comprehensive list of monitoring and mitigation measures to ensure that the treated groundwater is protected from contaminants before re-injection.</p> |
| MMF-011 | EAP Section 8.2 Water Management Plan and Section 8.4 Groundwater Monitoring and Impact Mitigation Plan | The Proponent commits to developing a Water Management Plan and a Groundwater Monitoring and Impact Mitigation Plan, however, there is no information on when this plan will be developed or how it will be implemented. | The MMF requests that a draft of the Water Management Plan be submitted within these proceedings and the MMF is provided opportunity to comment on this document prior to the approval of this Project. The Water Management Plan and the Groundwater Monitoring and Impact Mitigation Plan will have significant implications on the credibility of the Proponent to minimize impacts on water and subsequent impacts on individual and collectively held rights of Red River Métis Citizens. |
| MMF-012 | EAP Appendix A | The Proponent provides a series of geochemical analysis including Shake Flask Extraction | The Proponent has not provided any plans for treated |



| Comment # | Reference | Comment | Recommendation |
|-----------|---|---|---|
| | Hydrogeological Assessment Final Report | results in which rock material is shaken with water and then extracted to understand possible dissolved contaminants that may become mobilized. The Proponent outlines multiple instances where Red River Carbonate, Winnipeg Shale, and Winnipeg Sandstone all demonstrate exceedances of applicable guidelines for a range of important contaminants of potential concern including selenium, mercury, aluminum, arsenic, uranium, and iron. The Proponent suggests that this test is considered aggressive and overly conservative, given the techniques used by this Project. Although, similar levels of mobilization could be observed. Therefore, we believe that this Project is a good proxy for conditions that will be experienced in the aquifer. | water to be returned to the aquifer other than by UV treatment. The MMF is greatly concerned about groundwater contamination, and while this Project may not indeed, as the Proponent suggests, have any impacts on groundwater quality, there is no contingency plan to treat water if it is found to have unacceptably high levels of any contaminant. We request that the Proponent develop a robust groundwater monitoring program and identify methods in which it will intervene if groundwater levels exceed appropriate groundwater quality guidelines. |
| MMF-013 | EAP Section 4.3.1 | Release of contaminated site runoff - The drainage from the Project Site through the natural drainage channels goes to Brokenhead River which feeds into Lake Winnipeg and Edie Creek which drains into Cooks Creek, or directly into Cooks Creek which feeds into the Red River. It is unclear what the impact of increased sediment discharge and potentially contaminated water discharge from extraction operations, such as routine slurry line movement, will be on the aquatic environment. | The MMF requests that the Proponent provide an assessment of the impacts of the proposed activities on the water quality of site runoff and its impact on downstream aquatic systems. |
| MMF-014 | EAP Section 6.2.3 | Long-term effects – The annual impact on volumes of water in the local areas domestic groundwater wells in the Winnipeg Sandstone and Red River Carbonate aquifers are expected to recharge to 80 % after 2 days with the remaining 20% after 20-80 days following the end of extraction. What is the long-term effect of water withdrawal from the aquifers on streams, lakes and groundwater use and levels. | The MMF requests that the Proponent provide an assessment of the long-term effect of water withdrawal on the water quality and level in the aquifers, lakes, and streams. |
| MMF-015 | EAP Section 2.2.1 | Potable water contamination - When each well is drilled, the casing will be installed and grouted in place to isolate the Red River Carbonate and Winnipeg Sandstone aquifers from one another and thereby prevent the vertical mixing of waters. The carbonate aquifer is a major source of potable water for southeastern and central Manitoba. The water from the Winnipeg Sandstone aquifer does not meet drinking water quality standards. | The MMF requests that the Proponent explain how the integrity of the casing will be monitored and the measures that will be taken if there is a failure and the carbonate aquifer is contaminated. |
| MMF-016 | EAP Section 4.3.1 | Release of slurry water to the environment – a large spill from a slurry line break would release the contaminated slurry water into Brokenhead River or Cook’s Creek and potentially into the carbonate aquifer, affecting human health, wildlife, vegetation and fish and fish habitat. | The MMF requests that the Proponent provide an assessment of the impacts of large spills of slurry water on the aquatic environment and on human health. |



| Comment # | Reference | Comment | Recommendation |
|---|--|---|--|
| MMF-017 | EAP Section 4.3.1 | Potable water contamination – There will be hundreds of wells drilled per year for 24 years. Each well will be sealed. Seal failures would result in contamination of the carbonate aquifer from surface runoff and serious impacts on human health. | The MMF requests that the Proponent provide an explanation of how seal failures will be detected, and contamination of the carbonate aquifer will be prevented. |
| MMF-018 | EAP Section 4.3.2 | Fish rights – The Proponent states that waterbodies within the Project area consist of small, isolated ponds associated with previous quarry operations that are assumed to be unlikely to support fish and fish habitat. The fish and fish habitat survey used in the assessment is dated 2013. | The MMF requests that the Proponent investigate current fish and fish habitat and water quality in the waterbodies within the Project Site and assess baseline water quality and fish and fish habitat in the receiving waters impacted by the Project. Without this information, the MMF cannot properly assess the existing conditions or predicted changes/impacts as a result of this Project. |
| MMF-019 | EAP Section 6.4 Aquatic Environment | The Proponent fails to provide analysis on groundwater-surface water connectivity. Therefore, it is unclear whether or not project activities will adversely impact surface water or other aquatic resources. | The Proponent must provide discussion and analysis on groundwater-surface water connectivity for the effected aquifer. |
| Terrestrial Ecology and the Physical Environment | | | |
| MMF-020 | EAP Section 4.4.1 Vegetation | How does the Proponent plan to clear and revegetate well pads? What measures will be used to prevent Invasive species | |
| MMF-021 | EAP Section 4.4.2 Wildlife | Moose are culturally important species to the Red River Métis for harvest; however, no effort has been made to quantify their occurrence within the Regional Project Area. | The MMF requests that the Proponent provide information on the presence of moose within the Regional Project Area, as well as detail efforts in which the Proponent will take to preserve moose in the area. |
| MMF-022 | EAP Section 4.4.2 Wildlife | The Proponent acknowledges that at least 60 bird species are likely to breed within the landcover types that occur within the Project Site, “the majority of which are migratory birds protected under the federal <i>Migratory Birds Convention Act, 1994</i> ”. While we applaud the Proponent for recognizing the presence of migratory birds within the Regional Project Area, this statement falls short in demonstrating appropriate knowledge of which birds may be actually found at the site, information which the Proponent should use to inform an Environmental Monitoring and Management Plan for the site. | The MMF requests the Proponent outline specific measures which it will take to monitoring and minimize impacts on breeding birds within the Regional Project Area, including conducting nest sweeping surveys before activity, and forest clearing for access and well pad development outside of seasonal bird breeding. |
| MMF-023 | EAP Section 4.4.2 Wildlife | The Proponent states that “Boreal Chorus Frogs were consistently heard in marshes with open water centres and extensive emergent plant growth along the margins. This type of wetland does not occur within the Project Site.” It is however, unclear where the Boreal Chorus Frogs were heard if not within the Project Site. | The MMF requests additional information on the location of observations of Boreal Chorus Frogs relative to the Project Site, as well as specific measures the Proponent will enact to avoid impacts on the frogs, including the reduction of noise during seasonal breeding. |



| Comment # | Reference | Comment | Recommendation |
|-----------|--|---|--|
| MMF-024 | EAP Section 4.4.3 Species of Conservation Concern | The Proponent provides a desktop analysis of Species of Conservation Concern for plant and animal species that may occur within the Project Site. We note that while a desktop study may be appropriate for narrowing down the possible species that may occur within a Project Area, these must be paired with field studies to understand which species, or species habitats are found. To this end, the Proponent fails to provide any information of field studies, and therefore should assume that all identified species at risk that possibly exist in the Regional Project Area, do indeed exist, and as a result, appropriate monitoring and mitigation measures implemented. | <p>A) The MMF requests that the Proponent outline information on field assessments of habitat for species at risk.</p> <p>B) Additionally, where species may be present, the MMF requests that the Proponent outline monitoring and mitigation measures to be implemented during the Project to minimize impacts on species at risk.</p> <p>C) Finally, the MMF requests that the Proponent identify all species at risk permits necessary to complete this work, and that we be appropriately consulted and included in the development of habitat offset programs.</p> |
| MMF-025 | EAP Section 6.2.1 Geology/Topography | The Proponent suggests that measurable disturbance will be imposed on natural geologic and topographic features, and disturbances will be limited to the Project Site, however, the Proponent provides insufficient evidence to support this claim. Additionally, we note that the Proponent proposes no monitoring or surveillance program sufficient in detecting impacts of slump as a result of project activities. | The MMF requests that the Proponent outline how they will monitor the full impacts of this Project on geology, including the potential for surface slump. This program must include monitoring locations within the Project Area and at nearby infrastructure (e.g., residential houses, structures), to monitoring for slump throughout the Project. |
| MMF-026 | EAP Section 6.5.3 | The Proponent asserts that species of conservation concern are not expected to experience a substantial decrease in regional populations, however, no assessment beyond a desktop analysis has been performed to assess on the ground habitat. | The MMF requests that the Proponent perform field studies to support assertions of limited species at risk habitat, and as part of an environmental monitoring plan further provide an outline of how impacts to species at risk and breeding birds, or their habitat will be mitigated and monitored in advance of project activities. |
| MMF-027 | EAP Section 8.7 Revegetation Monitoring Program | The Proponent commits to the development of a revegetation monitoring program, however, fails to provide any information on what endpoints will be monitored, how monitoring will be conducted, whether or not active or passive revegetation will be employed, whether or not invasive species management will be performed, and if so how. As a result, there is insufficient information provided to indicate whether this plan will be successful. | The MMF requests that the Proponent submit a draft version of the Revegetation Monitoring Program as part of these proceedings, and that the MMF be provide opportunity to review this document. The MMF remains concerned regarding the amount of planning for monitoring and restoration is being deferred until after |



| Comment # | Reference | Comment | Recommendation |
|---------------------------|---------------------------------------|--|--|
| | | | the approval of this Project. |
| Indigenous Peoples | | | |
| MMF-028 | EAP Section 4.5 Indigenous Peoples | <p>The Proponent does the absolute bare minimum in providing context and understanding to the impacts of Indigenous peoples as a result of this Project. While the Proponent does acknowledge that the Regional Project Area is within an area recognized by “the Manitoba Métis Federation as an area for Métis Natural Resource Harvesting”, they fail to consider in any meaningful manner how their project may interact with the rights and interest of the Red River Métis. Additionally, the Proponent fails to properly describe the degree to which this Project falls within lands used by the Red River Métis for harvesting, as the entire project footprint, not just the Regional Project Area overlaps with this area.</p> <p>The failure to acknowledge the exercise of rights in the Project Area by the Red River Métis, demonstrates the Proponents negligence in considering the impacts this Project will have.</p> | <p>The Proponent must directly engage with the MMF to appropriately understand and consider the potential impacts of the proposed project on the rights and interests of the Red River Métis living in the area. This includes but is not limited to understanding how Métis Citizens exercise rights (such as harvest), and possible interactions between project activities and the exercise of rights. Additionally, where interactions are expected to occur, the MMF requires that the Proponent work with the MMF to identify appropriate means of avoidance, mitigation, and accommodation. Where impacts impact individual rights (as opposed to collectively held rights), the MMF expects that the Proponent will work directly with affected Red River Métis Citizens and the MMF where appropriate to identify compensation for impacts.</p> |
| MMF-029 | EAP Section 4.5 Indigenous Peoples | <p>The Proponent does the absolute bare minimum in providing context and understanding to the impacts of this Project on the rights and interests of the Red River Métis. By not considering these factors, the Proponent demonstrates an incomplete assessment of project impacts. The MMF is disappointed by the Environmental Approvals Branch of Manitoba Environment and Climate for allowing the Environmental Act Proposal for this proposal to pass through completion screening, demonstrating that project impacts on the rights of Indigenous Peoples in Manitoba is not a priority for the Environmental Approvals Branch.</p> <p>In considering its duties, the Environmental Approvals Branch to ensure Manitoba acts honourably in discharging the Duty to Consult as a representative of the Crown, cannot allow projects with such limited consideration of their impacts on Aboriginal and treaty rights be allowed to proceed through the Environmental Assessment Process. While The Environmental Act, 1987, is notably devoid of requirements for Indigenous engagement, guidance provided by Information Bulletin – Environmental Act Proposal Report Guidelines, clearly outline the need to evaluate the “potential impacts of the development on</p> | <p>Given the fundamental failings in the consideration of impacts on Indigenous peoples including the Red River Métis, the Environmental Approvals Branch and the CEC cannot allow this Project to be approved as presented.</p> |



| Comment # | Reference | Comment | Recommendation |
|----------------------------------|--|---|--|
| | | <p>Indigenous communities, including, but not necessarily limited to:</p> <ul style="list-style-type: none"> -direct impacts on communities in the Project Area; -resource use, including hunting, fishing, trapping, gathering, etc; cultural or traditional activities in the Project Area.” <p>A minimal standard which the Proponent has failed to meet.</p> | |
| MMF-030 | EAP Section 6.6.5 Indigenous and Treaty Rights | <p>The Proponent states that “the Project is not expected to adversely impact the exercise of Indigenous or Treaty rights because:</p> <ul style="list-style-type: none"> • The Project Site consists of private land covered under private surface rights that do not have public access unless by permission; • No fish or fish habitat will be affected by the Project (Section 6.4.2); • The residual environmental impact of the Project on vegetation beyond the Project Site is assessed to be negligible (Section 6.5.1); and • The residual environmental impact of the Project on regional wildlife populations is assessed to be negligible (Section 6.5.2).” <p>This assessment is greatly misinformed and does not consider the harvest rights that Red River Métis Citizens hold. Through the entirety of these proceedings, the Proponent have failed to meaningfully engagement with the MMF including no interaction since 2020.</p> | <p>The MMF does not consider engagement with the Proponent to be meaningful, and as a result, we consider the significant amount of procedural elements of the Duty to Consult that have been delegated by Manitoba to the Proponent to be incomplete. Given the concerns we raise throughout this document, we do not believe that Manitoba has acted honourably in discharging its duties. We therefore recommend that this Project not move forward until we have been appropriately consulted on this Project, and any outstanding impacts to rights be accommodated as per section 35 of the <i>Constitution Act, 1982</i>.</p> |
| Socioeconomic Environment | | | |
| MMF-031 | EAP Section 4.6 Socioeconomic Environment | <p>In considering the baseline socioeconomic environment, the Proponent fails to adequately recognize the importance of agricultural activity on both social and economic aspects of the environment and those who live in the vicinity of the Project Area. Agricultural producers rely heavily on access to high quality groundwater from the underlying aquifer. Any impact to the aquifer would have significant adverse impacts on the regional economy and social well-being of those impacted.</p> | <p>As many of those who live in proximity of the Project Site are Red River Métis Citizens, impacts to the socioeconomic well-being of nearby residents is of great importance to the MMF. The MMF requests that baseline information be provided regarding the occupation of residents within the Regional Project Area and the amount of agricultural land that draws water from the shared aquifer.</p> |
| MMF-032 | EAP Section 6.6.1 Labour Force and Employment | <p>The Proponent suggest that the overall effect of this Project on labour force and employment will be positive, however, fail to provide concrete examples of how. Additionally, the Proponent does not provide insight into how it will ensure marginalized members of the workforce will be provided an opportunity to participate and benefit from</p> | <p>The Proponent should outline specific opportunities it has identified for the local labour market, including total number of jobs or contract opportunities, training opportunities, and preferential hiring practices.</p> |



| Comment # | Reference | Comment | Recommendation |
|--|---|--|--|
| | | this Project, this includes women, Indigenous persons, and members of the LGBTQ2+ community, who often experience adverse impacts to overall wellness as a result of mining projects. | Additionally, we request that the Proponent outline how it will encourage opportunities for historically marginalized members of the community. |
| Archaeology and Cultural Heritage | | | |
| MMF-033 | EAP Section 4.6.5 Heritage Resources | The on-site archaeological investigation found the Project Site to have substantial previous disturbances and concluded that there were no heritage concerns regarding development of the Project at the Project Site . The incidental discovery of unknown heritage resources may occur during the construction phase (this includes incidental discovery of human remains). | Language in this section should be revised to acknowledge the risk of incidental discovery of unknown heritage resources and human remains that may occur during the construction phase of the proposed development. A Chance Find Protocol should be developed alongside the MMF that outlines what actions and communications need to take place should these events occur. |
| MMF-034 | Heritage Resources Impact Assessment, Appendix G. Sec. 1.2 Screening Criteria | A Heritage Resources Impact Assessment (HRIA) is used to identify and assess any heritage resources that may be negatively impacted by development . Examples of heritage resources can include but are not exclusive to works of nature or human endeavour that have prehistoric, historic, cultural, natural, scientific, or aesthetic value. | In order to fully assess the history and intrinsic scientific value of any landscape all avenues of inquiry should be exhausted – this includes the active consultation and engagement with Indigenous communities. The archaeological assessment of this Project Area did not include the MMF and is therefore missing a crucial component in the identification and assessment of heritage resources that may be negatively impacted by development. Language in the EAP should be revised to acknowledge this omission. |
| MMF-035 | Heritage Resources Impact Assessment Appendix G. Sec. 5.2 Fieldwork Summary | Landowner permission had not been granted at the time of the survey for the SW-20-10-8 EPM, and therefore a portion of AOC 5 could not be assessed. This area was originally flagged due to the presence of landform anomalies noted from the LiDAR imagery and should still be considered as having archaeological and heritage potential | This portion of AOC 5 still needs to be assessed for heritage resources. |



Appendix B: Red River Métis Land Use Maps

The following series of maps outline Red River Métis land use in the area that surrounds the proposed project site. Included in these maps is an outline of specific use for harvesting, including hunting, trapping or snaring, collection of plants (including firewood), fishing and camping and cultural gathering.

Figure 1: Map of locations used for fishing and camping in proximity to the proposed project footprint.

Figure 2: Map of locations used for gathering and plant-based harvesting, including for consumption and firewood in proximity to the proposed project footprint.

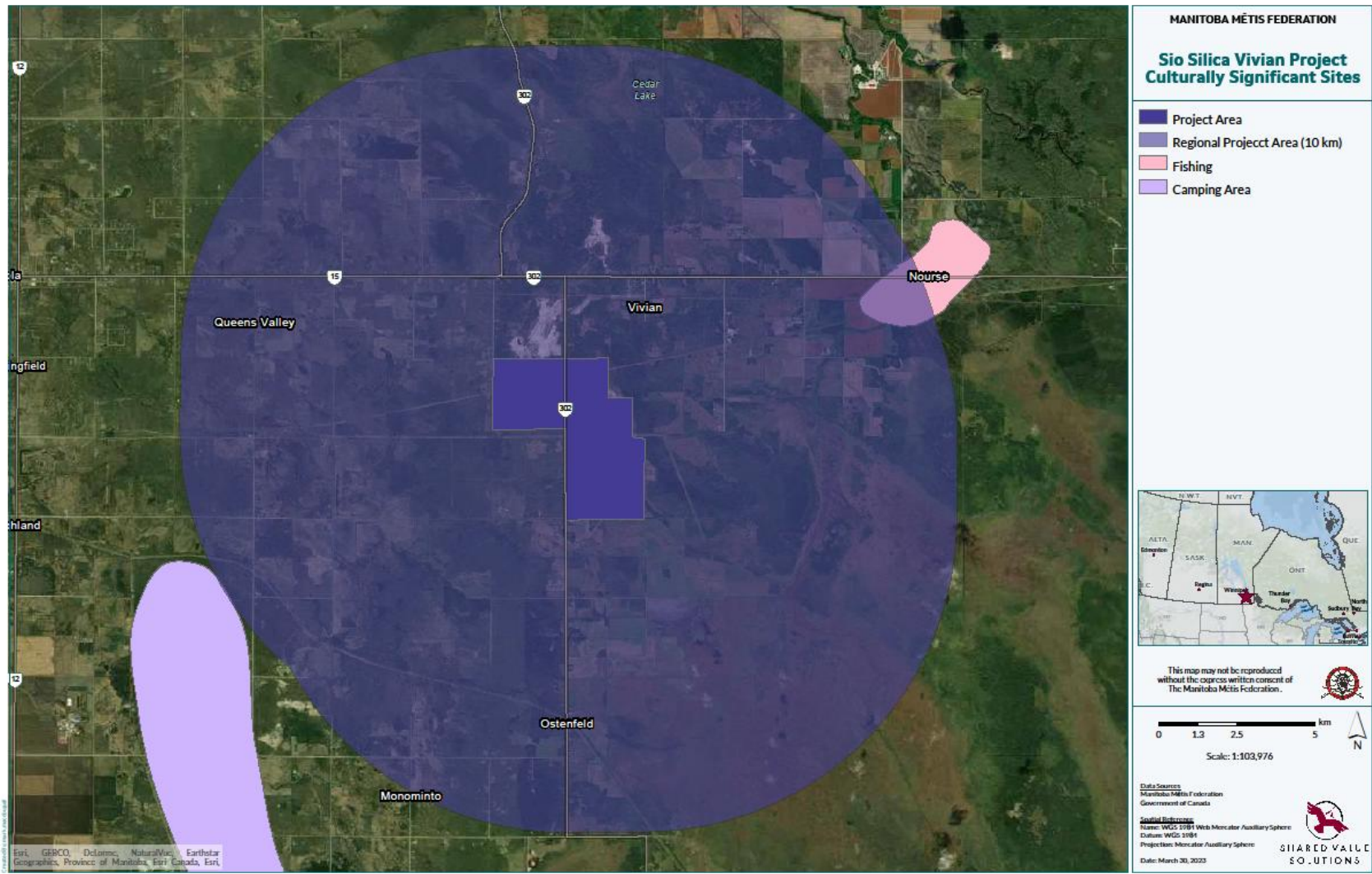
Figure 3: Map of locations used for hunting bird species in proximity to the proposed project footprint.

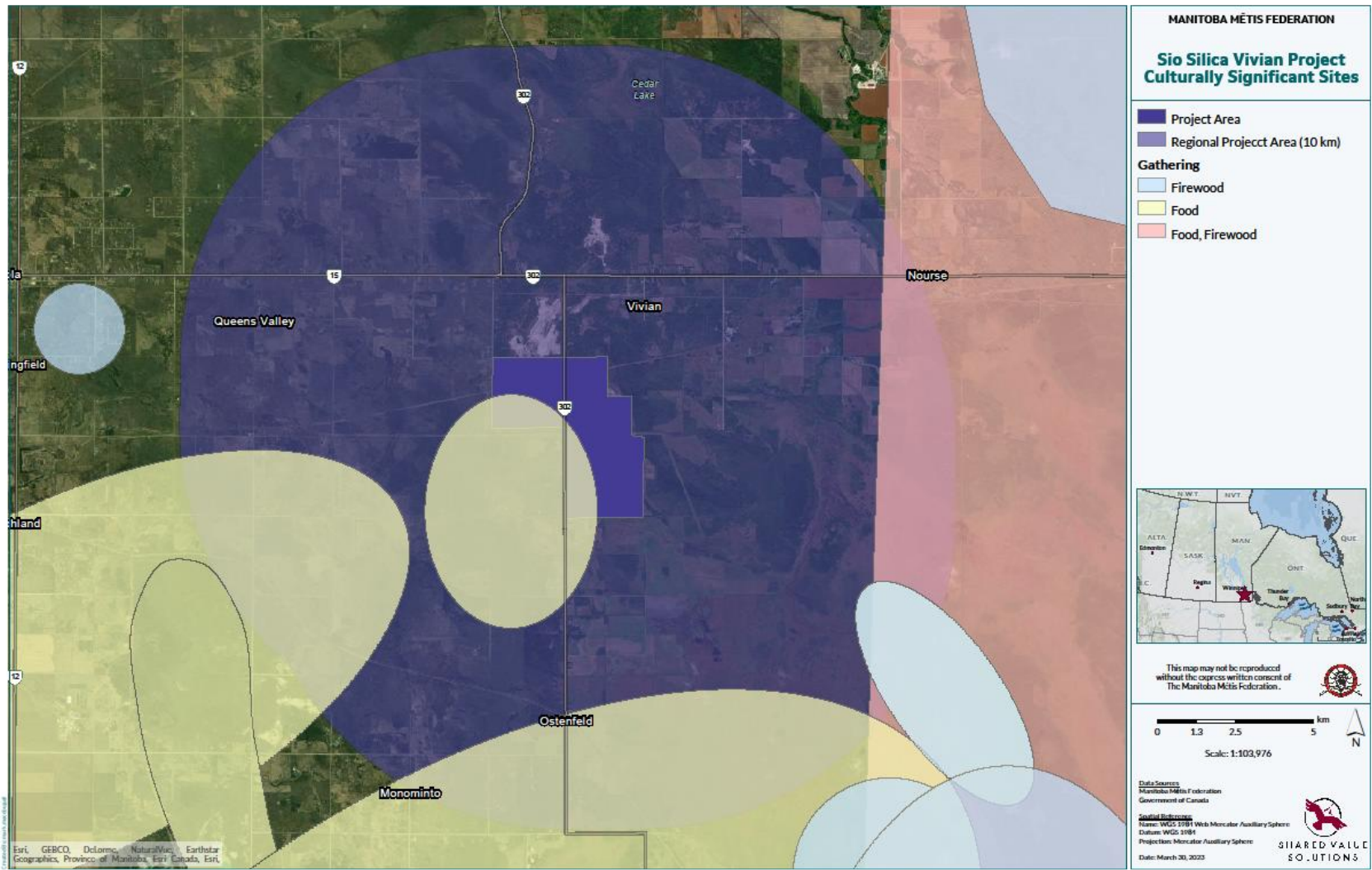
Figure 4: Map of locations used for hunting small fur-bearing species in proximity to the proposed project footprint.

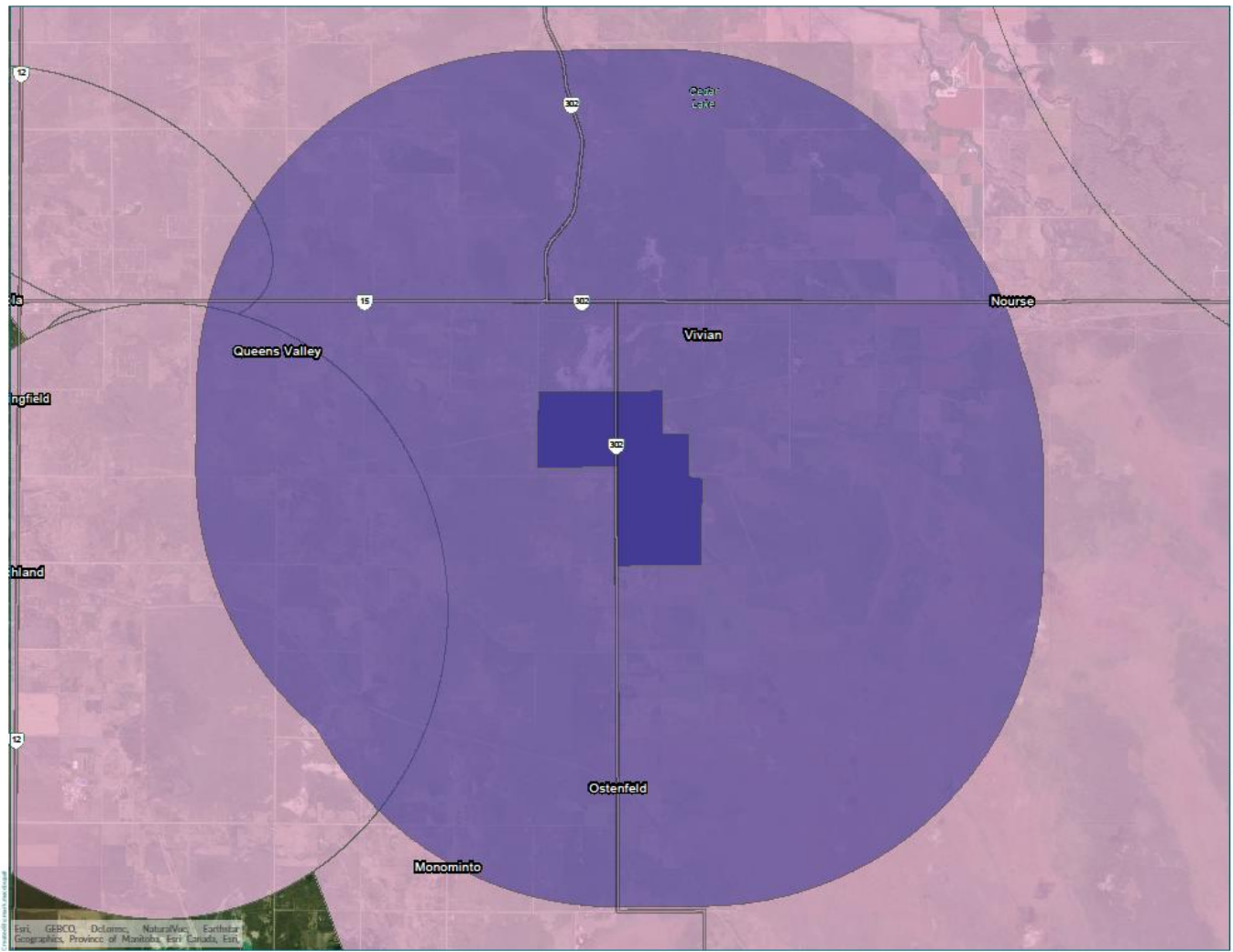
Figure 5: Map of locations used for hunting mammal species in proximity to the proposed project footprint.

Figure 6: Map of locations used for trapping and snaring of small fur-bearing species in proximity to the proposed project footprint









MANITOBA MÉTIS FEDERATION

**Sio Silica Vivian Project
Culturally Significant Sites**

- Project Area
- Regional Project Area (10 km)

Hunting

- Bird and Fowl Species

This map may not be reproduced without the express written consent of The Manitoba Métis Federation.

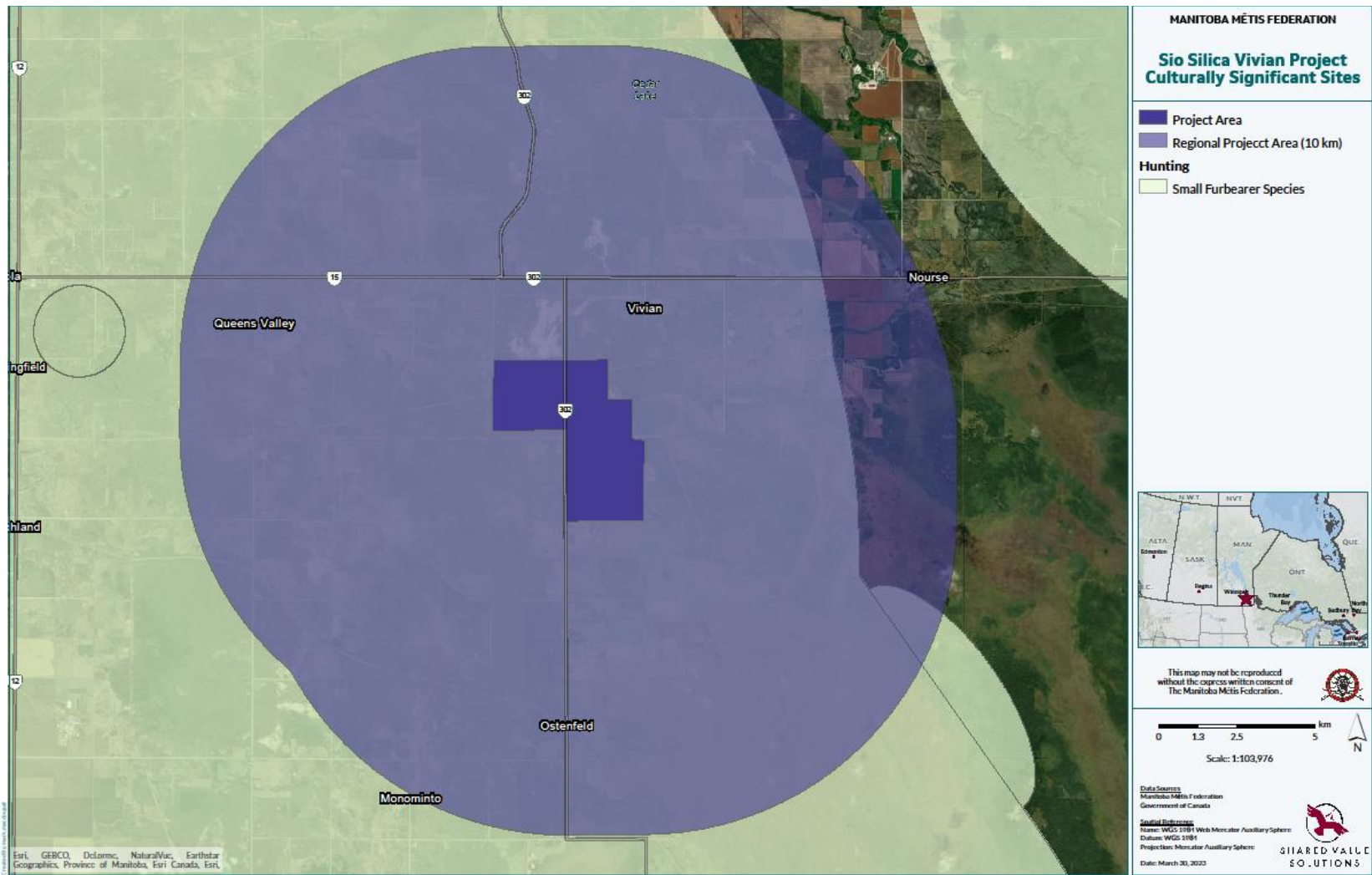
0 1.3 2.5 5 km
Scale: 1:103,976

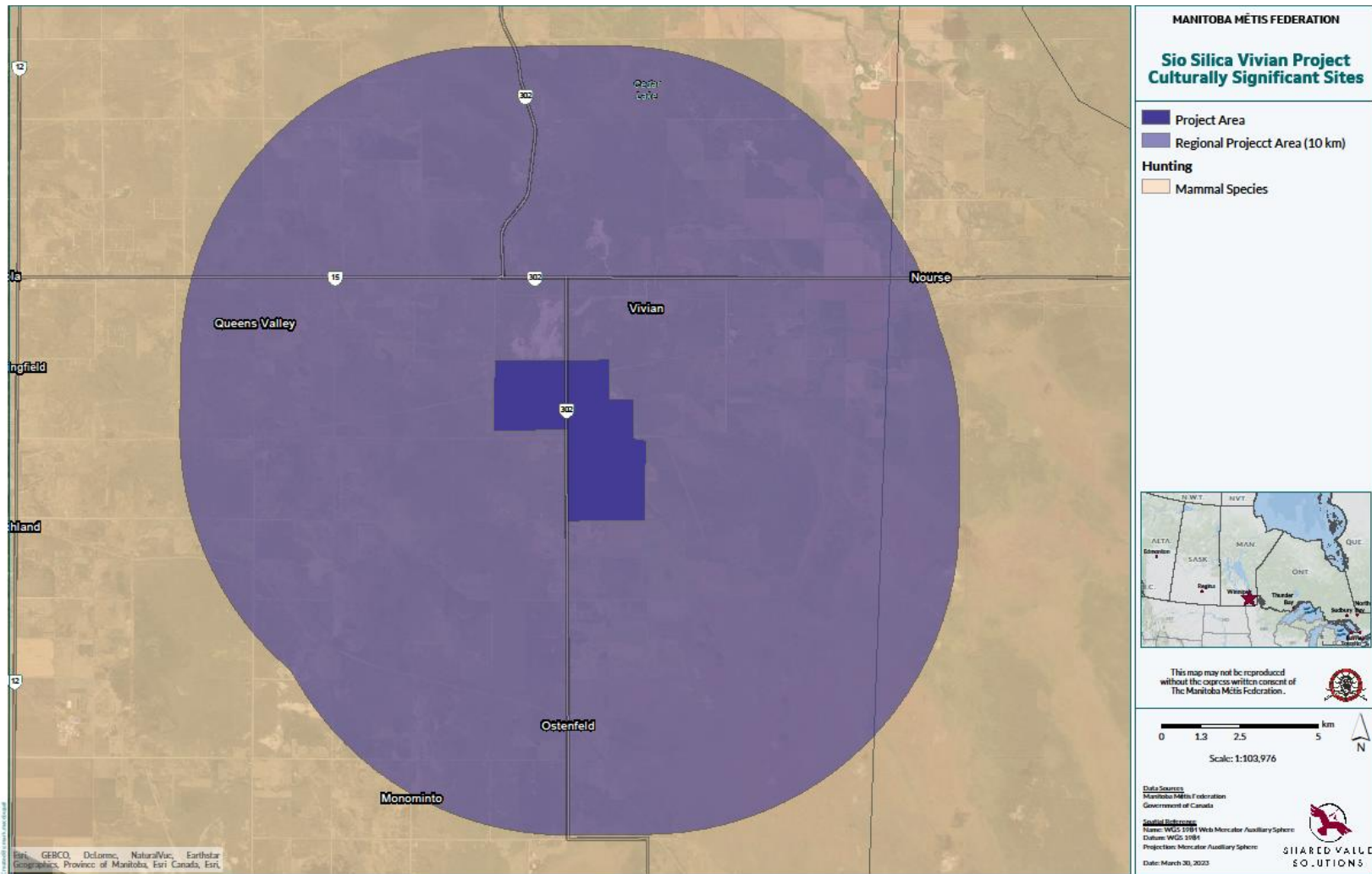
Data Sources:
Manitoba Métis Federation
Government of Canada

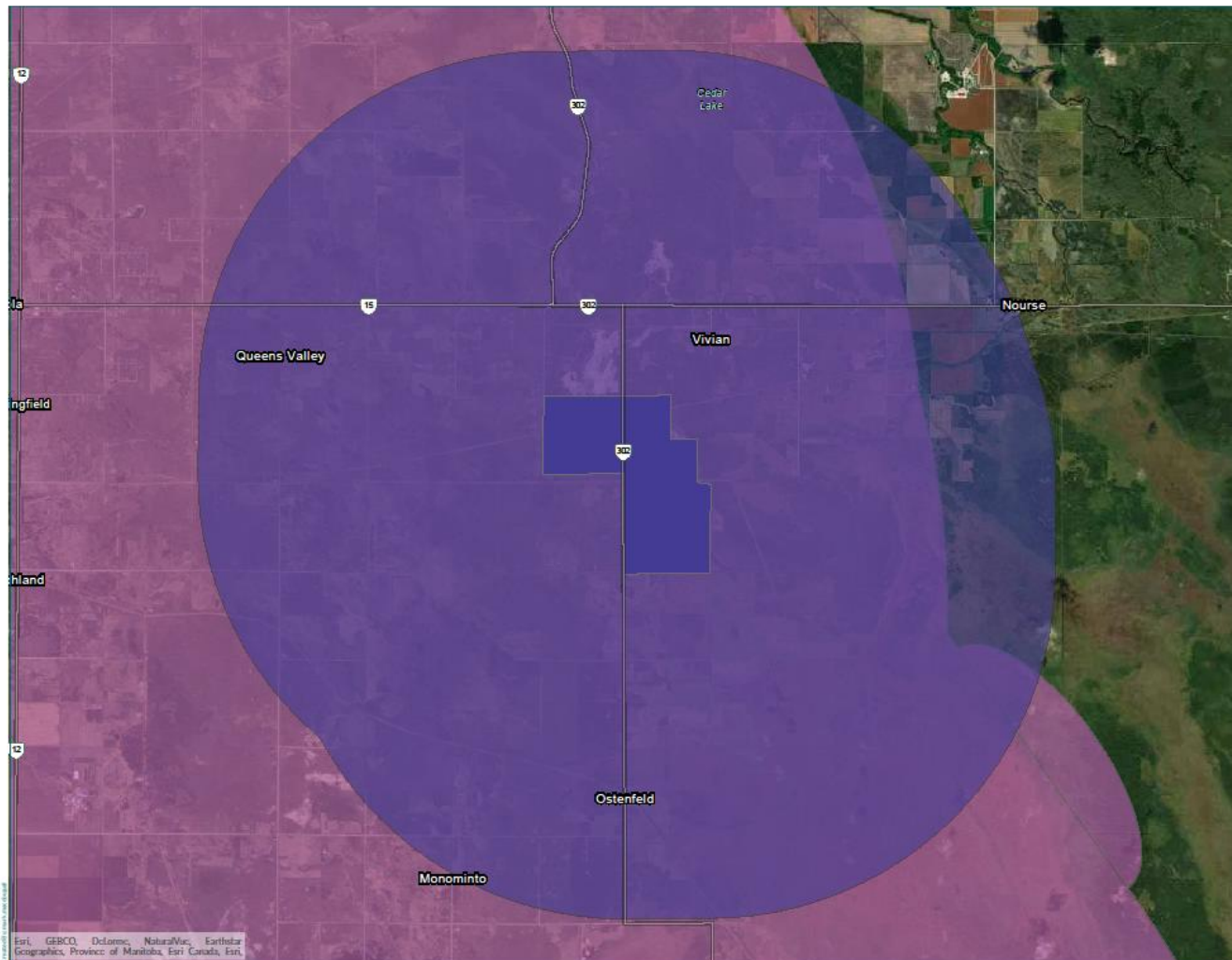
Mapfile Information:
Name: WGS 1984 Web Mercator Auxiliary Sphere
Datum: WGS 1984
Projection: Mercator Auxiliary Sphere

Date: March 30, 2023









MANITOBA MÉTIS FEDERATION

**Sio Silica Vivian Project
Culturally Significant Sites**

- Project Area
- Regional Project Area (10 km)

Trapping and Snaring

- Small Furbearer Species

This map may not be reproduced without the express written consent of The Manitoba Métis Federation.

0 1.3 2.5 5 km
Scale: 1:102,976

Data Sources
Manitoba Métis Federation
Government of Canada

Spatial Reference
Name: WGS 1984 Web Mercator Auxiliary Sphere
Datum: WGS 1984
Projection: Mercator Auxiliary Sphere
Date: March 30, 2023

SHARED VALUE SOLUTIONS

