

# **What We Heard: Mudpuppy Species-at-Risk Community Engagement Report**

## **MMF – National Government of the Red River Métis**

July 2025



# 1.0 Introduction

Environment and Climate Change Canada (ECCC) is engaging with the Manitoba Métis Federation (MMF) on the proposed change in mudpuppy status from Not at Risk to Threatened. The mudpuppy is an aquatic salamander with a geographic range including areas of the National Homeland of the Red River Métis, and specifically within Manitoba. Although currently not legally listed as a species at risk, nor governed under the Species at Risk Act, ECCC has pre-listed the species as threatened.

Red River Métis Citizens are keepers of Red River Métis Ecological Knowledge, a collectively held body of knowledge gained from generations of relationships with and to the lands and waters. Understanding the unique perspectives held by the Red River Métis, the MMF engaged Red River Métis Citizens to document their knowledge of mudpuppy habitat, population, indicators of their health, and ongoing threats. During engagement, Red River Métis Citizens shared perspectives, concerns, and interests in upgrading the status of the mudpuppy to threatened.

This report presents the results of the MMF's technical review and community engagement regarding the mudpuppy and its status as a species at risk and provides recommendations for the meaningful integration of Red River Métis Ecological Knowledge and Citizens into the management plans and further assessments required for a legally listed species at risk.

## 2.0 Background—The Red River Métis and the MMF

### 2.1 The Red River Métis

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

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



## 2.2 Red River Métis' Rights, Claims, and Interests

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

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

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

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

This Project has the potential to impact Red River Métis rights, claims, and interests and as such, engagement and consultation with the MMF, through the process set out above, must be followed. The “postage stamp province” of Manitoba was the birthplace of the Red River Métis. We currently have an outstanding claim flowing from the Federal Crown's failure to diligently implement the land grant provision of 1.4 million acres of land promised to the Red River Métis as a condition for bringing Manitoba

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<sup>1</sup> More information about Resolution No. 8 is available online at: <http://www.mmfmb.ca/docs/2013-Resolution%208%20Booklet-VFinal.pdf>



into Confederation. It is set out in section 31 of the *Manitoba Act, 1870* and must be resolved in accordance with the honour of the Crown.<sup>2</sup>

Red River Métis section 35 rights are distinct from First Nation's rights and must be respected. The MMF is the National Government of the Red River Métis.

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

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

Red River Métis self-government has evolved and changed over time to better meet the needs of the collectivity. Today, the MMF is the recognized, democratically elected, national government of the Red River Métis. On November 30, 2024 the Red River Métis and His Majesty the King signed the Red River Métis Self-Government Recognition and Implementation Treaty. The Treaty recognizes the Manitoba Métis Federation as the government of the Red River Métis.

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

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<sup>2</sup> *Manitoba Metis Federation Inc. v. Canada (Attorney General)*, 2013 SCC 14, [2013] 1 SCR 623 ("MMF Case"). The Supreme Court of Canada recognized that this outstanding promise represents "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 s. 35 of the *Constitution Act*, 1982 and underlying s. 31 of the *Manitoba Act*, remains unachieved. The ongoing rift in the national fabric that s. 31 was adopted to cure remains unremedied. The unfinished business of reconciliation of the Metis people with Canadian sovereignty is a matter of national and constitutional import" (para. 140).

<sup>3</sup> MMF Constitution, Article III outlines the citizenship definition and application process. This definition ("Metis" is defined to mean "a person who self-identifies as Métis, is of historic Métis Nation Ancestry, is distinct from other Aboriginal Peoples and is accepted by the Métis Nation ") aligns with the definition of what constitutes a section 35 rights-bearing Metis community as outlined by the Supreme Court of Canada in *Powley* at para. 30.



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

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

The MMF governance structure includes a centralized MMF President, Cabinet, Regions, and Locals. There are seven (7) Regions and approximately 135 Locals throughout Manitoba (Figure 1). There are thousands of Citizens who live outside of Manitoba. All MMF Citizens are Members of a Local. Locals and Regions work together to authorize and support the MMF Cabinet, and the MMF's various departments and offices. Through elections held every four years, Citizens choose and elect the MMF Cabinet consisting of the MMF President, who is the leader and spokesperson for the MMF, a Vice-President of each Region, and two Regional Executive Officers from each Region. The MMF Cabinet also includes the spokeswoman from the Infinity Women Secretariat. Each Local's Membership elects a Chairperson, a Vice-Chairperson, a Secretary and a Treasurer (or a Secretary-Treasurer, as the case may be) to serve the Local for a four-year term.

Consistent with the direction of our Citizens back in 2014, MMF removed the arbitrary provincial borders from our Constitution that separated Red River Métis who live outside of Manitoba from those within. Today, the MMF represents Red River Métis Citizens within the provincial borders of Manitoba, and thousands more across our National Homeland, and around the world.

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

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<sup>4</sup> *Newfoundland and Labrador v. Labrador Metis Nation*, 2007 NLCA 75 at para 47: "Anyone becoming a member of the [Labrador Metis Nation] should be deemed to know they were authorizing the LMN to deal on their behalf to pursue the objects of the LMN, including those set out in the preamble to its articles of association. This is sufficient authorization to entitle the LMN to bring the suit to enforce the duty to consult in the present case."

<sup>5</sup> *Behn v. Moulton Contracting Ltd.*, 2013 SCC 26 at para 30: "[A]n Aboriginal group can authorize an individual or an organization to represent it for the purpose of asserting its s.35 rights."



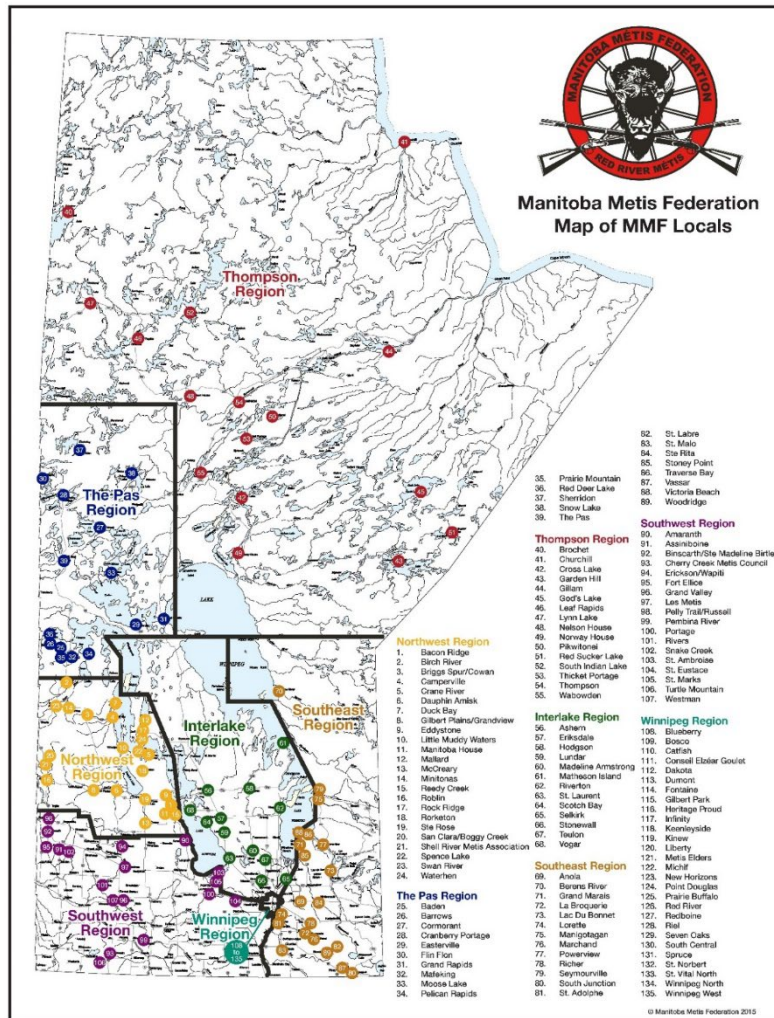


Figure 1. Manitoba Métis Federation (MMF) Regions.

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

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

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

*For the purposes of these Points of Agreement, Manitoba will recognize as Métis Rights-Holders, individuals who are residents in Manitoba and who hold a valid MMF Harvesters Card, issued*

<sup>6</sup> *R. v. Goodon*, 2008 MBPC 59 para 52. Note that the number of MMF Citizens (40,000) identified by the Court was as of 2007. .

<sup>7</sup> Manitoba Métis Policy, September 2010 at 4, 12, online (PDF): [http://www.gov.mb.ca/imr/ir/major-initiatives/pubs/Metispolicy\\_en.pdf](http://www.gov.mb.ca/imr/ir/major-initiatives/pubs/Metispolicy_en.pdf)





*according to the MMF's Laws of the Hunt. [. . . and will] consult with the MMF prior to implementing any changes to the current regulatory regime that may infringe Métis Harvesting Rights.<sup>8</sup>*

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

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

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

The MMF signed the *Manitoba Métis Self-Government Recognition and Implementation Agreement* (MMSGRIA) on July 6, 2021. This marked a major step forward in reconciliation between the Red River Métis and Canada. The MMSGRIA, among other things, immediately recognized the MMF as the National Government of the Red River Métis, and sets out a path forward towards the completion of a modern Treaty. As noted above, that Treaty was signed on November 30, 2024. Once Implementation Legislation is in place, the Treaty will become fully effective and will have constitutional protection, further strengthening the relationship between the Red River Métis and Canada.

## 3.0 Methodology

The MMF used three different approaches to identify Red River Métis concerns about the mudpuppy and gather insights on how best to integrate Red River Métis Knowledge into culturally and ecologically sustainable management of this species and their habitat. These methods included: a Citizen Engagement Session, a Citizen Engagement Survey, and a technical review of the Committee on the Status of Endangered Wildlife in Canada's (COSEWIC's) *Assessment and Status Report on the Mudpuppy* (*Necturus maculosus*) in *Canada* (2023).

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<sup>8</sup> MMF-Manitoba Harvesting Points of Agreement (September 29, 2012), ss. 3, 6-7.

<sup>9</sup> *MMF Case*, *supra* note 6 at para 44.

<sup>10</sup> MMF-Canada Framework Agreement on Advancing Reconciliation, November 15, 2016, Preamble.



### 3.1 Citizen Engagement Methodology

The MMF held an in-person Citizen Engagement Session with Red River Métis Citizens on April 3, 2025 in Lac du Bonnet, Manitoba. A total of 27 Red River Métis Citizens attended the session. At the session, staff from the MMF's Energy, Infrastructure & Resource Management (EIRM) Department presented about ECCC's proposed upgrades to the mudpuppy's status as a species at risk.

Following this presentation, attendees were divided into smaller breakout groups, and staff facilitated group discussions using the following questions:

- What does your Red River Métis Knowledge tell us about the overall health of the environment if the populations of mudpuppy are declining? What does it tell us if they are improving?
- What does your Red River Métis Knowledge tell us about the habitat(s) or ecosystem(s) the mudpuppy lives in?
- What impacts or benefits do you think could come from the listing of the mudpuppy in accordance with the Species at Risk Act?
- What goals do you think the MMF should set for protecting and conserving the mudpuppy?
- What types of activities would you like to see in a recovery strategy plan for the mudpuppy?
- What locations do you think the mudpuppy's recovery strategy plans should focus on?
- How would the act of listing the mudpuppy as threatened affect other species?
- What other monitoring programs could the MMF initiate to support mudpuppy habitat?

This discussion provided Red River Métis Citizens with an opportunity to share their thoughts and perspectives about ECCC's proposal to change of status for the mudpuppy, to identify existing gaps within the ECCC assessment, and to inform the MMF's recommendations to ECCC about MMF involvement in the protection of the mudpuppy and subsequent management planning for this at-risk species.

MMF staff prepared a digital survey to capture additional information from Red River Métis Citizens. A total of 24 Red River Métis Citizens completed the survey. The MMF analyzed survey results and the information from the sessions to inform the results of this report.





## 3.2 Technical Review

The MMF also undertook a technical review of the Executive Summary of COSEWIC's *Assessment and Status Report on the Mudpuppy (Necturus maculosus) in Canada* (2023). This Executive Summary proposed upgrading the status of the species' Manitoba population (Designatable Unit 1; DU1) based on its limited and declining distribution, sensitivity to disturbance, sedentary lifestyle, late maturity, and long lifespan. The proposed status change upgrades the mudpuppy from Not at Risk to Threatened under the federal Species at Risk Act, S.C. 2002 (SARA). This will afford individual and habitat protections for the species, the requirement of a Management Plan, and a trigger for additional assessment for status upgrading under the provincial Endangered Species and Ecosystems Act.

The technical review aimed to understand potential interactions with the environment and human health from a Western scientific perspective. The technical review comments outline the concerns of Red River Métis Citizens related to the information presented, its expected effects, and subsequent potential impacts. The associated recommendations either seek additional information to settle the concern or request adaptations to improve access to consistent and current information to provide greater benefit to the environment and eliminate or reduce impacts to Red River Métis rights, claims, and interests.

## 4.0 What We Heard from Red River Métis Citizens

What we heard from Citizens is that the mudpuppy holds both cultural and ecological significance for the Red River Métis, and that the Red River Métis possess unique knowledge about the species. Information from Red River Métis Citizens indicates gaps in the range boundaries for the species, revealed additional threats, and identified important opportunities for conservation and restoration of this important species.

### 4.1 Mudpuppy Habitat and Population

Red River Métis Citizens shared their Red River Métis Knowledge about mudpuppy habitat and population health throughout the MMF's engagement initiatives. When asked if they had seen the mudpuppy in the wild, seven survey respondents (30%) indicated that they had seen mudpuppies. Red River Métis Citizens in the Engagement Session further identified the presence of mudpuppies in the following areas:

- Lake Winnipeg
- Pointe du Bois
- Lac du Bonnet
- The Winnipeg River system



- Gimli
- Hecla Island
- Whitemouth River
- Seine River
- Lake of the Woods
- Southwood Bay (Lac du Bonnet area)
- Great Falls Dam

Several participants shared stories of encountering mudpuppies in the past. One Citizen shared that during the 1950s through 1970s, he and his father caught “fish with legs that looked like small jack,” which they have come to realize were mudpuppies. Another said their father found mudpuppies in the Brokenhead River 50 years ago. Two other participants shared that they remember large populations in the Lac du Bonnet and Pointe du Bois areas; the mudpuppies they found were 4–10 inches long.

A few participants said that mudpuppies are most often found in fast-flowing water, including rivers, or on ice in the winter. Another Red River Métis Citizen gave important details about the tendency for this species to find its way into hydropower generating stations, noting:

*[When] I worked for Manitoba Hydro at all the six generating stations on the Winnipeg River, they would do generator maintenance; We would lower steel gates into the water to block the water flow. After 2–5 days we would pull up to the gates and often we would have mudpuppies in the gate pockets.*

## 4.2 Indicators of Environmental Health

Participants were asked how to tell if mudpuppies are healthy and what indicators to look for in the mudpuppy and their habitat. Red River Métis Citizens shared that clean, healthy waters low in toxins are vital to this species. Likewise, several Red River Métis Citizens said that a thriving population of mudpuppies is good indicator of clean, healthy waters.

*If the species is improving, it could be a positive indicator that our lakes and rivers are getting healthier, possibly due to reduced pollution or better resource management.*

Some Citizens also shared that observing mudpuppy activity, growth, and movement are indicators of healthy populations.



Several Red River Métis Citizens expressed that a lack of education about mudpuppies has led to their misidentification by Citizens. Despite this, several Citizens emphasized that mudpuppies are an integral part of a much larger ecosystem, including as a food source for big birds such as herons and for fish. One participant summarized the overall importance of the mudpuppy to the health of the environment, stating:

*When a species like the mudpuppy starts to disappear or decline, it often signals deeper issues within the ecosystem—especially water quality. Even though many of us may not have heard of mudpuppies before, or didn't recognize them when younger, there is an intuitive understanding that every species has a role to play. If these creatures are declining, it could reflect imbalances in the water systems we rely on for fishing, harvesting, and cultural activities.*

Another comment from a Red River Métis Citizen clearly identified how the mudpuppy is not only an indicator of environmental health, but of cultural wellbeing as well. As mudpuppies reflect a thriving aquatic ecosystem, their presence supports the vitality of other species upon which the Red River Métis rely for commercial and subsistence purposes.

*From a Métis harvesting perspective, we know that when fish and other aquatic species begin to dwindle, something is out of balance. The mudpuppy lives in the same freshwater systems that sustain our fishing traditions—like Lake Winnipeg and its many tributaries. If these waters are being overfished or impacted by pollution or development, then species like the mudpuppy are likely suffering too. The decline in mudpuppies might be connected to larger issues, such as habitat disruption, sedimentation, or even climate change affecting our lakes and rivers.*

## 4.3 Threats and Concerns

In pre-listing the mudpuppy as threatened, ECCC has identified major threats to the mudpuppy. These threats include the following:

- Agriculture
- Forestry
- Climate change
- Flood control
- River channelization activities
- Invasive species



When asked to identify any missing threats from ECCC's list, Red River Métis Citizens reported that the following threats must be added:

- Hydroelectric generating stations
- Human recreation activities, such as fishing and water sports
- Pollution and contaminated waters
- Lack of awareness about the species and its importance in the ecosystem

Of these threats, many Red River Métis Citizens focused on the dangers of misinformation and a lack of awareness. Some respondents expressed concerns about people potentially killing mudpuppies when finding them, due to a lack of understanding.

## 4.4 Conservation and Recovery

MMF staff asked Citizens what they felt could be done to minimize the threats to mudpuppies and what conservation strategies could be implemented. Participants offered solutions that fall into three broad categories of (1) education, (2) research, and (3) regulations to protect the water and mudpuppy habitat.

Several participants mentioned that they were not previously aware of this species. They said that both Red River Métis Citizens, as well as the public, could benefit from awareness-raising programs. Red River Métis Citizens recommended educational materials, targeted outreach to Red River Métis Citizens, and MMF-led information sessions to inform people about the mudpuppy and the issues that are threatening the species. They also shared that storytelling could function as a culturally appropriate method for education, and emphasized the potential benefit of creating multimedia awareness and educational materials. These materials may include short videos that could be played during MMF-run events, in schools, and during cultural programming. Citizens also recommended specific programs targeted at people who fish to ensure that incidentally caught mudpuppies are released properly. Several participants emphasized the importance of involving youth in education campaigns and the value of intergenerational knowledge transfer in meeting this goal.

Some Red River Métis Citizens recommended the implementation of research and monitoring programs to understand mudpuppy behaviour, population sizes, and habitat areas. One participant suggested a summer student project on mudpuppies to count numbers and study their habitat. Others recommended a reporting mechanism with photographs, similar to other commonly used mobile application tools such as *iNaturalist*.

Red River Métis Citizens would like to see government regulation to limit the use of fertilizers, nitrates, and phosphates, as well as regulations around water conservation, control of invasive species, and protection of wetlands. Citizens also recommended a program where commercial fishermen report



mudpuppy quantities to the MMF to share with the Manitoba's Ministry of Natural Resources and Indigenous Futures. Others suggested controlled-habitat breeding programs.

MMF staff asked Citizens if they felt a mudpuppy recovery strategy would have a direct impact on them or their ability to exercise their Red River Métis rights, claims, and interests. Survey respondents indicated that they did not currently have any concerns, although their view may change if recovery strategies restrict access to certain areas. Access restriction may be of concern and may limit harvesting or connection to the lands and waters. In the survey, MMF staff provided a variety of potential opportunities to involve Red River Métis Citizens in mudpuppy management activities, and asked Citizens to choose their preferred methods. All respondents indicated that they would like to be involved in some manner. Most of them preferred a combination of online and in-person activities for planning and reviewing future policies, as well as being involved in land-based events to participate in restoration activities and share knowledge about mudpuppies. Table 1 shows the percentage of respondents who chose the different options proposed.

*Table 1. Red River Métis Citizen preferred involvement in mudpuppy management activities*

Possible mudpuppy management activities	People preferring this option (%)
Online participatory planning sessions or focus groups for mudpuppy recovery strategies, policies, or initiatives	62.50
In-person participatory planning sessions or focus groups for mudpuppy recovery strategies, policies, or initiatives	70.83
Interactive online platforms for reviewing proposed mudpuppy recovery strategies, policies, or initiatives	50.00
Online comment or submission to voice concerns or report issues related to mudpuppy recovery strategies, policies, or initiatives	54.17
Dedicated phone line or email address to contact MMF staff about issues related to mudpuppy recovery strategies, policies, or initiatives	41.67
Mudpuppy habitat restoration activities	75.00
Land-based events celebrating mudpuppy and other species at risk (e.g., knowledge-sharing sessions, events focused on species of importance to Red River Métis way of life and traditional economies)	87.50
Co-creation and design of mudpuppy recovery programs with federal regulators (i.e., involvement in design of programs)	37.50
Co-analysis of the results of mudpuppy management, recovery, and monitoring programs (i.e., opportunity to see data and make assessments)	54.17
None, I do not wish to be involved in mudpuppy management and recovery	0.00



The survey provided Red River Métis Citizens with potential options for how Citizens would like to be engaged and receive information from the MMF about topics related to mudpuppy management and recovery. All survey respondents indicated that they would like to receive communication about mudpuppy management and recovery, and most indicated that a combination of options was preferred. Several attendees at the Community Engagement Session echoed these comments and recommended that the MMF regularly communicate with Red River Métis Citizens about the wellbeing of mudpuppies and their habitats. The preferred options were email newsletters, information posted on the MMF website in both written and visual formats, and in-person community consultation sessions. Table 2 shows the percentage of survey respondents who chose the different communication options proposed.

*Table 2. Red River Métis Citizen preferred communication methods about mudpuppy management activities*

Communication methods	People preferring this option (%)
Email newsletters or updates	75.00
Virtual meetings on specific management and recovery approaches	41.67
Interactive online surveys	45.83
Social media updates	50.00
Live Q&A sessions	33.33
In-person community consultation meetings	70.83
Workshops on mudpuppy management strategies and approaches	54.17
In-person participatory planning sessions or focus groups	58.33
Fact sheets, brochures, and infographics posted to the MMF website	70.83
Educational videos and documentaries posted to the MMF website	75.00
None, I do not wish to be engaged in mudpuppy management and recovery	0.00

## 4.5 Technical Review

While originally assessed as Not at Risk under the federal Species at Risk Act (SARA), the updated evaluation of the mudpuppy will trigger the consideration for status addition under Schedule 1 of SARA. Such a change in status would be accompanied by upgraded protections for the species and their habitats. Under SARA, updated Threatened status for the mudpuppy (Manitoba population) will also require the federal minister (Parks Canada, Fisheries and Oceans, or Environment, depending on jurisdiction) to include “aboriginal organizations directly affected by the management plan” to the “extent possible” in the development of a plan (Section 66[1][d]) (Government of Canada, SC 2002).



Under Manitoba's Endangered Species and Ecosystems Act, threatened species are those at risk of becoming endangered in the near future or are considered threatened because of low or declining numbers in the province (considered particularly at risk if the factors affecting its vulnerability do not become reversed). While currently considered vulnerable (S3) in Manitoba, the future of the mudpuppy in the National Homeland might be at risk due to factors such as restricted range and habitat alteration or loss, warranting a similar review of the species' provincial status. Both individual and habitat protections would be afforded by the Threatened status under provincial legislation, and this would include the establishment of Ecosystem Preservation Zones (EPZs) on provincial Crown Lands.

The MMF, through engagement with Red River Métis Citizens, has found significant inferred or observed declines in the Manitoba population. The engagement also underscored the extent to which the mudpuppy indicates health of the ecosystems upon which the Red River Métis Citizens practise traditional and cultural rights. As such, the MMF requests that the process of upgrading the mudpuppy's status be expedited immediately. Adaptive management must be incorporated into the ongoing management updates for the mudpuppy at the federal and provincial levels to ensure updated information received through ongoing monitoring and study is meaningfully integrated (i.e., range boundaries or protections adjusted to retain currency and relevancy, if research warrants further change).

The MMF, and by extension Red River Métis Citizens, must be engaged prior to drafting the new Management Plan for the species. This will ensure more fulsome information is presented on the species' existing conditions, especially within the National Homeland of the Red River Métis. The current species' range boundaries and distribution for Manitoba and throughout Canada in the Summary rely heavily on incidental observations and do not currently include the extensive Ecological Knowledge of Red River Métis Citizens. For example, during engagement sessions, Red River Métis Citizens reported observing mudpuppies beyond the current range proposed in the Summary, including sites near McKenzie Bay, the northern basin of Lake Winnipeg and its tributaries, Gimli, Hecla Island area, Lake of the Woods, various hydroelectric generating stations, and bridges near Highway 13.

Immediate commitments must also be made by the provincial and federal ministers in charge of environment and climate change to standardize survey protocols and establish what would constitute critical habitat, to help better understand population trends and distribution for the Manitoba population of mudpuppy. These protocols should also include testing for the at-risk salamander mussel, for which the mudpuppy is a host species, and no information is known about its potential range in Manitoba. MMF wishes to work collaboratively with the province to generate local awareness and interest for the mudpuppy, establish and implement EPZs or other Indigenous Protected and Conserved Areas (IPCAs) that protect and support study of local populations, and improve baseline characterization of this unique species' populations in the National Homeland of the Red River Métis.

The table below more fully presents the MMF's comments and associated recommendations for the sustainable management of the mudpuppy within the National Homeland of the Red River Métis.





Comment #	Reference	Comment	Recommendation
1	General comment	<p>Red River Métis Citizens support the immediate review and consideration of Threatened status for mudpuppy (Manitoba population) in Canada. Updated federal status will also trigger further consideration of provincial commitments to protecting and recovering species at risk.</p> <p>Immediate commitments must be made by the federal minister and the provinces to standardize survey protocols that help better understand population trends and ensure currency in the data presented.</p>	<p>Protections afforded under Threatened status for mudpuppy (Manitoba population) would allow both individual and habitat safeguards, including Ecosystem Preservation Zones on provincial Crown lands, but this needs to be adequately informed by rigorous scientific data, Red River Métis Ecological Knowledge, and public input under the provincial framework. There are recent scientific studies and ongoing research for the mudpuppy in Manitoba. The MMF is also working to establish Indigenous Protected and Conserved Areas (IPCAs) in the Manitoba that may be beneficial for future monitoring or study of the mudpuppy that may improve distribution information available for the province. In addition, the MMF can support addressing data gaps with existing programs that focus on community-based water monitoring and eDNA testing. These programs can be expanded to potentially include population surveys and/or testing for the at-risk salamander mussel.</p> <p>The MMF expects further engagement with the federal minister to develop the plan for the mudpuppy (Manitoba population). Further international conservation collaboration with neighbouring organizations and development of effective reporting mechanisms for ice fishing bycatch should be a priority for the future Management Plan required under SARA. Adaptive management must also be a central theme of the Management Plan, with any updated information received through ongoing monitoring and study integrated into the plan within five years to retain currency and relevancy. Range boundaries and protections should also be adjusted if research and engagement results warrant adjustments.</p>



Comment #	Reference	Comment	Recommendation
2	Distribution; population sizes and trends	There are noted limitations in available, consistent, and current data that highlight the need for more monitoring to establish a better baseline distribution for the species in Manitoba and throughout Canada.	<p>Education or training sessions and regular communications with the MMF can generate local interest in the species. There are Red River Métis Citizen observations of mudpuppy throughout the National Homeland, that would greatly improve the current range boundary proposed in Manitoba.</p> <p>As mentioned in the above recommendation, the MMF notes potential testing for salamander mussel (e.g., eDNA sampling), water quality, and quantity monitoring may support standardizing monitoring methods and target sampling locations to improve available information. The MMF requests to work collaboratively to modify or expand on existing programs and study IPCAs being established by Red River Métis Citizens.</p>
3	Distribution; population sizes and trends	Current mudpuppy (Manitoba population) range boundaries and distribution rely heavily on incidental observations and do not currently include the extensive Ecological Knowledge of Red River Métis Citizens.	<p>During engagement sessions, Red River Métis Citizens reported observing the mudpuppy beyond the current range proposed in the Summary, including sites near McKenzie Bay, the northern basin of Lake Winnipeg and its tributaries, Gimli, Hecla Island area, Lake of the Woods, various hydroelectric generating stations, and bridges near Highway 13.</p> <p>The MMF recommend further adjustments to the range boundaries that include meaningful engagement and consultation.</p>

## 5.0 Recommendations and Conclusions

The MMF supports the immediate upgraded listing of the mudpuppy (Manitoba population) in Canada, to Threatened status under SARA. Red River Métis Citizens consider the mudpuppy an indicator of a healthy environment; mudpuppy decline often signals deeper ecosystem issues that include potentially harmful changes in water quality or quantity. The continued impacts of farming, forestry, industry, hydroelectricity, and other infrastructure have played an important role in the observed and inferred



declines of the species across the National Homeland of the Red River Métis and highlight the need for standardized protocols to adequately monitor and assess the mudpuppy (and associated at-risk species).

The technical and qualitative data presented in the COSEWIC Executive Summary also indicate the necessity for ongoing collaboration and consultation with the MMF that ensure appropriate range boundaries are evaluated, to avoid undue impacts to these critical species and their habitats. Doing so requires an understanding from the minister of ECCC that the Red River Métis have unique knowledge gained through generations of relationships to lands and waters of the National Homeland.

The MMF requests that the minister and department of ECCC commit to the following:

- Collaborate with international and provincial governments to standardize survey protocols and reporting mechanisms for bycatch, to help better understand population trends and ensure currency in the data presented. Sampling specifically for salamander mussel (e.g., eDNA sampling), water quality, and quantity monitoring may support standardizing monitoring methods and target sampling locations to improve on available information.
- Provide the MMF with funding capacity for MMF-led monitoring initiatives to benefit the mudpuppy that include existing programs for water quality and quantity monitoring, eDNA sampling, and benthic assessments, which could be expanded to include bycatch reporting and sampling for salamander mussel.
- Collaborate directly with the MMF and engage Red River Métis Citizens to update the existing range boundaries and distribution data across the National Homeland (e.g., training/education, expanding and collaborating on community-led monitoring programs and research, Management Plan for mudpuppy [Manitoba population]).

The MMF looks forward to continuing to engage with ECCC regarding the status and management of the mudpuppy and other species-at-risk initiatives within the National Homeland of the Red River Métis.

## 6.0 References

COSEWIC. 2023. COSEWIC assessment and status report on the Mudpuppy *Necturus maculosus*, Manitoba population and Great Lakes/St. Lawrence population in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xvi + 78 pp. ([Species at risk public registry](#)).

