Work Plan Application

Project Information	
Project Title:	Fort McKay Metis Nation (FMMN) Community-Based Environmental Program (CBEMP): Data Tool Phase 2
Lead Applicant, Organization, or Community:	Margaret Luker, Fort McKay Metis Nation
Work Plan Identifier Number: If this is an on-going project please fill the identifier number for 24/25 fiscal by adjusting the last four digits: **Example:** D-1-2425 would become D-1-**2425**	fmmn-01-24
Project Region(s):	Oil Sands Region
Project Start Year: First year funding under the OSM program was received for this project (if applicable)	2023/24
Project End Year: Last year funding under the OSM program is requested **Example: 2024**	2026
Total 2024/25 Project Budget: From all sources for the 2024/25 fiscal year	$330,000.00
Requested OSM Program Funding: For the 2024/25 fiscal year	$330,000.00
Project Type:	Community Based Monitoring
Project Theme:	Data Mgmt, Analytics and Prediction
Anticipated Total Duration of Projects (Core and Focused Study (3 years))	Year 3
Current Year (choose one):	Focused Study Year 2 of 3
	Core Monitoring Year 2 of 3

Contact Information

Lead Applicant/ Principal Investigator: Every work plan application requires one lead applicant. This lead is accountable for the entire work plan and all deliverables.	Margaret Luker, Fort McKay Metis Nation
Job Title:	Agreement Relations Manager
Organization:	Fort McKay Metis Nation (FMMN)
Address:	Box 119, Riverstone PO, Fort McMurray, Alberta, T9K 2Y4
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Project Summary

In the space below, please provide a summary of the proposed project that includes a brief overview of the project drivers and objectives, the proposed approach/methodology, project deliverables, and how the project will deliver to the OSM Program objectives. The summary should be written in plain language and **should not exceed 300 words**.

The proposed Community-based Environmental Monitoring Program (CBEMP) Data Tool is an initiative to establish one secure web-based platform to store, manage, analyze, and interpret CBEMP data collected by the Fort McKay Métis Nation (FMMN). CBEMP by FMMN complements the OSMP by directly addressing the FMMN's concerns about cumulative effects in their traditional territory.

In the 2023/24 funding year, CBEMP Data Tool development is in progress. CBEMP data have been sourced and manually cleaned to be in a format that can be read into a database. In addition, standard data formats are developed to allow data uploads to the database in the future, reducing manual data entry and management errors and effort. The FMMN CBEMP data types include air/odour, berry quality, wildlife camera, surface water and pore water chemistry, groundwater and surface water level, fish and benthic invertebrate tissue chemistry, benthic taxonomy, fish age, and wetland health parameters. By the end of the 2023/24 funding year, the CBEMP will include all CBEMP data up to the end of 2022 and will have interactive data visualizations available for each type of data and parameter.

The 2024/25 fund application is for the continued development of the Data Tool after the basic building blocks have been developed in 2023/24. With all of the CBEMP data compiled, the Data Tool development will move on to next phase to further automate data analysis, concentrate on data interpretation and key community questions, result communication, and to connect data between monitoring program that were in silos. The planned tasks include data standard implementation, adding custom data visualizations and statistical analysis, adding data interpretation aids such as pop up windows, and translation of key Data Tool content to Cree language. The Data Tool development team is in contact with SIKIC, and ICBMAC to fulfill 2023/24 funding conditions.

1.0 Merits of the Work Plan

All work plans under the OSM Program must serve the mandate of the program by determining (1) if changes in indicators are occurring in the oil sands region and (2) if the changes are caused by oil sands development activities and (3) the contribution in the context of cumulative effects. In the space below please provide information on the following:

- Describe the key drivers for the project identifying linkages to Adaptive Monitoring framework particularly as it relates to surveillance, confirmation and limits of change (as per OC approved Key Questions).
- Explain the knowledge gap as it relates to the Adaptive Monitoring that is being addressed along with the context and scope of the problem as well as the Source - Pathway - Receptor Conceptual Models .
- Describe how the project meets the mandate of the OSM Program or areas of limited knowledge is the work being designed to answer with consideration for the TAC specific Scope of Work Document (attached) and the Key Questions (attached)?
- Discuss results of previous monitoring/studies/development and what has been achieved to date. Please identify potential linkages to relevant sections of the State of Environment Report.

FMMN's CBEMP data are valuable and require systematic approach to data management and analysis that is controlled by the community. The main drivers for the proposed Data Tool are to allow FMMN to use data collected under the CBEMP to systematically evaluate cumulative effects in its traditional territory and allow for the efficient and transparent analysis of the western science data collected under the CBEMP. With the Data Tool, CBEMP data collected by FMMN are consistently and reproducibly managed and quality controlled, and data are available to FMMN for evaluation and analysis in a timely manner. The Data Tool allow the CBEMP scientists to communicate and display the analytical findings in an interactive and intuitive way to the FMMN community and various stakeholders. The community looks for concise communication of CBEMP results that relate to their concerns over cumulative effects in their traditional territory, and the continued development of the Data Tool is a critical step in achieving the community's needs to understand CBEMP results.

The 2024/25 Data Tool work plan is focused on implementing near real-time data uploads in standard data formats, working with FMMN's scientist teams to provide automated, transparent, and reproducible data analysis that answers the CBEMP key questions, and communicating conclusions to the community in a clear and concise way. The 2023/24 Data Tool work plan focused on bringing the data together in a standard format, which required a substantial manual effort. For 2024/25 year, a gap analysis will be completed for CBEMP data analysis and interpretation needs and result communication needs with FMMN's scientist teams and the community. Additionally, the Data Tool will be functional for data uploads and immediate data visualization for FMMN's scientist teams in 2024/25.

The Data Tool has been designed to manage and monitor privileged access to the data and data analysis to ensure that the community and their scientist teams have the appropriate level of access to the data they need. The open source-based Data Tool design components allow flexibility for any future modifications of the tool.

2.0 Objectives of the Work Plan

List in point form the objectives of the 2024/25 work plan below

The proposed 2024/25 work plan continues the development of the Data Tool to meet the community's needs for CBEMP data interpretation and key result communication.

3.0 Scope

Evaluation of Scope Criteria (Information Box Only- No action required)

Your workplan will be evaluated against the criteria below. A successful workplan would:

- Be in scope of the OSM Program (e.g., regional boundaries, specific to oil sands development, within boundaries of the Oil Sands Environmental Monitoring Program Regulation)
- consider the TAC-specific Scope of Work document and the key questions
- integrate western science with Indigenous Community-Based Monitoring)
- address the Adaptive Monitoring particularly as it relates to surveillance, confirmation and limits of change as per approved Key Questions.
- have an experimental design that addresses the Pressure/Stressor, Pathway/Exposure, Response continuum
- produce data/knowledge aligned with OSM Program requirements and is working with Service Alberta
- uses Standard Operating Procedures/ Best Management Practices/ Standard Methods including for Indigenous Community-Based Monitoring

3.1 Theme

Please select the theme(s) your monitoring work plan relates to:

- ☐ Air
- ☐ Groundwater
- ☐ Surface Water
- ☐ Wetlands
- ☐ Terrestrial Biology
- ☑ Data Management Analytics & Prediction
- ☐ Cross Cutting

3.2 Core Monitoring, Focused Study or Community Based Monitoring

Please select from the dropdown menu below if the monitoring in the work plan is “core monitoring” and/or a “focused study”. Core monitoring are long term monitoring programs that have been in operation for at least 3 years, have been previously designated by the OSM program as core, and will continue to operate into the future. Focused studies are short term projects 1-2 years that address a specific emerging issue.

Community Based Monitoring

Themes

Please select the theme from the options below. Select all that apply.

- ☐ Air
- ☐ Groundwater
- ☐ Surface Water
- ☐ Wetland
- ☐ Terrestrial
- ☑ Cross-Cutting

3.3.6 Cross-Cutting Across Theme Areas

3.3.6.1 Sub Themes

Other: (Describe in space below)

If “Other” was selected from the drop down list above please describe below:

Data Management AND Integrated Analytics & Cumulative Effects AND QA/QC/Standards/Methods AND Geospatial

3.3.6.2 Cross-Cutting - Key Questions:

Explain how your cross-cutting biological monitoring program addresses the key questions below.

Is data produced following OSM Program requirements and provided into the OSM Program data management system?

Yes, FMMN CBEMP conforms with OSM Program requirements. CBEMP data are protected by default and released at the discretion of FMMN because datasets include Indigenous Knowledge.

Do methodologies use relevant Standard Operating Procedures/ Best Management Practices/ Standard Methods?

Yes, OSM Standard Operating Procedures/Best Management Practices/Standard Methods for data management, integrated analytics, and cumulative effects will be analyzed in a transparent and reproducible manner in the CBEMP Data Tool.

How does the monitoring identify integration amongst projects, themes or with communities?

Yes, the proposed Data Tool allows for the consistent management of all types of CBEMP data collected by FMMN, allowing for integration of data across OSM themes. The learnings from the Data Tool development may be shared with other communities, allowing for development of similar tools across the region.

With consideration for adaptive monitoring, where does the proposed monitoring fit on the conceptual model for the theme area relative to the conceptual model for the OSM Program?

The proposed Data Tool provides a platform to systematically and transparently analyze CBEMP data and address FMMN community concerns over cumulative effects in their traditional territory.

How will this work advance understanding transition towards adaptive monitoring?

The proposed Data Tool integrates data from several theme areas.

Is the work plan contributing to Programmatic State of Environment Reporting? If yes, please identify potential linkages to relevant sections of the State of Environment Report.

In addition to benefits to the FMMN for CBEMP data access, the Data Tool will allow FMMN to contribute Indigenous Knowledge and CBEMP data to the State of the Environment reporting.

4.0 Mitigation

Evaluation of Mitigation Criteria (Information Box Only- No action required)
Your workplan will be evaluated against the criteria below. A successful workplan would potentially inform:

- efficacy of an existing regulation or policy
- an EPEA approval condition
- a regional framework (i.e., LARP)
- an emerging issue

Explain how your monitoring program informs management, policy and regulatory compliance. As relevant consider adaptive monitoring and the approved Key Questions in your response.

The CBEMP satisfies the FMMN community's needs (i.e., an emerging issues) and fits the philosophy of the ICBM Program Framework as well as the confirmation step of the adaptive monitoring framework. The Data Tool improves timely access to data and allows for efficient data analysis by FMMN and contributes to the State of the Environment reporting.

5.0 Indigenous Issues

Evaluation of Indigenous Issues Criteria (Information Box Only- No action required)
Your workplan will be evaluated against the criteria below. A successful workplan would potentially:

- Investigate Indigenous communities key questions and concerns
- Includes culturally relevant receptor(s) and indicator(s)
- Include or be driven by Indigenous communities (participatory or collaborative)
- Develop capacity in Indigenous communities
- Include a Council Resolution or Letter of Support from one or more Indigenous communities
- Describe how ethics protocols and best practices regarding involvement of Indigenous peoples will be adhered to
- Provide information on how Indigenous Knowledge will be collected, interpreted, validated, and used in a way that meets community Indigenous Knowledge protocols

Explain how your monitoring activities are inclusive and respond to Indigenous key questions and concerns and inform the ability to understand impacts on concerns and inform Section 35 Rights

CBEMP was initiated by FMMN and directly responds to the community's concerns and needs regarding impacts of oil sands development in their traditional territory, which are and continue to affect FMMN's ability to exercise their Aboriginal Rights and culture. Managing, analyzing, and interpreting CBEMP data meets FMMN's goals of understanding and mitigating cumulative effects in their traditional territory. The proposed Data Tool will allow FMMN to make risk-based decisions and prioritize monitoring and management to those of the greatest risk and concern to FMMN.

Does this project include an Integrated Community Based Monitoring Component?

No

If YES, please complete the ICBM Abbreviated Work Plan Forms and submit using the link below

ICBM WORK PLAN SUBMISSION LINK

5.1 Alignment with Interim Ethical Guidelines for ICBM in the OSM Program

Are there any community specific protocols that will be followed?

N/A

Does the work plan involve methods for Indigenous participants to share information or knowledge (e.g. interview, focus group, survey/structured interview), or any other Indigenous participation? If yes, describe how risks and harms will be assessed, and the consent process that will be used.

N/A

Do the activities include any other collecting/sharing, interpreting, or applying Indigenous knowledge? Please describe how these activities will be conducted in alignment with the Interim Ethical Guidelines, and any community-based protocols and/or guidelines that may also apply.

N/A

Indicate how Indigenous communities / Indigenous knowledge holders will be involved to ensure appropriate analysis, interpretation and application of data and knowledge.

N/A

How are Indigenous communities involved in identifying or confirming the appropriateness of approach, methods, and/or indicators?

N/A

How does this work plan directly benefit Indigenous communities? How does it support building capacity in Indigenous communities?

N/A

How is the information from this work plan going to be reported back to Indigenous communities in a way that is accessible, transparent and easy to understand?

N/A

6.0 Measuring Change

Evaluation of Measuring Change Criteria (Information Box Only- No action required)

Your workplan will be evaluated against the criteria below. A successful workplan would potentially:

- assess changes in environmental conditions compared to baseline (e.g., validation of EIA predictions)
- report uncertainty in estimates and monitoring is of sufficient power to detect change due to oil sands development on reasonable temporal or spatial scales
- include indicators along the spectrum of response (e.g., individual, population, community)
- focus on areas of highest risk (where change is detected, where change is greater than expected, where development is expected to expand collection of baseline).
- measure change along a stressor gradient or a stressor/reference comparison

Explain how your monitoring identifies environmental changes and how can be assessed against a baseline condition. As relevant, consider adaptive monitoring, the TAC specific Scope of Work document and the Key Questions in your response.

The proposed Data Tool will consolidate western science and Indigenous Knowledge indicators collected under the CBEMP components and will provide data visualization tools for the FMMN. As CBEMP data can be more readily processed, quality controlled, and visualized, creating increased opportunities to evaluate cumulative effects.

7.0 Accounting for Scale

Evaluation of Accounting for Scale Criteria (Information Box Only- No action required)

Your workplan will be evaluated against the criteria below. A successful workplan would potentially be:

- appropriate to the key question and indicator of interest
- relevant to sub-regional and regional questions
- relevant to organism, population and/or community levels of biological organization
- where modelled results are validated with monitored data
- where monitoring informs on environmental processes that occur at a regional scale. e.g. Characterizing individual sources to gain a regional estimate of acid deposition and understand signal from individual contributing sources.

Explain how your monitoring tracks regional and sub-regional state of the environment, including cumulative effects. As relevant, consider adaptive monitoring, the TAC specific Scope of Work document and the Key Questions in your response.

The CBEMP data are directly relevant to subregional concerns raised by the FMMN. The Data Tool initiative consolidates CBEMP data and allows for the assessment of historical trends in the FMMN traditional territory to measure change in Indigenous indicators that are important to FMMN.

8.0 Transparency

Evaluation of Transparency Criteria (Information Box Only- No action required)
Your workplan will be evaluated against the criteria below. A successful workplan would potentially include:

- a plan for dissemination of monitoring data, including appropriate timing, format, and aligns with OSM program data management plan
- demonstrated transparency in past performance
- identified an annual progress report as a deliverable
- reporting of monitoring results occurs at timing and format that is appropriate for recipient audience.

Explain how your monitoring generates data and reporting that is accessible, credible and useful. As relevant, consider adaptive monitoring, the TAC specific Scope of Work document and the Key Questions in your response.

The Data Tool allows for FMMN to efficiently store, analyze and interpret CBEMP data. The 2023/24 Data Tool development included a full QA/QC of CBEMP data collected to the end of 2022, the creation of data standard for future data, and the automatisation of data QA/QC. The Data Tool allows for FMMN to share CBEMP data for the State of the Environment reporting at FMMN's discretion.

9.0 Efficiency

Evaluation of Efficiency Criteria (Information Box Only- No action required)
Your workplan will be evaluated against the criteria below. A successful workplan would include:

- appropriately addressed a risk-informed allocation of resources
- identified the role and justification for each staff member on the proposed work plan
- identified in-kind and leveraged resources (e.g., resources and approaches are appropriately shared with other OSM projects where possible)
- established partnerships (value-added) and demonstrated examples of coordinated efficiencies (e.g., field, analytical)
- identified co-location of monitoring effort
- demonstrated monitoring activities and information collected are not duplicative
- considered sampling/measurement/methods compatibility to other data sources (e.g., AER)

Explain how your monitoring is integrated with other OSM projects and incorporates community-based participation and/or engagement in proposed monitoring activities. As relevant, consider adaptive monitoring, the TAC specific Scope of Work document and the Key Questions in your response.

FMMN CBEMP is fully community-led and executed program. The individual monitoring components (e.g., groundwater, surface water, wetlands, and berries) have been integrated at the TAC-level and ICBMAP.

10.0 Work Plan Approach/Methods

List the Key Project Phases and Provide Bullets for Each Major Task under Each Project Phase

The Project is a continuation of Data Tool development from 2023/24. The first year of development successfully compiled all existing CBEMP data (up to the end of 2022) in the database and included time series data visualizations for each site and parameter, and sampling sites on a map interface. Some custom visualization were completed in 2023/24, but the majority of the effort was spent on data sourcing, sorting, cleaning, and generating the secure web-based interactive data visualization interface. During the data clean-up phase, standardized data formats for the database entry were developed and these are planned to be rolled out in 2024. The completed Data Tool development steps have identified some raw data gaps, which are being addressed, and opportunities for further data analysis and interpretation to answer key CEBMP questions.

In 2024/25, the following additional Data Tool development steps are envisioned:
- Two in-person community meetings in Fort McKay to present progress on Data Tool development and seek community feedback for key questions and data interpretation needs.
- FMMN has identified that translation of key content to Cree language and using site names that are traditionally used in the community is a priority for communicating CBEMP results. The 2024/25 work plan includes time for identifying key content to be translated and translation costs.
- Continue to develop Data Tool capabilities based on FMMN consultant and community feedback, including customized data visualizations, statistical data analysis, and data interpretation aids. The focus of this development is to answer the community's concerns and questions on cumulative effects in a more standardized and transparent manner.
- Continue Data Tool hosting and user support (for the first year of use, will require more support than subsequent years).
- Apply a data standard for each CBEMP monitoring component in FMMN's consulting contracts for 2024/25 and supporting FMMN’s staff and consultants in uploading data to the Data Tool. This task will involve liaising with FMMN’s consultants, analytical laboratories, and taxonomic laboratories to produce all 2024 CBEMP data in standard structures/formats, as well as supporting FMMN staff and consultants in uploading data.
- Batch import of 2023 CBEMP data, as the standard data formats will not be applicable until for 2024 contracts by FMMN. This will involve sourcing 2023 CBEMP data in editable raw formats and adding to the Data Tool database. The effort will be substantially less than the overall data sourcing for all historical data in 2023/24.

Describe how changes in environmental Condition will be assessed

The Data Tool development in 2024/25 will include CBEMP data visualizations and statistical analysis options, such as trend analysis, to answer key monitoring questions. FMMN's scientist teams will inform the Data Tool development team of gaps in data analysis and interpretation, which will be filled in 2024/25.

Are there Benchmarks Being Used to Assess Changes in Environmental Condition? If So, Please Describe, If Not, State "NONE"

Based on work completed in 2023/24, the Data Tool includes applicable federal and provincial environmental quality guidelines to allow for comparison of CBEMP data results to guidelines. In addition, community-based thresholds can be added to the Data Tool. For determining risk to health, FMMN's Risk Assessor will guide the Data Tool development team in automating risk assessment steps to a feasible extent, reducing manual analysis needs.

(e.g., objectives, tiers, triggers, limits, reference conditions, thresholds, etc.)

Provide a Brief Description of the Western Science or Community-Based Monitoring Indigenous Community-Based Monitoring Methods by Project Phase

Transparent and reproducible data upload, processing, and quality control steps developed for the Data Tool are in keeping with the OSM program data management plan, as appropriate.

List the Key Indicators Measured, If Not Applicable, State N/A

Grounwater and surface water quality chemical and physical parameters, fish and benthic invertebrate tissue chemistry, fish biology, benthic invertebrate taxonomy, berry contaminants, wetland vegetation health, and air quality and odour, soil quality parameters, and wildlife abundance

11.0 Knowledge Translation

In the space below, please provide the following:

- Describe the plan for knowledge transfer and distribution of learnings from the project. This could include workshops, publications, best practice documentation, marketing plan, etc.
- Demonstrate that the knowledge transfer plan is appropriate for the intended end-users.

Knowledge gained through the Data Tool project will be available to the FMMN community via various platforms (e.g., phone, laptop, etc.) and in various visual formats. The community may share CBEMP results vis community newsletter and Facebook page. The Data Tool will be used source of information for the community to understand impacts in their traditional territory. At FMMN's discretion, CBEMP data can also contribute to the State of the Environment reporting. Furthermore, the FMMN-led Data Tool development may yield scholarly work that will be shared via presentations and peer-reviewed articles.

The 2023/24 funding conditions to communicate with the Data TAC, SIKIC and ICBMAC are being met and these communication lines will be kept open in the 2024/25 funding cycle.

12.0 External Partners

List by project or project phase each component that will be delivered by an external party (including analytical laboratories) and name the party. Describe and name the associate work plan/grant/contract for these services. * state none if not required

FMMN leads the Data Tool development with the support from Analythium Solutions Inc. and Avanti Environmental Consulting Ltd. Additionally, FMMN may rengage a consultant for Cree translations.

*To ensure complete work plan proposal submission, all grants and contracts listed in this section should also be captured in Grants & Contracts.

13.0 Data Sharing and Data Management

For 2024-25 the following approach will be taken by the OSM Program related to data sharing.

For all work plans of a **western science** nature funded under the OSM Program, data sharing is a condition of funding and must align with the principle of **"Open by Default"**. In this case, all data is to be shared with the OSM Program as directed by the OSM Program Data Management work plan.

For all work plans involving **Indigenous Knowledge** as defined below and funded under the OSM Program, data sharing is a condition of funding and the Indigenous Knowledge components of the work plan must align with the principle of **"Protected by Default".** In this case, all data as defined as Indigenous Knowledge, are to be retained by the Indigenous community to which the Indigenous Knowledge is held.

Indigenous Knowledge is defined as:

*"*The knowledge held by First Nations, Inuit and Métis peoples, the Aboriginal peoples of Canada. Traditional knowledge is specific to place, usually transmitted orally, and rooted in the experience of multiple generations. It is determined by an Aboriginal community's land, environment, region, culture and language. Traditional knowledge is usually described by Aboriginal peoples as holistic, involving body, mind, feelings and spirit. Knowledge may be expressed in symbols, arts, ceremonial and everyday practices, narratives and, especially, in relationships. The word tradition is not necessarily synonymous with old. Traditional knowledge is held collectively by all members of a community, although some members may have particular responsibility for its transmission. It includes preserved knowledge created by, and received from, past generations and innovations and new knowledge transmitted to subsequent generations. In international or scholarly discourse, the terms traditional knowledge and Indigenous knowledge are sometimes used interchangeably.*"*

This definition was taken from the Canadian Government's Tri-council Policy Statement for Ethical Research involving Humans (Chapter 9, pg. 113) and is an interim definition specific to the Oil Sands Monitoring Program.

13.1 Has there, or will there be, a Data Sharing agreement established through this Project? *

No

13.2 Type of Quantitative Data Variables**:**

-Select One-

13.3 Frequency of Collection:

-Select One-

13.4 Estimated Data Collection Start Date:

13.5 Estimated Data Collection End Date:

13.6 Estimated Timeline For Upload Start Date:

13.7 Estimated Timeline For Upload End Date:

13.8 Will the data include traditional knowledge as defined by and provided by an Indigenous representative, Community or Organization?

-Select One-

Table 13.9 Please describe below the Location of Data and Data Type:

Add a Data Source by clicking on the add row on the bottom right side of table

Name of Dataset	Location of Dataset (E.g.:Path, Website, Database, etc.)	Data File Formats (E.g.: csv, txt, API, accdb, xlsx, etc.)	Security Classification
FMMN CBEMP Database	Data Tool Database will be hosted online by Analythium	Various source file formats, can be exported in various file formats	Protected by Default

14.0 2024/25 Deliverables

Add an additional deliverable by clicking on the add row on the bottom right side of table

Type of Deliverable	Delivery Date	Description
OSM Program Annual Progress Report (required)	Q4	FMMN CBEMP Data Tool Progress Report delivered by March 31, 2025

15.0 Project Team & Partners

In the space below please provide information on the following:

- Describe key members of the project team, including roles, responsibilities and expertise relevant to the proposed project.
- Describe the competency of this team to complete the project.
- Identify any personnel or expertise gaps for successful completion of the project relative to the OSM Program mandate and discuss how these gaps will be addressed.
- Describe the project management approach and the management structure.

The following experienced team members will deliver the FMMN CBEMP Data Tool:
- Margaret Luker: FMMN Agreement Relations Manager
- Chiara Belverdesi, PhD: FMMN Postdoctoral Fellow
- Foluke Aina: FMMN CBEMP Data Coordinator
- Cree Translation Services
- Khalid Lemzouji, PStat, Senior Statistician (Analythium Solutions Inc.): Data Tool Design Lead
- Peter Solymos, PhD, Senior Data Scientist (Analythium Solutions Inc.): Software Development
- Karoliina Munter, MSc, PBiol, Senior Biologist (Avanti Environmental Consulting Ltd.): Environmental Data Consolidation

FMMN will lead the Data Tool development with selected consultants, and the consultants will continue to develop and Data Tool under FMMN's guidance. The Data Tool team will be working collaboratively to implement CBEMP data standard, identify gaps CBEMP data analysis and interpretation, identify key CBEMP conclusions for community communications, and translate key Data Tool content to Cree. In addition, monthly progress meetings will be held to oversee Data Tool design and development.

Margaret Luker – Fort McKay Métis Nation (FMMN)

Margaret Luker will oversee the project team, track the budget, complete financial reporting, and provide overall project management and coordination between project technical experts.

Margaret is an environmental and conservation science specialist with 20 years' experience focusing on environmental, indigenous, and regulatory issues in the Alberta oil sands. She comes with a strong project management, multi-stakeholder, and negotiation/facilitation background. She is currently managing all the agreements for the FMMN and served as Interim Director for the McKay Metis Sustainability Centre which runs the FMMN community based monitoring program.

16.0 Project Human Resources & Financing

Section 16.1 Human Resource Estimates

Building off of the competencies listed in the previous section, please complete the table below. Add additional rows as necessary. This table must include **ALL staff involved** in the project, their role and the % of that staff's time allocated to this work plan. The AEPA calculated amount is based on an estimate of $120,000/year for FTEs. This number cannot be changed. The OSM program recognizes that this is an estimate.

Table 16.1.1 AEPA

Add an additional AEPA Staff member by clicking on the add row below the table. The total FTE (Full Time Equivalent) is Auto Summed (in Table 16.2.1) and converted to a dollar amount.

Name (Last, First)	Role	%Time Allocated to Project

Table 16.1.2 ECCC

Add an additional ECCC Staff member by clicking on the add row below the table. The total FTE (Full Time Equivalent) is Auto Summed (in Table 16.2.2) and converted to a dollar amount.

Name (Last, First)	Role	%Time Allocated to Project

The tables below are the financial tables for Alberta Environment & Protected Areas (AEPA) and Environment & Climate Change Canada. All work plans under the OSM Program require either a government lead or a government coordinator.

Section 16.2 Financing

The OSM Program recognizes that many of these submissions are a result of joint effort and monitoring initiatives. A detailed "PROJECT FINANCE BREAKDOWN" must be provided using the Project Finance Breakdown Template provided, accessible here. Please note that completion of this Project Finance Breakdown Template is mandatory and must be submitted along with each workplan.

PROJECT FINANCE BREAKDOWN TEMPLATE

Table 16.2.1 Funding Requested BY ALBERTA ENVIRONMENT & PROTECTED AREAS

Organization - Alberta Environment & Protected Areas ONLY	Total % time allocated to project for AEPA staff	Total Funding Requested from OSM
Salaries and Benefits (Calculated from Table 16.1.1 above)	0	$0.00
Operations and Maintenance		
Consumable materials and supplies		
Conferences and meetings travel		
Project-related travel		
Engagement		
Reporting		
Overhead		
Total All Grants (Calculated from Table 16.4 below)		$70,000.00
Total All Contracts (Calculated from Table 16.5 below)		$260,000.00
Sub-Total (Calculated)		$330,000.00

Capital*	
AEPA TOTAL (Calculated)	$330,000.00

* The Government of Alberta Financial Policies (*Policy # A600*) requires that all **capital asset** purchases comply with governmental and departmental legislation, policies, procedures, directives and guidelines. **Capital assets** (*Financial Policy # A100*, Government of Alberta, January 2014) are tangible assets that: have economic life greater than one year; are acquired, constructed, or developed for use on a continuing basis; are not held for sale in ordinary course of operations; are recorded and tracked centrally; have a cost greater than $5,000.
Some **examples of capital asset equipment include:** laboratory equipment, appliances, boats, motors, field equipment, ATV's/snowmobiles, stationary equipment (pier/sign/weather), fire/safety equipment, pumps/tanks, heavy equipment, irrigation systems, furniture, trailers, vehicles, etc. (*Financial Policy # A100*, Government of Alberta, January 2014).

Table 16.2.2 Funding Requested BY ENVIRONMENT & CLIMATE CHANGE CANADA

Organization - Environment & Climate Change Canada ONLY	Total % time allocated to project for ECCC staff	Total Funding Requested from OSM
Salaries and Benefits FTE (Please manually provide the number in the space below)	0	$0.00
Operations and Maintenance		
Consumable materials and supplies		
Conferences and meetings travel		
Project-related travel		
Engagement		
Reporting		
Overhead		
ECCC TOTAL (Calculated)		$0.00

* ECCC cannot request capital under the OSM program. Any capital requirements to support long-term monitoring under the OSM program should be procured by Alberta and captured in that budget table.

Table 16.3

Complete ONE table per Grant recipient.

Add a Recipient by clicking on add table below the table. The total of all Grants is Auto Summed in Table 16.2.1

GRANT RECIPIENT - ONLY: Name	Margaret Luker
GRANT RECIPIENT - ONLY: Organization	Fort McKay Metis Nation
Category	Total Funding Requested from OSM
Salaries and Benefits FTE	$15,000.00
Operations and Maintenance	
Consumable materials and supplies	
Conferences and meetings travel	
Project-related travel	
Engagement	$15,000.00
Reporting	$10,000.00
Overhead	$30,000.00
GRANT TOTAL (Calculated)	$70,000.00

Table 16.4

Complete ONE table per Contract recipient.

Add a Recipient by clicking on add row below the table.. This section is only to be completed should the applicant intend to contract components or stages of the project out to external organizations. The total of all Contracts is Auto Summed in Table 16.2.1

CONTRACT RECIPIENT - ONLY: Name	Khalid Lemzouji
CONTRACT RECIPIENT - ONLY: Organization	Analythium Solutions Inc.
Category	Total Funding Requested from OSM
Salaries and Benefits	$185,000.00
Operations and Maintenance	
Consumable materials and supplies	
Conferences and meetings travel	
Project-related travel	$5,000.00
Engagement	
Reporting	
Overhead	
CONTRACT TOTAL (Calculated)	$190,000.00

CONTRACT RECIPIENT - ONLY: Name	Karoliina Munter
CONTRACT RECIPIENT - ONLY: Organization	Avanti Environmental Consulting Ltd.
Category	Total Funding Requested from OSM
Salaries and Benefits	$65,000.00
Operations and Maintenance	
Consumable materials and supplies	
Conferences and meetings travel	
Project-related travel	$5,000.00
Engagement	
Reporting	
Overhead	
CONTRACT TOTAL (Calculated)	$70,000.00

Table 16.5 GRAND TOTAL Project Funding Requested from OSM Program

The table below is auto calculated, please do not try to manually manipulate these contents.

Category	Total Funding Requested from OSM
Salaries and Benefits Sums totals for salaries and benefits from AEPA and ECCC ONLY	$0.00
Operations and Maintenance	
Consumable materials and supplies Sums totals for AEPA and ECCC ONLY	$0.00
Conferences and meetings travel Sums totals for AEPA and ECCC ONLY	$0.00
Project-related travel Sums totals for AEPA and ECCC ONLY	$0.00
Engagement Sums totals for AEPA and ECCC ONLY	$0.00
Reporting Sums totals for AEPA and ECCC ONLY	$0.00
Overhead Sums totals for AEPA and ECCC ONLY	$0.00
Total All Grants (from table 16.2.1 above) **Sums totals for AEPA Tables ONLY**	$70,000.00
Total All Contracts (from table 16.2.1 above) **Sums totals for AEPA Tables ONLY**	$260,000.00
SUB-TOTAL (Calculated)	$330,000.00
Capital* **Sums total for AEPA**	
GRAND PROJECT TOTAL	$330,000.00

Some **examples of capital asset equipment include:** laboratory equipment, appliances, boats, motors, field equipment, ATV's/snowmobiles, stationary equipment (pier/sign/weather), fire/safety equipment, pumps/tanks, heavy equipment, irrigation systems, furniture, trailers, vehicles, etc. (*Financial Policy # A100*, Government of Alberta, January 2014).

17.0 FINANCIAL MANAGEMENT

The OSM Program reserves the right to reallocate project funding during the current fiscal year on the basis of project performance and financial overspend or underspend.

☑ Please check this box to acknowledge you have read and understand

In the space below please describe the following:

- Discuss how potential cost overruns and cost underruns will be managed.
- If this is a continuing project from last year, identify if this project was overspent or underspent in the previous year and explain why.
- Describe what risks and/or barriers may affect this project.

Project management will include careful tracking of the budget associated with each of the subcontractors. The scope and budget for each of the consultants will be confirned as part of the contracting process and they will all be fixed budgets. All consultants will be requested to provide updates if they anticipate being underspent, or if they think the scope needs to be adjusted to remain within budget.

18.0 Alternate Sources of Project Financing - In-Kind Contributions

Table 18.1 In-Kind Contributions

Add an In Kind Contribution by clicking on the table and then clicking on the add row on the bottom right side of table.

Description	Source	Equivalent Amount ($CAD)
	TOTAL	$0.00

19.0 Consent & Declaration of Completion

Should your application be successful, The OSM Program reserves the right to publish this work plan application. Please check the box below to acknowledge you have read and understand:

☑ I acknowledge and understand.

Lead Applicant Name

Margaret Luker

Title/Organization

Fort McKay Metis Nation

Signature

Margaret Luker Digitally signed by Margaret Luker Date: 2023.11.03 16:49:48 -06'00'

Government Lead / Government Coordinator Name (if different from lead applicant)

Title/Organization

Signature

Please save your form and refer to the instructions page for submission link.

Program Office Use Only

Governance Review & Decision Process

this phase follows submission and triggers the Governance Review

TAC Review (Date):

ICBMAC Review (Date):

SIKIC Review (Date):

OC Review (Date):

Final Recommendations:
Decision Pool:

Notes:

Post Decision: Submission Work Plan Revisions Follow-up Process

This phase will only be implemented if the final recommendation requires revisions and follow-up from governance

ICBMAC Review (Date):

SIKIC Review (Date):

OC Review (Date):

Comments:
Decision Pool:

Notes & Additional Actions for Successful Work Plan Implementation:

Signature