



# 2023-2024 OSM WORK PLAN APPLICATION

This form will be used to assess the merits of the proposed work plan and its fit with the Oil Sands Monitoring (OSM) Program mandate and strategic priorities. Applicants must complete the form in its entirety. Applicants that fail to use this form and complete all sections in the timeframe will not be considered.

OSM Work Plan Submission Deadline: The deadline for submission of proposed work plans is <b>October 31, 2022 at 4:30 PM Mountain Standard time</b> . Late submissions will not be accepted.	<b>October 31, 2022</b> 4:30 PM MST
<b>Decision Notification</b>	Mid to Late March 2023

## WORK PLAN COMPLETION

Please **Enable Macros** on the form when prompted.

The applicant is required to provide information in sufficient detail to allow the evaluation team to assess the work plan. Please follow the requirements/instructions carefully while at the same time being concise in substantiating the project's merits. The OSM Program is not responsible for the costs incurred by the applicant in the preparation and submission of any proposed work plan.

**Privacy:** The OSM Program is governed by the Freedom of Information and Protection of Privacy Act (FOIP) and may be required to disclose information received under this Application, or other information delivered to the OSM Program in relation to a Project, when an access request is made by anyone in the public. Applicants are encouraged to familiarize themselves with FOIP. All work plans are public documents.

**Technical Requirements:** When working on this form, please maintain Macros compatibility by always saving your draft and your final submission as a **Microsoft Word Macro-Enabled Document**, failure to do so will result in loss of form functionality. This form was created using Microsoft word 2016 on a PC and may not have functionality on other versions of Microsoft on PC or MACS.

**Government Lead/Coordinator:** All work plans under the OSM Program require either a government lead or a government coordinator. This will ensure that the financial tables (for Alberta Environment and Parks & Environment and Climate Change Canada) are completed accurately for work plan consideration. **However**, if an **Indigenous community, environmental nongovernmental organization** or any other **external partner** is completing a work plan proposal, they would **only** complete the **grant or contract budget component** of the **Human Resources & Financials Section** for their project. The government coordinator within Alberta Environment & Parks would be responsible for completing the remaining components of the Human Resources and Financial Section of this Work Plan Application, as they are responsible for contract and grant facilitation of successful submissions. All other sections outside of **Human Resources & Financials Section** of this work plan proposal are to be completed in full by all applicants.

**Supplemental Materials:** The OSM Program recognizes that majority of work planning submissions are a result of joint effort and monitoring expertise. Should the applicant wish to submit supplemental materials in addition to their application additional resources are available in the Work Planning Package accessible here: [2023-24 Work Planning Package \(Ctrl+CLICK\)](#)

Should you have any **questions** about completing this work planning form or uploading your final submission documents, please send all inquiries by email to: [OSM.Info@gov.ab.ca](mailto:OSM.Info@gov.ab.ca).



## WORK PLAN SUBMISSION

Upon completion of this application, please submit the appropriately named work plan (**Microsoft Word Macro-Enabled Document**) and all supporting documents to the link provided below. Failure to follow the naming convention provided may result in oversight of your application.

Please upload (by drag and dropping) the **WORK PLAN SUBMISSION & ALL SUPPORTING DOCUMENTS** here:

[\*\*WORK PLAN SUBMISSION LINK \(CTRL+CLICK HERE\)\*\*](#)

Please use the following file naming convention when submitting your **WORK PLAN**:

**202324\_wkpln\_WorkPlanTitle\_ProjectLeadLastNameFirstName**

**Example:**

202324\_wkpln\_OilSandsResiduesinFishTissue\_SmithJoe

If applicable, please use the following file naming convention when submitting your **supplementary or supporting files**. Please number them according to the guidance and examples provided:

**202324\_sup##\_WorkPlanTitle\_ProjectLeadLastNameFirstName**

**Examples:**

202324\_sup01\_OilSandsResiduesinFishTissue\_SmithJoe

202324\_sup02\_OilSandsResiduesinFishTissue\_SmithJoe

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202324\_sup10\_OilSandsResiduesinFishTissue\_SmithJoe

**Do not resave your work plan or documents under any other naming conventions.** If you need to make revisions and resubmit before the work planning deadline of October 31, 2022, **DO NOT** rename your submission. When resubmitting, simply resubmit with the exact naming convention so that it replaces the original submission. **DO NOT** add any additional components such as versioning or dates to the file naming convention. Please direct any questions regarding the submission or naming of submissions to [OSM.Info@gov.ab.ca](mailto:OSM.Info@gov.ab.ca).



## WORK PLAN APPLICATION

PROJECT INFORMATION	
<b>Project Title:</b>	Terrestrial Biological Integrated Indigenous Community Based Monitoring
<b>Lead Applicant, Organization, or Community:</b>	Alberta Biodiversity Monitoring Institute
<b>Work Plan Identifier Number:</b> <i>If this is an on-going project please fill the identifier number for 22/23 fiscal by adjusting the last four digits: <b>Example:</b> D-1-2223 would become D-1-2324</i>	B-CM-29-2324
<b>Project Region(s):</b>	Oil Sands Region
<b>Project Start Year:</b> <i>First year funding under the OSM program was received for this project (if applicable)</i>	2022-23
<b>Project End Year:</b> <i>Last year funding under the OSM program is requested <b>Example:</b> 2024</i>	Continuing
<b>Total 2023/24 Project Budget:</b> <i>For the 2023/24 fiscal year</i>	\$588,000.00
<b>Requested OSM Program Funding:</b> <i>For the 2023/24 fiscal year</i>	\$588,000.00
<b>Project Type:</b>	Community Based Monitoring
<b>Project Theme:</b>	Terrestrial Biological Monitoring
<b>Anticipated Total Duration of Projects (Core and Focused Study (3 years))</b>	Choose an item.
<b>Current Year</b>	<b>Focused Study:</b> Choose an item.
	<b>Core Monitoring:</b> Year 2

CONTACT INFORMATION	
<b>Lead Applicant/ Principal Investigator:</b> <i>Every work plan application requires one lead applicant. This lead is accountable for the entire work plan and all deliverables.</i>	Monica Kohler
<b>Job Title:</b>	Operations Centre Director
<b>Organization:</b>	Alberta Biodiversity Monitoring Institute
<b>Address:</b>	CW 405, Biological Sciences Building University of Alberta, Edmonton, AB T6G 2E9
<b>Phone:</b>	780-238-6603
<b>Email:</b>	mkohler@ualberta.ca

## PROJECT SUMMARY

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

In the space below please provide a summary (300 words max) 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.

This work plan supports the implementation of coordinated Indigenous community camera programs across the Oil Sands Region. We are partnering with multiple communities who have expressed an interest in wildlife monitoring to implement a standardized and coordinated framework for co-developing camera programs that are integrated with regional OSM camera monitoring. This work plan submission includes:

Abbreviated work plans and budget request for three Indigenous communities (Beaver Lake Cree Nation \$75,000, Giff Lake Metis Settlement \$75,000 and Metis Nation of Alberta, Region 1 \$75,000)  
Technical capacity to provide the following support functions for both the abbreviated community work plans, and a number of stand-alone community work plans:

- Co-design and scoping of community camera projects
- Training and capacity building on standardized operating procedures for remote cameras
- Data summary, analysis, and reporting

These projects will align with the overall objectives and principles of the core terrestrial Before-After-Dose-Response (BADR) monitoring design, and contribute standardized data that integrate with BADR monitoring to understand, through incorporation of Indigenous knowledge, if wildlife are changing in response to oil sands activities. This work plan provides technical expertise, infrastructure, and other resources needed to support Indigenous communities in scoping, planning, and implementing community-led camera programs over the long term.

The total requested funding (\$588,000) includes \$225,000 specifically for the Abbreviated work plans for three Indigenous communities detailed below and \$363,000 requested specifically for ABMI.

This work plan provides scoping, equipment, and training support for multiple community projects, including:

- Beaver Lake Cree Nation (abbreviated work plan included as part of this submission)
- Chipewyan Prairie Dene First Nation
- Cold Lake First Nation
- Conklin Métis Local 193
- Giff Lake Metis Settlement (abbreviated work plan as part of this submission)
- Lakeland Metis Community Association
- Metis Nation of Alberta, Region 1 (abbreviated work plan as part of this submission)
- Whitefish Lake First Nation 459

## 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.

The primary drivers for this project are community-identified concerns about wildlife and oil sands stressors. The Operational Framework Agreement (OFA) highlights the need for integration of ICBM into western science monitoring approaches. This work plan directly aligns with this need for wildlife monitoring. Community camera programs will integrate the core TBM-BADR principles by focusing monitoring on specific oil sands stressors, incorporating both habitat and stressor stratification, and ensuring adequate sample sizes. These principles will be applied at a scale relevant to each community and in partnership with Indigenous communities to reflect Indigenous knowledge, concerns, and priorities. These programs will fill two knowledge gaps: 1) They will collect data at a local scale that is relevant to each community (something that regional monitoring is currently unable to do); and 2) They will contribute data directly to regional monitoring to improve our ability to detect responses at the regional scale. This work plan provides the technical support needed for capacity building, community engagement, science development, and implementation in order to establish integrated ICBM camera projects. The ICBM projects will serve the mandate of OSM by working in an integrated approach with core BADR monitoring to address 1) Whether terrestrial wildlife indicators have changed? and 2) To what extent changes are attributable to oil sands activities, in the context of cumulative effects. ICBM projects using cameras were first initiated in 2021 -22 and have been gradually expanding and operationalizing since then to include more communities, and to develop a more standardized framework and life cycle for implementing projects.

## 2.0 Objectives of the Work Plan

List in point form the Objectives of the 2023/24 work plan below

The objectives of this work plan include:

Relationship-building and scoping: Build strong, working relationships with Indigenous communities interested in delivering camera monitoring projects. Build shared understanding of terrestrial biological monitoring and collaboratively scope and design ICBM projects that align with community priorities while maintaining standardization with the BADR design and SOPs.

Capacity-Building: Deliver training sessions with communities on the full life cycle of camera monitoring programs.

Integrated Data Collection: Advance communities to operational implementation of local monitoring systems and establish work-flows for data integration and reporting.

Science Development: Work in partnership with Indigenous communities to improve the adaptive monitoring BADR approach to reflect Indigenous knowledge, concerns, and priorities.

### 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 Sub Theme

Please select from the dropdown menu below the theme(s) your monitoring work plan relates to:

Choose an item.

### 3.2 Core Monitoring or Focused study

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. For the purposes of 2023/24 work planning all Community Based Monitoring Projects are Focused Studies.

Choose an item.

### 3.3 Sub Theme Key Questions

Please select from the dropdown menus below the sub-theme(s) your monitoring work plan relates to and address the Key Questions:

#### 3.3.1 Surface Water Theme

##### 3.3.1.1. Sub Themes:

Choose an item.

##### 3.4.1.2 Surface Water Key Questions

Explain how your surface water monitoring program addresses the key questions below.

1. Has baseline been established? Have thresholds or limits of change been identified?

Click or tap here to enter text.

2. Are changes occurring in water quality, biological health (e.g., benthos, fish) and/or water quantity/flows relative to baseline? If yes, is there evidence that the observed change is attributable to oil sands development? (Describe source-pathway-receptor and/or conceptual models and what is the contribution in the context of cumulative effects?)

Click or tap here to enter text.

3. Are there unanticipated results in the data? If yes, is there need for investigation of cause studies?

Click or tap here to enter text.

4. Are changes in water quality and/or water quantity and/or biological health informing Indigenous key questions and concerns?

Click or tap here to enter text.

5. Are data produced following OSM Program requirements and provided into the OSM Program data management system?

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

8. 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?

Click or tap here to enter text.

9. How will this work advance understanding transition towards adaptive monitoring?

Click or tap here to enter text.



10. 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.

Click or tap here to enter text.





**3.3.2 Groundwater Theme**

**3.3.2.1 Sub Themes:**

Choose an item.

**3.3.2.2 Groundwater Key Questions**

Explain how your groundwater monitoring program addresses the key questions below.

1. Has baseline been established? Have thresholds or limits of change been identified?

Click or tap here to enter text.

2. Are changes occurring in groundwater quality and/or quantity relative to baseline? If yes, is there evidence that the observed change is attributable to oil sands development? (*Describe source-pathway-receptor and/or conceptual models*) and what is the contribution in the context of cumulative effects?

Click or tap here to enter text.

3. Are there unanticipated results in the data? If yes, is there need for investigation of cause studies?

Click or tap here to enter text.

4. Are changes in groundwater quality and/or quantity informing Indigenous key questions and concerns Indigenous concerns and health?

Click or tap here to enter text.

5. Are data produced following OSM Program requirements and provided into the OSM Program data management system?

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

8. 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?

Click or tap here to enter text.

9. How will this work advance understanding transition towards adaptive monitoring?

Click or tap here to enter text.

10. 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.

Click or tap here to enter text.



**3.3.3 Wetlands Theme**

**3.3.3.1 Sub Themes:**

Choose an item.

**3.3.3.2 Wetlands - Key Questions**

Explain how your wetlands monitoring program addresses the key questions below.

1. Has baseline been established? Have thresholds or limits of change been identified?

Click or tap here to enter text.

2. Are changes occurring in wetlands due to contaminants and hydrological processes? If yes, is there evidence that the observed change is attributable to oil sands development? (Describe source-pathway-receptor and/or conceptual models) and what is the contribution in the context of cumulative effects?

Click or tap here to enter text.

3. Are there unanticipated results in the data? If yes, is there need for investigation of cause studies?

Click or tap here to enter text.

4. Are changes in wetlands informing Indigenous key questions and concerns?

Click or tap here to enter text.

5. Are data produced following OSM Program requirements and provided into the OSM Program data management system?

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

8. 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?

Click or tap here to enter text.

9. How will this work advance understanding transition towards adaptive monitoring?

Click or tap here to enter text.

10. 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.

Click or tap here to enter text.



**3.3.4 Air Theme**

**3.3.4.1 Sub Themes:**

Choose an item.

**3.3.4.2 Air & Deposition - Key Questions**

Explain how your air & deposition monitoring program addresses the key questions below.

1. Has baseline been established? Have thresholds or limits of change been identified?

Click or tap here to enter text.

2. Are changes occurring in air quality? If yes, is there evidence that the observed change is attributable to oil sands development? (Describe source-pathway-receptor and/or conceptual models) and what is the contribution in the context of cumulative effects?

Click or tap here to enter text.

3. Are there unanticipated results in the data? If yes, is there need for investigation of cause studies

Click or tap here to enter text.

4. Are changes in air quality informing Indigenous key questions and concerns?

Click or tap here to enter text.

5. Are data produced following OSM Program requirements and provided into the OSM Program data management system?

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

8. 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?

Click or tap here to enter text.

9. How will this work advance understanding transition towards adaptive monitoring?

Click or tap here to enter text.

10. 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.

Click or tap here to enter text.

**3.3.5 Terrestrial Biology Theme**

**3.3.5.1 Sub Themes:**

Wildlife

**3.3.5.2 Terrestrial Biology - Key Questions**

Explain how your terrestrial biological monitoring program addresses the key questions below.

1. Has baseline been established? Have thresholds or limits of change been identified?

Baselines have been established by Indigenous knowledge keepers but this has been limited to the areas they can access consistently and may not cover their entire traditional territory. Our work plan will enable Indigenous communities in establishing current baseline conditions for wildlife species using remote cameras across their traditional territories.

2. Are changes occurring in terrestrial ecosystems due to contaminants and landscape alteration? If yes, is there evidence that the observed change is attributable to oil sands development? (Describe source-pathway-receptor and/or conceptual models) and what is the contribution in the context of cumulative effects?

Terrestrial ecosystems are changing due to landscape alteration and contaminant deposition. Indigenous knowledge keepers have observed changes associated with development that have impacted their ability to exercise treaty rights. Western-science evidence has linked changes in biological ecosystems in the oil sands region to human activities, some related to oil sands development (Roberts et al. 2021). Such changes include, but are not limited to, widely observed positive and negative mammal responses to landscape disturbance (e.g. Toews et al. 2017, Fisher & Burton 2018), altered vegetation communities in response to soil nitrogen accumulation (Davidson et al. 2020), and increased wildlife contaminant burdens (e.g. Thomas et al. 2020, Fernie et al. 2018).

3. Are there unanticipated results in the data? If yes, is there need for investigation of cause studies?

The OSM ICBM camera program is still in its early program phases of data collection and the data has yet to be analyzed.

4. Are changes in terrestrial ecosystems informing Indigenous key questions and concerns?

This work plan will continue our ongoing meaningful engagement with Indigenous communities. Indigenous communities will continue to be directly involved in study design, data collection and interpretation to ensure changes in terrestrial ecosystems are informing Indigenous key questions and concerns. The OSM ICBM camera program started in 2022-23, and in 2023-24 we propose to continue and expand this work and provide capacity to on-board multiple new communities into this program.

5. Are data produced following OSM Program requirements and provided into the OSM Program data management system?

The ICBMAC provides clear instruction for ICBM projects for data management. Data produced from western science is "Open by default" and must be shared with the OSM program. Data produced from Indigenous Knowledge is "Protected by default"; Indigenous Knowledge data will be retained by each community.

Wildlife camera data will be stored and processed in WildTrax, the cross-party data repository used by multiple members of the TBM science team.

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

The ICBMAC provides clear instructions for methodology. For ICBM projects based on western science approaches, it is a requirement to use methods or SOPs consistent with those used for core monitoring. This requirement will be adhered to for Indigenous communities that are engaged in this work plan. The ICBM Facilitation Centre at Athabasca University will be consulted for support in developing methodologies and study design. TBM partners and TAC members have engaged with communities via the Facilitation Centre through the 2022-23 workplanning process to support community work plan development.

Camera monitoring methodologies for wildlife follow BADR Standard Operation Procedures for programming, deploying, refreshing, retrieving, managing and processing remote cameras and remote camera data. These SOPs align with provincial guidelines on using cameras, including the Alberta Camera Metadata Standards, and provincial class protocols. One of the deliverables for the camera monitoring projects in 2023-24 is to continue to develop training materials (fact sheets, checklists, etc.). Where appropriate, the western science-based field protocols used in TBM will be incorporated to allow for future interoperability and pooling of data.

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

One of the primary purposes of this work plan is to provide resources to ensure meaningful integration amongst projects and communities -- ultimately to work with Indigenous communities to ensure approaches to camera monitoring are aligned with the core BADR design and are standardized across communities. The ICBMAC provides clear integration expectations, including (i) ensuring respectful and equitable production of IK and western science data, (ii) using common methods or SOPs for field data collection and measurement, (iii) avoiding duplication, and (iv) avoiding knowledge silos and knowledge appropriation. These expectations will be followed during engagement, capacity building, and implementation of monitoring.

8. 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 focus of ICBM projects supported by this work plan are traditional resources and cultural practices that are identified as Valued Components in the OSM programmatic conceptual model (Roberts et al. 2021, Swanson et al. 2019). This work plan, and the ICBM projects it supports, will provide important Indigenous context for the pathways defined in the current TBM conceptual model, and may define or introduce new pathways via non-Western science ways of knowing--currently an identified gap in the TBM program (Roberts et al. 2021).

9. How will this work advance understanding transition towards adaptive monitoring?

This work will advance adaptive monitoring through incorporation of Indigenous knowledge and questions into wildlife data collection efforts for OSM. Knowledge holders can identify species and/or places experiencing change and establish integrated community-led monitoring programs in these areas to increase monitoring intensity in areas of concern.

10. 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.

Data from ICBM projects, be they based on Western science or Indigenous Knowledge, have not yet been incorporated into OSM's State of Environment Reporting effort. The intention of this work plan is, with adequate support from project partners, to contribute reporting and analyses of ICBM-generated monitoring data to future State of Environment Reporting, should these data be included there.



**3.3.6 Cross-Cutting Across Theme Areas**

**3.3.6.1 Sub Themes:**

Choose an item.

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

Click or tap here to enter text.

**3.3.6.2 Cross-Cutting - Key Questions**

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

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

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

4. 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?

Click or tap here to enter text.

5. How will this work advance understanding transition towards adaptive monitoring?

Click or tap here to enter text.

6. 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.

Click or tap here to enter text.

## 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.

Data collected by ICBM projects will feed into the core TBM program, further contributing to the informing of management, policy, and regulatory requirements supported in that core program. The major recurring terrestrial approval conditions that appear in most of the mining EPEA deemed compliance documents, and that fall within the scope of OSM, include: Long-term monitoring of cumulative effects on biodiversity and wildlife; Long-term monitoring of species at risk; and Analysis & collection of regional data to validate Habitat Suitability Index (HSI) models.

Regional monitoring of biodiversity is a required activity for oil sands operators under EPEA approval conditions. The exact wording of this requirement varies across operators but generally refers to the requirement to monitor the long-term cumulative effects on biodiversity and wildlife. In some cases, these conditions make reference to specific programs or organizations such as ABMI and the former Ecological Monitoring Committee for the Lower Athabasca (EMCLA). The TBM component of OSM is the activity which facilitates compliance with these clauses. In other cases, the approval-holder is to select appropriate monitoring methods and actions and demonstrate that these are adequate, and in these instances, data produced in TBM programs (e.g., MAPS, regional yellow rail monitoring) may fulfil the requirements. The BADR design will contribute scientific information with which to judge the efficacy of existing regulations and compliance with approvals as they apply to "beyond the fence line" responses to oil sands stressors at local, sub-regional and regional scales.

TBM outcomes will also provide an understanding of the effects of oil sands land disturbance, by type, on a range of indicators. These results will have implications for company management programs and regulatory agency policy decisions such as industry environmental management procedures, regulatory limits on disturbance, disturbance-buffer selection, and restoration management requirements.

The BADR design incorporates spatial stratification based on land use, allowing the monitoring to contribute directly relevant information to regional frameworks such as LARP regarding observed changes in response to oil sands stressors and cumulative effects.

## 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

This project provides support for Indigenous communities to scope and deliver community-led camera monitoring projects that address Indigenous questions and concerns related to wildlife and oil sands stressors. ICBM projects supported under this work plan, will be developed collaboratively by incorporating Indigenous questions, concerns, and knowledge, building off the foundation of the BADR design and existing terrestrial SOPs. Technical staff from the ABMI will work closely with the involved communities, ICBMAC, and the Facilitation Centre to ensure projects are approached collaboratively, respectfully, and following the guidance and practices being developed by OSM. Knowledge-sharing agreements will be used to protect the IP rights of communities, and relationship-building will be a guiding objective of the work.

This project will directly increase Indigenous community capacity and involvement in terrestrial monitoring. It provides needed technical and logistical support for ICBM work plans submitted by the following communities:

Beaver Lake Cree Nation  
 Chipewyan Prairie Dene First Nation  
 Cold Lake First Nation  
 Conklin Métis Local 193  
 Giff Lake Metis Settlement  
 Lakeland Metis Community Association  
 Metis Nation of Alberta, Region 1  
 Whitefish Lake First Nation 459

The total requested funding (\$588,000) includes \$225,000 specifically for the Abbreviated work plans for three Indigenous communities (Beaver Lake Cree Nation \$75,000, Giff lake Metis Settlement \$75,000, and Metis Nation of Alberta, Region 1 \$75,000) and \$363,000 requested specifically for ABMI for supporting all 8 community-led camera monitoring programs detailed above.

Does this project include an Integrated Community Based Monitoring Component?

Yes





If YES, please complete the [ICBM Abbreviated Work Plan Forms](#) and submit using the link below

[ICBM WORK PLAN SUBMISSION LINK \(CTRL+CLICK HERE\)](#)

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

1. Are there any community specific protocols that will be followed?

Traditional community specific protocols will be identified through communication with community contacts before any engagement, workshop, or training session takes place. Any community specific protocol that is identified will be prepared for in advance and followed when working with the community. For example, a traditional community specific protocol when engaging with indigenous knowledge holders from Beaver Lake Cree Nation is to provide a gift of tobacco and to provide them the opportunity to say a prayer to commence the knowledge sharing session.

While working with all of our partner communities, ABMI follows the practices of OCAP (Ownership, Control, Access and Possession) and has made an ongoing commitment to seeking free, prior, and informed consent.

2. 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.

Yes, our work plan involves methods for Indigenous participants to share information or knowledge. These methods take different forms as each community has different preferences for how knowledge is traditionally exchanged and different levels of interest in sharing Indigenous knowledge. ABMI is committed to creating space for ongoing communication with Indigenous knowledge holders and engaging using a preferred method (e.g. interview, focus group, survey/structured interview). For example, the Metis Nation of Alberta, Region 1 is proposing to form a Community Knowledge Committee composed of both elders and youths from across the region. This Community Knowledge Committee will help to share knowledge and disseminate information across age ranges and the region and will periodically engage with ABMI staff and contractors about program updates, monitoring methods, study design, site locations, analysis, and integration of Indigenous knowledge indicators. This will also include ensuring mutual understanding among all those involved about risks, potential harms, and burdens of the proposed monitoring activities and outcomes.

Careful consideration from many perspectives will be used to identify harms and risks associated with these proposed monitoring activities and sharing of Indigenous knowledge. Time and financial resources will be made available to ensure mutual understanding among all those involved. Appropriate cultural sharing and use protocols for Indigenous knowledge will be respectfully included in all engagement and knowledge sharing opportunities with community members.

While working with all of our partner communities, ABMI follows the practices of OCAP (Ownership, Control, Access and Possession) and has made an ongoing commitment to seeking free, prior, and informed consent. The form to enable consent that is commonly used by the community (e.g. written, verbal, ceremonial) will be followed to ensure consent is ongoing throughout the program.

3. 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.

Each community involved in developing a camera program will have a different level of reliance on Indigenous knowledge, with some communities collecting and applying knowledge to provide direction on the scope of the program, and others with little to no Indigenous knowledge collection and a stronger focus on capacity building. Any and all Indigenous knowledge that is collected/shared is protected by default and will be treated as the intellectual property of the respective community.

Any activities that include collecting/sharing, interpreting, or applying indigenous knowledge will be conducted in alignment with the interim ethical guidelines by using many approaches, including the following:

- Ensuring that the proper time and resources are made available to build trust, common understandings

and to respectfully engage using culturally appropriate processes.

- Learning about Indigenous knowledge systems and Indigenous peoples.
- Considering how to develop strengths-based approaches to developing monitoring programs.
- Fostering fair and equitable participatory approaches and practices when engaging with communities to ensure all community members feel valued and can be included should they choose to be.

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

As most community camera programs are at the onset of work, there are not large volumes of data available yet for analysis and interpretation. However, these are anticipated to increase over the next 2-3 years. Community members will have direct access to the raw data and training on how to interact with and process the data through the WildTrax platform. We will provide basic data summaries and analysis that follow standard camera data workflows for feedback and input from each community, and will enhance data presentation approaches wherever possible to incorporate community direction. All raw data and results will be presented and made available with communities.

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

Indigenous communities drive the direction, scope, and implementation of these programs. Communities identify their needs, priorities, and capacity for wildlife camera monitoring and provide input on the scope of the program throughout its development and implementation, guided by BADR principles and SOPs. The scope details of a community program will be driven by each community's interest and capacity. This direction is facilitated through ongoing dialogue within individual communities, and between communities and TBM scientists.

6. How does this work plan directly benefit your community? How does it support capacity building in your community?

We will follow the leadership of community elders, land-users, environmental monitors, and community representatives throughout the scoping, implementation, and analysis of each camera program to ensure that the work being planned is aligned with community priorities and concerns in order to provide value to each community. This requires ongoing, regular dialogue and relationship building to facilitate, as well as sufficient flexibility in approach. Specific benefits to each community involved in this initiative are detailed in community abbreviated work plans and stand-alone work plans. We will ensure direct access to relevant technical experts during each phase of the camera operational life cycle to provide hands-on experiences to support capacity building within communities.

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

We will work with community leads to determine the most appropriate reporting approach for that community and will develop both verbal and written reporting. This will include presenting results at community events, workshops, or committees, as appropriate and as directed by each community. Reporting will be iterative to allow for community input into the presentation of results. As each community project generates results, we will work with each community to develop plain-language summaries of the project and work in accessible formats.

## 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.

ICBM camera projects will be scoped and designed in order to contribute information to the core BADR monitoring framework and its approach to measuring change along multiple oil sands stressor-gradients, while enabling analysis and reporting at local, community-relevant scales. Existing SOPs are being implemented under the core TBM work plan, serving as the foundation off of which to build ICBM projects.

The BADR design identifies environmental change attributable to oil sands activity against a reference or baseline condition. It achieves this by:

1. Using ecologically relevant spatial units that align with other TACs;
2. Examining environmental response along stressor gradients at various spatial scales;
3. Including reference/baseline sampling units in both space and time;
4. Including indicators at the individual, population, and community level;
5. Incorporating areas of planned oil sands expansions; and
6. Producing results which can be used for model validation and forecasting purposes.

Details on the approach used under the BADR design are provided in Bayne et al. 2020. The two key elements of BADR that contribute to measuring change against a baseline are:

1. BEFORE-AFTER: Monitoring at different phases of oil sands development (before and after development occurs); and
2. DOSE-RESPONSE: Monitoring along a gradient of current oil sands disturbance (high to low).

## 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.

ICBM projects developed under this work plan will be highly integrated with the core BADR design being developed by the TBM Project Team and TAC, and will help to inform the ongoing development of its adaptive monitoring approach.

BADR addresses two elements related to scale:

1. Scale of ecological organization. Data are collected on individual behaviour and health as well as populations and communities. ICBM projects will be focused on the ecological scale that individual communities are interested in (eg. specific species or landscape metrics of highest concern).

2. Spatial scale. Monitoring locations under BADR are selected with intentional variation in local and regional disturbance to ensure that the program provides knowledge relevant to local, landscape, and regional questions, efficiently addressing indicators at several relevant organizational scales (organisms, communities, and populations). BADR is able to integrate data across scales and address regional and sub-regional questions, which allows for Indigenous communities to implement monitoring in local areas of interest and provide complementary data to the core TBM work.

## 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.

As per the overall guidance from ICBMAC, all Western science generated by this project will be "Open by Default", and all Indigenous Knowledge generated will be "Protected by Default." The primary mechanism for disseminating monitoring information with Indigenous communities involved in this work plan will be in-person and/or virtual verbal communication. This work plan provides resources to support staff travel to communities to facilitate regular, ongoing dialogue, presentations, brainstorming, and training, as well as necessary equipment needed for community-led data collection. The timing of these communications will be guided by the cycle of monitoring activities in order to build community capacity on camera monitoring over time (design, site selection, protocols, data processing, analysis, reporting). A collaborative approach will be taken to data analysis and interpretation between staff and members of the community.

## 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.

All ICBM work supported via this work plan will be fully integrated with the core TBM monitoring activities, using standardized protocols, and providing supplementary data in order to enhance the ability to measure change. These programs will be co-designed to ensure that they address Indigenous concerns directly, and collect local-scale information that is standardized and feeds into the broader regional ambient biological monitoring system. This will ensure general consistency in approach across multiple communities and the broader TBM program, facilitating regional amalgamation of datasets for analysis and reporting.

## 10.0 Work Plan Approach/Methods

### 10.1 List the Key Project Phases and Provide Bullets for Each Major Task under Each Project Phase \*

Phase 1: Community Engagement and Scoping

- Continuing and new meetings/workshops with communities to scope wildlife indicators, monitoring plans, potential study designs, as well as IK indicator integration into regional monitoring efforts

Phase 2: Training and Capacity Building

- Training sessions with communities to build capacity around camera monitoring methods including:
  - Initial camera setup and application of settings
  - In-field camera deployment standard operating procedures
  - In-field camera reshing (changing sd cards and batteries in cameras already deployed)
  - In-field camera retrieval standard operating procedures
  - Camera specific data management and processing
  - Camera inventory and management planning
  - Image processing (tagging) training using the Wildtrak platform
  - Data analysis and interpretation workshops

Phase 3: Monitoring Implementation Support

- Support for implementation of monitoring activities (variable by community in terms of scale and protocol; guided by scoping discussions and state of readiness)

Phase 4: Reporting and Communications

- Development of plain language training materials of field methods for broad community use (fact sheets, checklists, etc.)
- Ongoing presentations and sharing of information to communities at in-person discussions

### 10.2 Describe how changes in environmental Condition will be assessed \*

Over the long term, community engagement, capacity building, and implementation of ICBM camera projects will enable communities to identify receptors and indicators, develop baselines, and generate data for surveillance of local natural and subsistence resources, documenting (confirm) change, and investigating cause. Thus, ICBM projects will serve the mandate of the OSM program in an adaptive framework in an integrated approach with the core BADR program.

### 10.3 Are There Benchmarks Being Used to Assess Changes in Environmental Condition? If So, Please Describe, If Not, State "NONE" \*

A standard approach to setting triggers/thresholds for terrestrial biological diversity does not currently exist for Alberta, or in many jurisdictions globally. The TBM team initiated work in 2021-22 to lead the development of establishing triggers for TBM in the context of OSM's adaptive monitoring approach. This work is expected to take multiple years to complete and requires Indigenous community input.

In the meantime, the proposed terrestrial monitoring design includes monitoring in low-impact areas to establish a comparative reference condition against which to assess monitoring data from higher stress regions and locations. Implementation of the design will include consideration of effect size (i.e., what constitutes a significant change from reference) and the sample sizes needed to detect the effect size within a specified degree of confidence.

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





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

As required by ICBMAC, methods for the collection of western-science data will be consistent (identical to) methods (field SOPs and lab analyses) used for core monitoring. Please see core work plans for mammal (camera) details.

For IK indicators, TBD, but efforts will be made to allow for comparison with the core monitoring data where possible.

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

The key Western science indicators measured will be mammal occupancy, abundance, density, distribution, and habitat selection.

The key Indigenous Knowledge indicators are still being determined with the communities. Key Indigenous Knowledge indicators that have been identified to date include Moose health/quality (coat colour).

## 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.

Western science data is "Open by Default" and will be shared both with the communities involved in this work plan, and with the OSM program. IK is "Protected by Default". This project will follow guidelines and direction provided by ICBMAC on knowledge translation in the context of Indigenous Community Based Monitoring.

Building community capacity for data collection and data management is an important objective of this project. Knowledge translation will occur during scoping conversations, training sessions, and follow-up discussion, both within classrooms and in the field. This will include summarizing and analyzing data as it becomes available, and reporting back to the community for input. With the support of this project, individual communities will be responsible for disseminating knowledge gained in a way that is best received by their members. The general approach will be both internal community workshops/engagement sessions and plain-language reports, for both field methods and project results, guided by each community lead.

## 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

The total requested funding for this work plan (\$588,000) includes \$225,000 specifically for the Abbreviated work plans for three Indigenous communities (Beaver Lake Cree Nation \$75,000, Gift lake Metis Settlement \$75,000, and Metis Nation of Alberta, Region 1 \$75,000) and \$363,000 requested specifically for ABMI to support all 8 community-led camera monitoring programs detailed below.

Indigenous community-led camera monitoring programs supported by the ABMI OSM ICBM work plan that are submitting an Abbreviated OSM ICBM work plan included with this one include:

Beaver Lake Cree Nation  
 Gift Lake Metis Settlement  
 Metis Nation of Alberta, Region 1

Indigenous community-led camera monitoring programs supported by the ABMI OSM ICBM work plan that are submitting full OSM ICBM work plans include:

Chipewyan Prairie Dene First Nation  
 Cold Lake First Nation  
 Conklin Métis Local 193  
 Lakeland Metis Community Association  
 Whitefish Lake First Nation 459

The Alberta Biodiversity Monitoring Institute will be the delivery agent for this work and will work in collaboration with the Athabasca University Facilitation Centre, AEP Program Leads, the TBM TAC, ICBMAC, and the University of Alberta.

\*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 2022-23 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.*

**Data Sharing and Data Management** *Continued*

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

YES

13.2 Type of Quantitative Data Variables:

Both

13.3 Frequency of Collection:

Annually

13.4 Estimated Data Collection Start Date:

2023-04-01

13.5 Estimated Data Collection End Date:

2024-03-31

13.6 Estimated Timeline For Upload Start Date:

2023-04-01

13.7 Estimated Timeline For Upload End Date:

2024-03-31

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

YES

**TABLE 13.9 Please describe below the Location of Data and Data Type:**

*Add a Data Source by clicking on the table and then clicking on the blue "+" symbol 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
<i>ICBM Western Science Camera (Mammal) Data</i>	WildTrax Database	Images, csv	Open by Default
<i>ICBM Indigenous Knowledge Camera Data</i>	TBD	TBD	Protected by Default

## 14.0 2023/24 Deliverables

Add an additional deliverable by clicking on the table and then clicking on the blue "+" symbol on the bottom right side of table.

Type of Deliverable	Delivery Date	Description
Key Engagement/Participation Meeting	Q4	Knowledge-sharing and community engagement with multiple communities on camera monitoring programs
Key Engagement/Participation Meeting	Q4	Training workshops with multiple communities for remote camera study design, deployment, refreshing, retrieval, data management and WildTrax image processing
OSM Program Annual Progress Report (required)	Q4	Annual report summarizing 2023-24 ICBM camera program activities
Public Dissemination Document	Q4	Data summaries, preliminary analyses, and reports, where data are available, for each community
Public Dissemination Document	Q4	Develop training materials (fact sheets, checklists etc.) to support community camera programs

## 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 project team is well situated to complete the project. Its members hold expertise and experience across a variety of fields, including extensive community-based monitoring experience: project management, project coordination and relationship building/maintenance, geospatial analytics, scientific design and analysis, wildlife camera logistics/set-up/maintenance, and environmental fieldwork.

Below we list the full project team, including project team members who are resourced through this work plan submission (technical and logical support for communities), and the three associated abbreviated work plans, as well as community members who are associating stand-alone work plans that include a camera component.

Monica Kohler, Operations Centre Director, ABMI - Project Lead

David Evans, ICBM Co-Lead, ABMI - Project Coordinator

Crisia Tabacaru, ICBM Co-Lead, ABMI - Coordination Support

Cole Gladue, OSM Project Lead in Community, Beaver Lake Cree Nation - Beaver Lake Cree Nation ICBM Camera Program Coordinator

Ave Dersch, Traditional Land Use Study Facilitator, Moccasin Flower Consulting - Chipewyan Prairie Dene First Nation ICBM Camera Program Coordinator

Fin MacDermid, OSM Project Lead in Community, Cold Lake First Nation - Cold Lake First Nation ICBM Camera Program Coordinator

Jim Janvier, OSM Project Support in Community, Cold Lake First Nation - Cold Lake First Nation ICBM Camera Program Coordination Support

Nikita Lattery, OSM Project Support in Community, Cold Lake First Nation - Cold Lake First Nation ICBM Camera Program Coordination Support

Cameron Johnston, Environmental Lead, Higher Ground Consulting - Conklin Metis Local 193 ICBM Camera Program Coordinator

Roger Higgins, Project Manager, Gift Lake Metis Settlement - Gift Lake Metis Settlement ICBM Camera Program Coordinator

Clayton Shaw, Environmental Monitor, Gift Lake Metis Settlement - Gift Lake Metis Settlement ICBM Camera Program Coordination Support

Andrew Lamouche, Environmental Monitor, Gift Lake Metis Settlement - Gift Lake Metis Settlement ICBM Camera Program Coordination Support

Melina Power, President, Lakeland Metis Community Association - Lakeland Metis Community Association ICBM Camera Program Coordinator

Janice Elliott, Community Liaison, Lakeland Metis Community Association - Lakeland Metis Community Association ICBM Camera Program Coordination Support

Dermot O'Connor, Social Scientist, Oak Road Concepts - Lakeland Metis Community Association ICBM Camera Program Coordination Support

Cheryl Gordon, Regional Consultation Coordinator, Metis Nations of Alberta, Region 1 - Metis Nations of Alberta, Region 1 ICBM Camera Program Coordinator

Theo Peters, Consultation Technician, Metis Nation of Alberta - Metis Nations of Alberta, Region 1 ICBM Camera Program Coordination Support

Fabian Grey, OSM Project Lead in Community, Whitefish Lake First Nation - Whitefish Lake First Nation ICBM Camera Program Coordinator

David Roberts, Science Co-Lead, ABMI - Scientific design and analysis support

Marcus Becker, Ecologist, ABMI - Mammal science and study design support

Cassandra Stevenson, Ecologist, ABMI - Mammal science and WildTrax support

Joshua Logel, Field Biologist, InnoTech Alberta - Camera training/fieldwork support

Brett Bodeux, Information Coordinator, ABMI - WildTrax and data management support

Cris Gray, GIS coordinator, ABMI - Geospatial support

Eric Dilligeard, GIS Scientist, ABMI - Geospatial and study design support

Jenet Dooley, Ecologist, ABMI - BADR science

Corrina Coop, Information Centre Director, ABMI - Reporting



## 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 AEP 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 AEP

Add an additional AEP Staff member by clicking on the table and then clicking on the blue "+" symbol on the bottom right side of 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
Click or tap here to enter text.	Click or tap here to enter text.	0%

#### Table 16.1.2 ECCC

Add an additional ECCC Staff member by clicking on the table and then clicking on the blue "+" symbol on the bottom right side of table. The total FTE (Full Time Equivalent) is Auto Summed in Table 16.2.2

Name (Last, First)	Role	% Time Allocated to Project
Click or tap here to enter text.	Click or tap here to enter text.	0%



The tables below are the financial tables for Alberta Environment & Parks (AEP) 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 (ctrl + click the link below). Please note that completion of this Project Finance Breakdown Template is mandatory and must be submitted along with each workplan.

## [PROJECT FINANCE BREAKDOWN TEMPLATE \(CTRL+CLICK HERE\)](#)

**Table 16.2.1 Funding Requested BY ALBERTA ENVIRONMENT & PARKS**

Organization – Alberta Environment & Parks ONLY	Total % time allocated to project for AEP staff	Total Funding Requested from OSM
<b>Salaries and Benefits</b> <i>(Calculated from Table 16.1.1 above)</i>	<b>0.00%</b>	<b>\$0.00</b>
<b>Operations and Maintenance</b>		
Consumable materials and supplies		\$0.00
Conferences and meetings travel		\$0.00
Project-related travel		\$0.00
Engagement		\$0.00
Reporting		\$0.00
Overhead		\$0.00
<b>Total All Grants</b> <i>(Calculated from Table 16.4 below)</i>		<b>\$588,000.00</b>
<b>Total All Contracts</b> <i>(Calculated from Table 16.5 below)</i>		<b>\$0.00</b>
<b>Sub- TOTAL</b> <i>(Calculated)</i>		<b>\$588,000.00</b>
Capital*		\$0.00
<b>AEP TOTAL</b> <i>(Calculated)</i>		<b>\$588,000.00</b>

\* 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
<b>Salaries and Benefits FTE</b> <i>(Please manually provide the number in the space below)</i>		
Salaries and Benefits		\$0.00
<b>Operations and Maintenance</b>		
Consumable materials and supplies		\$0.00
Conferences and meetings travel		\$0.00
Project-related travel		\$0.00
Engagement		\$0.00
Reporting		\$0.00
Overhead		\$0.00
<b>ECCC TOTAL</b> <i>(Calculated)</i>		<b>\$0.00</b>

\* 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 the table and then clicking on the blue "+" symbol on the bottom right side of table. The total of all Grants is Auto Summed in Table 16.2.1*

GRANT RECIPIENT - ONLY: Name	Monica Kohler
GRANT RECIPIENT - ONLY: Organization	Alberta Biodiversity Monitoring Institute
<b>Category</b>	<b>Total Funding Requested from OSM</b>
Salaries and Benefits	\$260,000.00
<b>Operations and Maintenance</b>	
Consumable materials and supplies	\$25,000.00
Conferences and meetings travel	\$0.00
Project-related travel	\$45,000.00
Engagement	\$0.00
Reporting	\$0.00
Overhead	\$33,000.00
GRANT TOTAL <i>(Calculated)</i>	<b>\$363,000.00</b>
GRANT RECIPIENT - ONLY: Name	Cole Gladue
GRANT RECIPIENT - ONLY: Organization	Beaver Lake Cree Nation
<b>Category</b>	<b>Total Funding Requested from OSM</b>
Salaries and Benefits	\$40,000.00
<b>Operations and Maintenance</b>	
Consumable materials and supplies	\$13,000.00
Conferences and meetings travel	\$5,000.00
Project-related travel	\$7,000.00
Engagement	\$5,000.00
Reporting	\$5,000.00
Overhead	0
GRANT TOTAL <i>(Calculated)</i>	<b>\$75,000.00</b>
GRANT RECIPIENT - ONLY: Name	Roger Higgins
GRANT RECIPIENT - ONLY: Organization	Gift Lake Metis Settlement
<b>Category</b>	<b>Total Funding Requested from OSM</b>
Salaries and Benefits	\$50,000.00
<b>Operations and Maintenance</b>	
Consumable materials and supplies	\$6,000.00
Conferences and meetings travel	\$8,000.00
Project-related travel	\$10,000.00
Engagement	\$0.00
Reporting	\$1,000.00
Overhead	\$0.00
GRANT TOTAL	<b>\$75,000.00</b>



<i>(Calculated)</i>	
GRANT RECIPIENT - ONLY: Name	Cheryl Gordon
GRANT RECIPIENT - ONLY: Organization	Metis Nation of Alberta, Region 1
<b>Category</b>	<b>Total Funding Requested from OSM</b>
Salaries and Benefits	\$38,000.00
<b>Operations and Maintenance</b>	
Consumable materials and supplies	\$11,000.00
Conferences and meetings travel	\$6,000.00
Project-related travel	\$10,000.00
Engagement	\$7,000.00
Reporting	\$3,000.00
Overhead	\$0.00
GRANT TOTAL <i>(Calculated)</i>	<b>\$75,000.00</b>

**Table 16.4**

**Complete ONE table per Contract recipient.**

*Add a Recipient by clicking on the table and then clicking on the blue "+" symbol on the bottom right side of 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	Click or tap here to enter text.
CONTRACT RECIPIENT - ONLY: Organization	Click or tap here to enter text.
<b>Category</b>	<b>Total Funding Requested from OSM</b>
Salaries and Benefits	\$0.00
<b>Operations and Maintenance</b>	
Consumable materials and supplies	\$0.00
Conferences and meetings travel	\$0.00
Project-related travel	\$0.00
Engagement	\$0.00
Reporting	\$0.00
Overhead	\$0.00
CONTRACT TOTAL <i>(Calculated)</i>	<b>\$0.00</b>

**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
<b>Salaries and Benefits</b> <i>Sums totals for salaries and benefits from AEP and ECCC ONLY</i>	\$0.00
<b>Operations and Maintenance</b>	
<b>Consumable materials and supplies</b> <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
<b>Conferences and meetings travel</b> <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
<b>Project-related travel</b> <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
<b>Engagement</b> <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
<b>Reporting</b> <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
<b>Overhead</b> <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
<b>Total All Grants (from table 16.2.1 above)</b> <i>Sums totals for AEP Tables ONLY</i>	\$588,000.00
<b>Total All Contracts (from table 16.2.1 above)</b> <i>Sums totals for AEP Tables ONLY</i>	\$0.00
<b>Sub- TOTAL</b>	\$588,000.00
<b>Capital*</b> <i>Sums total for AEP</i>	\$0.00
<b>GRAND PROJECT TOTAL</b>	\$588,000.00

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.

AEP grant managers will perform quarterly reviews of budgets and deliverables. Deviations from the proposed work plan will be reported to the OSM program office, and management actions may be taken to facilitate meeting of budget and deliverable expectations. All partners will follow good financial management practices as required by their agencies, institutions or corporations.

Foreseeable risks to the program include:

- Delays in contracts and grants, either due to modification of the work planning schedule or due to bureaucratic delays in grant/contract execution.
- Mis-matched funding allocations between communities and western scientists (eg. one group being funded and not the other, vice versa)
- Lack of clear direction for integration. Absence of strong direction on a clear, single integration process would create a risk of individual communities establishing siloed and disparate projects.
- The COVID-19 pandemic may preclude in-person community engagement and capacity building and postpone monitoring. We will proceed as allowed by Federal, Provincial, and Indigenous governments.



## 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 blue "+" symbol on the bottom right side of table.

DESCRIPTION	SOURCE	EQUIVALENT AMOUNT (\$CAD)
Click or tap here to enter text.	Click or tap here to enter text.	\$0.00
<b>TOTAL</b>		<b>\$0.00</b>





## 19.0 Consent & Declaration of Completion

**Lead Applicant Name**

Monica Kohler

**Title/Organization**

Operations Director/Alberta Biodiversity Monitoring Institute

**Signature**

Monica Kohler

**Date**

2022-10-26

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

Kristin Hynes

**Title/Organization**

Invertebrate Monitoring Biologist/Alberta Environment and Parks

**Signature**

Kristin Hynes

**Date**

2022-10-26



## PROGRAM OFFICE USE ONLY

### **Governance Review & Decision Process**

*this phase follows submission and triggers the Governance Review*

**TAC Review (Date):**

Click or tap to enter a date.

**ICBMAC Review (Date):**

Click or tap to enter a date.

**SIKIC Review (Date):**

Click or tap to enter a date.

**OC Review (Date):**

Click or tap to enter a date.

**Final Recommendations:**

**Decision Pool:**

Choose an item.

**Notes:**

Click or tap here to enter text.

### **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):**

Click or tap to enter a date.

**SIKIC Review (Date):**

Click or tap to enter a date.

**OC Review (Date):**

Click or tap to enter a date.

**Comments:**

**Decision Pool:**

Choose an item.

**Notes & Additional Actions for Successful Work Plan Implementation:**

Click or tap here to enter text.