



2022-2023 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 October 5, 2021 at 4:30 PM Mountain Standard time.	October 5, 2021 4:30 PM MST
Decision Notification	Mid to Late January 2022

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.

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.

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.

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.**

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 Form and Distribution Package, accessible here: [Work Planning Form and Distribution Package](#)

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.



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:

202223_wkpln_WorkPlanTitle_ProjectLeadLastNameFirstName

Example:

202223_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:

202223_sup##_WorkPlanTitle_ProjectLeadLastNameFirstName

Examples:

202223_sup01_OilSandsResiduesinFishTissue_SmithJoe

202223_sup02_OilSandsResiduesinFishTissue_SmithJoe

.
. .
. .

202223_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 5, 2021, **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.



WORK PLAN APPLICATION

PROJECT INFORMATION	
Project Title:	2022-2023-Community Based Oil sands Monitoring Program-Surface Water and Near Surface Ground Water
Lead Applicant, Organization, or Community:	Owl River Metis Community Association
Work Plan Identifier Number: <i>If this is an on-going project please fill the identifier number for 20/21 fiscal by adjusting the last four digits: Example: D-1-2020 would become D-1-2022</i>	-
Project Region(s):	Athabasca
Project Start Year: <i>First year funding under the OSM program was received for this project (if applicable)</i>	2022
Project End Year: <i>Last year funding under the OSM program is requested Example: 2022</i>	2023
Total 2022/23 Project Budget: <i>For the 2022/23 fiscal year</i>	\$97,844.00
Requested OSM Program Funding: <i>For the 2022/23 fiscal year</i>	\$356,500.00
Project Type:	Community Based Monitoring
Project Theme:	Surface Water
Anticipated Total Duration of Projects (Core and Focused Study (3 years))	Year 2
Current Year	Focused Study: Year 2 of 3
	Core Monitoring: Choose an item.

CONTACT INFORMATION	
Lead Applicant/ Principal Investigator: <i>Every work plan application requires one lead applicant. This lead is accountable for the entire work plan and all deliverables.</i>	Janani Shivasankar
Job Title:	Environmental Scientist
Organization:	Owl River Metis Community Association (ORMCA)
Address:	P.O. Box 1521, Lac La Biche, AB, T0A 2C0
Phone:	780-263-1893
Email:	janani.shivasankar@owlrivermetis.com

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.

The ORMCA is undertaking the proposed 2022-2023, community-based monitoring on surface water, aquatic ecosystem health and near surface groundwater interaction with support from the Oil Sands Monitoring Program (OSM). Although the groundwater and surface water programs are independent programs in OSM, ORMCA would like to propose and submit an integrated work plan addressing the connections between the Themes Surface water (Aquatic Health) and Groundwater, (near surface groundwater interaction). The Community based monitoring program by ORMCA aims to monitor the cumulative effects of oil sand activities on various biological and chemical characteristics of the watershed and aquifers, and thereby contribute to a more comprehensive picture of surface water, near surface groundwater and aquatic ecosystem health. ORMCA will begin to look at contaminants we try to identify the source-receptor pathway by conducting snow sampling with contaminant measurements from surface water quality and surface water groundwater interface sampling. Based on the resources, available from Alberta Environment and Parks, there exists a gap between the Study areas currently monitored. The ORMCA workplan will be monitoring those sites not covered by the Core program.

ORMCA is building its capacity through the funding provided for training from the 2020-2021 proposal, attending workshops/training related to environmental programs, facilitated by the Indigenous Community-Based Monitoring Facilitation Center (ICBMFC) to operate a community-based monitoring program for regional watersheds. Also ORMCA has expressed interest in working with the Alberta Lake Management Society (ALMS) for their lakekeeper program ,whish is tailored and consistent with the OSM Surface water Quality Monitoring.

These watersheds are in the heart of the ORMCA territory and therefore the community is well-positioned to identify and perform the Environmental monitoring.

Our approach towards the Community based monitoring will include site visits, environmental data collection through both western scientific methodologies and identification of Indigenous Indicators through interviews in the field with ORMCA knowledge holders. Project deliverables will include a technical report summarizing on the Indigenous Knowledge based indicators and identification of thresholds based on previous studies and focus on integrating the western science and the traditional knowledge.

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 the EEM 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 EEM framework 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
- Discuss results of previous monitoring/studies/development and what has been achieved to date.

The workplan for 2022-2023 Community based oil sands monitoring program satisfies the Indigenous community-based monitoring program (ICBM) guided by the Indigenous community-based monitoring Advisory committee (ICBMAC), alongside fulfilling the requirement from the Oil Sands monitoring Program of providing the thresholds and indicators through Community based monitoring.

2.0 Objectives of the Work Plan

List in point form the Objectives of the 2022/23 work plan below

Developing comprehensive interview questions to gather data from the community.

Identifying key monitoring locations and culturally important locations, by conducting focus group workshops with the community members.

Supporting co-production between indigenous knowledge and western science, Environmental Scientist (ORMCA) will conduct field visits with the community members in sampling surface-water quality, quantity, Aquatic ecosystem health, near surface groundwater interaction, snow sampling as the community members raise concerns about the color of snow turning yellow at few sits.

Data analysis, compilation and summarizing the traditional knowledge and scientific data obtained.

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)
- integrate western science with Indigenous Community-Based Monitoring
- addresses the EEM framework 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:

Surface Water

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 2022/23 work planning all Community Based Monitoring Projects are Focused Studies.

Focused Study (includes Community-Based Monitoring)

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:

Quality

3.4.1.2 Surface Water Key Questions

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

1. Are changes occurring in water quality, biological health (e.g., benthos, fish) and/or water quantity/flows, to what degree are changes attributable to oil sands activities, and what is the contribution in the context of cumulative effects?

Yes, according to ORMCA members surface water quality has of their regional watersheds have deteriorated. This has affected the fish health and the related aquatic ecosystems which supports the growth of traditional plants. ORMCA elders have observed that groundwater discharge and interact action with the surface water has a degrading effect on the water quality and may affect the terrestrial organisms as well. Concerns have arisen in respect to the use of snow as drinking water while on the land and that runoff during spring may contribute to changing surface water quality as well.

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

The ORMCA members are concerned about surface water quality of their regional watersheds. The Indigenous knowledge of ORMCA elders indicates that changes have occurred in water quality, quantity, fish habitat and near surface groundwater over the time.

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

Yes, the data generated by the western scientist monitoring will be provided to the OSM program.

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

Yes, ORMCA will follow the Standard operating procedures outlined by ECCC in the water quality sampling procedures, snow sampling techniques and perform the analysis using a third party environmental lab.

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

The Community based monitoring program by ORMCA aims to monitor the cumulative effects of oil sand activities and address the community concerns about the surface water quality, near surface water groundwater interface and aquatic ecosystem health. These parameters satisfy the integration between the thematic areas, and to perform this, ORMCA would be receiving training from the Fort McKay Metis Nation (FMMN) on their sampling techniques through the capacity funding (received in 21-22) which defines the integration of communities. Also, the ORMCA harmonizes the ICBM program Framework by integrating their traditional knowledge with the western science, which in turn leads to community's capacity building.

6.7.6. Where does the monitoring fit on the conceptual model within the EEM framework for the theme area and relative to the conceptual model for the OSM Program theme area? How will this work advance understanding transition towards of the conceptual model EEM framework?

This monitoring program fits with the conceptual models for surface water and community-based monitoring themes as outlined below.

The Proposed monitoring program fits the conceptual model as it aligns within the in-situ oil sands monitoring locations, and the ORMCA has observed a significant change in the quality of surface water over the time, one of the recent concerns being the Air deposition that occurs over the snow in winter times, snow runoff affects the Surface water quality as some of the community members use this as the drinking water. This indeed has a direct effect on the human health and wellbeing. This monitoring program addresses the CBM model as it acknowledges the concerns about the Access and loss of traditional and cultural practices, compromised quality of traditional resources and livelihood, loss of harvesting outlined in the valued components of CBM model.

This project will advance the understanding of these conceptual models as Owl River Métis will contribute knowledge directly related to valued components of each model, based on their perspective.

Hence this is relevant to the Conceptual model of OSM program in the context elaborated below:

Drivers: Access to traditional lands and resources, Loss if cultural practices.

Pressure: Potential loss of harvesting, loss of drinking water quality, loss of quantity in the rivers, lakes and creeks which had direct impact on the growth of Medicinal plants important to the communities.

Pathways: ORMCA identified the changes in SW, SW and GW interaction and transport which has a direct impact on the livelihood, and indicators on degrading culturally important Fish health and loss of traditional ways livelihood.

Therefore, the proposed program we (ORMCA) will collect data that will contribute to knowledge specific to surface water and aquatic health impacts Ecological Knowledge (TEK) which is both aligned with the existing monitoring and enhances and expands it using TEK. Monitored data will be investigated against the Government set standards and the Indigenous triggers and thresholds and aim at integrating them the TEK and the western science.

7. Is the work plan contributing to Programmatic State of Environment Reporting?

Yes, providing data for programmatic state of environment reporting.

3.3.2 Groundwater Theme

3.3.2.1 Sub Themes:

Quality

3.3.2.2 Groundwater Key Questions

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

1. Are changes occurring in groundwater quality and/or quantity, to what degree are changes attributable to oil sands activities, are changes affecting other ecosystems, and what is the contribution in the context of cumulative effects?

The ORMCA members have observed that groundwater discharge and interact action with the surface water has a degrading effect on the water quality and affect the terrestrial organisms. Concerns regarding the chemicals from traffic and snow control measure have been observed by the ORMCA members that alter the existing habitat for wildlife and pollute their source of drinking water.

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

Yes, ORMCA members are concerned about the near surface groundwater interaction as it disturbs the Ecosystem (changes the confidence of using water for drinking, fish health, species change) in their traditional lands.

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

Yes, the data generated by the western scientist of the community will be provided to the OSM program.

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

Yes, ORMCA will follow the Standard operating procedures outlined by AEP and ECCC in the water quality sampling procedures, snow sampling techniques and perform the analysis using a third-party environmental lab. SOP for surface water/groundwater interface are currently being developed by Fort McKay Metis and when available will be utilized.

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

The Community based monitoring program by ORMCA aims to monitor the cumulative effects of oil sand activities and address the community concerns about the near surface groundwater. ORMCA also aims at studying the Surface water quality deteriorating due to near surface groundwater interaction which satisfies the integration between the thematic areas, and to perform this, ORMCA would be getting the training from the Fort McKay Metis Nation (FMMN) on their sampling techniques through the capacity funding which defines the integration of communities. Also, the ORMCA harmonizes the ICBM program Framework by integrating their traditional knowledge with the western science, which in turn leads to community's capacity building.

6. Where does the monitoring fit within the EEM framework and relative to the theme area? How will this work advance transition towards the EEM framework?

Monitoring is risk-based as the ORMCA Elders indicated their concerns of the water quality deteriorating due to groundwater interaction, this alters the surface chemistry which attracts a lot of terrestrial wildlife and hence altering their habitat, changes have been observed over the years and this is of great concern to the community as it affects their ability to utilize their water sources and their traditional ways

of livelihood. Community identified few stressors over the time, which is contaminant deposition, quantity, quality, aquatic health. Besides Community prioritized the monitoring sites based on gaps with the existing monitoring sites, therefore ORMCA would monitor those locations which is currently not covered by the core program. Therefore within the EEM framework, these concerns identified by the community by their IK will work towards integrating the western science and studying the impacts of Groundwater.

7. Where does the monitoring fit on the conceptual model for the theme area and relative to the conceptual model for the OSM Program? How will this work advance understanding of the conceptual model?

This monitoring program fits with the conceptual models for ground water and community-based monitoring themes as outlined below.

According to the ORMCA members, the Increased traffic in-situ due to the Oil sands projects and the measures to control snow on these roads during winter months have elevated the levels of chemicals leaching into the groundwater Aquifers. This has a cumulative effect on the surface water and wildlife as this GW when interacts affects the surface water quality and leads to the creeks and rivers drying up and leaving large amounts of accumulated chemicals on the surface which attracts the wildlife in the region. Due to this there is an increased Mortality of wildlife in the defined region also leading to physiological changes in the wildlife due to ingestion of these chemicals. These observations are indicative of how the quality of groundwater alters the terrestrial organisms in the area.

This monitoring program addresses the CBM model as it acknowledges the concerns about the Access routes and loss of traditional and cultural practices, compromised quality of traditional resources and livelihood, loss of harvesting outlined in the valued components of CBM model. Therefore, this project will advance the understanding of these conceptual models as Owl River Métis will contribute knowledge directly related to valued components of each model, based on their perspective.

Therefore, the proposed program we (ORMCA) will collect data that will contribute to knowledge specific to surface water and aquatic health impacts Ecological Knowledge (TEK) which is both aligned with the existing monitoring and enhances and expands it using TEK. Monitored data will be investigated against the Government set standards and the Indigenous triggers and thresholds and aim at integrating them the TEK and the western science.

8. Is the work plan contributing to Programmatic State of Environment Reporting?

Yes, providing data for programmatic state of environment reporting.



3.3.3 Wetlands Theme

3.3.3.1 Sub Themes:

Choose an item.

3.3.3.2 Wetland - Key Questions

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

1. Are changes occurring in wetlands due to contaminants and hydrological processes, to what degree are changes attributable to oil sands activities, and what is the contribution in the context of cumulative effects?

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

6. Where does the monitoring fit within the EEM framework and relative to the theme area? How will this work advance transition towards the EEM framework?

Click or tap here to enter text.

7. Where does the monitoring fit on the conceptual model for the theme area and relative to the conceptual model for the OSM Program? How will this work advance understanding of the conceptual model?

Click or tap here to enter text.

8. Is the work plan contributing to Programmatic State of Environment Reporting?

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. Are changes occurring in air quality, to what degree are changes attributable to oil sands emissions, and what is the contribution in the context of cumulative effects?

Click or tap here to enter text.

2. Are changes informing Indigenous key questions and concerns?

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

6. Where does the monitoring fit within the EEM framework and relative to the theme area? How will this work advance transition towards the EEM framework?

Click or tap here to enter text.

7. Where does the monitoring fit on the conceptual model for the theme area and relative to the conceptual model for the OSM Program? How will this work advance understanding of the conceptual model?

Click or tap here to enter text.

8. Is the work plan contributing to Programmatic State of Environment Reporting? (Answer Box)

Click or tap here to enter text.



3.3.5 Terrestrial Biology Theme

3.3.5.1 Sub Themes:

Choose an item.

3.3.5.2 Terrestrial Biology - Key Questions

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

1. Are changes occurring in terrestrial ecosystems due to contaminants and landscape alteration, to what degree are changes attributable to oil sands activities, and what is the contribution in the context of cumulative effects?

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

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

Click or tap here to enter text.

6. Where does the monitoring fit within the EEM framework and relative to the theme area? How will this work advance transition towards the EEM framework?

Click or tap here to enter text.

7. Where does the monitoring fit on the conceptual model for the theme area and relative to the conceptual model for the OSM Program? How will this work advance understanding of the conceptual model?

Click or tap here to enter text.

8. Is the work plan contributing to Programmatic State of Environment Reporting?

Click or tap here to enter text.



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. Where does the monitoring fit within the EEM framework and relative to the theme area? How will this work advance transition towards the EEM framework?

Click or tap here to enter text.

5. Where does the monitoring fit on the conceptual model for the theme area and relative to the conceptual model for the OSM Program? How will this work advance understanding of the conceptual model?

Click or tap here to enter text.

6. Is the work plan contributing to Programmatic State of Environment Reporting?

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 give consideration for the EEM framework and the approved Key Questions.

Our monitoring program will inform management, policy, and regulatory compliance by documenting changes in surface water and groundwater indicators using Indigenous knowledge and scientific methods. If current industrial development in the area is in environmental compliance yet water quality changes are documented, then it will inform policy makers that current legislation is not sufficient for the desired outcome.

This project will also document information about the valued components of the aquatic environment that the Owl River Métis traditionally use which will inform policy makers when assessing gaps in current regulatory processes.

The project aligns with the Strategic Direction of the Lower Athabasca Regional Plan of "Inclusion of Aboriginal Peoples in Land-Use Planning" that intend to collect traditional ecological knowledge to inform land and natural resource planning in the region. Additionally, the information collected will inform Owl River Métis Communities' decision-making on continued traditional use and access.

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 program is run by Owl River Métis in collaboration with AEP/ECCC. Our monitoring activities are initiated by the community and inform questions posed by the community relating to regional aquatic and groundwater health. The data will be collected by the community relating to socio-cultural and western science indicators chosen or confirmed at a community meeting each year. The indicators will answer questions relating to overall aquatic health, traditional use and harvesting, surface water quality, and surface water/groundwater interface levels.

This project will build community capacity for future environmental monitoring. All research questions and indicators are approved by Owl River Métis collaboratively during project development and any comments or concerns are addressed at a community meeting prior to each year of monitoring to ensure full consent is received. Monitoring activities may be staged from a camp (if public health restrictions and the site allow) where elders, land users, and community monitors will work together throughout all aspects of the program. All program activities are structured to facilitate the transfer of knowledge, skills, and values among participants.

Does this project include an Integrated Community Based Monitoring Component?

Yes

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 can be assessed against a baseline condition. As relevant give consideration for the EEM framework and the approved Key Questions.

The proposed program will respond to the ORMCA's concerns and community needs. The proposed workplan aims at identifying the indicators, thresholds and triggers, culturally relevant receptors. Changes in environmental condition will be assessed by comparing results to historical conditions whenever possible using Indigenous knowledge or previous data collected through other studies in the area. ORMCA will conduct field visits and ensure community engagement as the community members will carryout this monitoring program along with their western scientist, following the SOP defined by the ECCC and AEP. Where no data is available, the first year of monitoring will be used as baseline conditions for comparison in future years.

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 give consideration for the EEM framework and the approved Key Questions.

This monitoring will use methods and materials aligned with core monitoring programs in the Aquatics (Surface water, Fish Health) and the Groundwater Technical Advisory Committees (TAC) which will allow the data to contribute to regional monitoring. The sub-regional scale will be at a site level in areas of importance to the community and will monitor groundwater levels, surface water quality, fish health which will be analyzed for the many interactions that may be linked to the conditions observed by Elders.

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 give consideration for the EEM framework and the approved Key Questions.

This monitoring program will be a collaboration between the Owl River Métis community, to collect data with consistent formats and methods as the Technical Advisory Committee (TAC) core monitoring programs. This will result in the western science data produced in a useful format that can be shared with the interested TACs. The results from the Owl Métis community first year of this program on training and scoping for 2021-2022 will be summarized into a year-end report. A results and field methods report will be produced each year containing all locations, methods, results, and data interpretation and discussion. A similar report containing the results and from each year of monitoring will be completed to document progress for the OSM program.

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 give consideration for the EEM framework and the approved Key Questions.

The Community based monitoring program by ORMCA aims to monitor the cumulative effects of oil sand activities and address their community concerns about the surface water quality, near surface groundwater and aquatic ecosystem health. ORMCA also aims at studying the Surface water quality deteriorating due to near surface groundwater interaction. These would be carried out by the community members, hence satisfying the requirement set by community based monitoring. Also, the ORMCA harmonizes the ICBM program Framework by integrating their traditional knowledge with the western science, which in turn leads to community's capacity building.

10.0 Work Plan Approach/Methods

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

Data Compilation and literature review:

- Desktop review of historical data and literature regarding the aquatic environment in the watershed.
- Community mapping of key monitoring sites.
- Identify areas of greater risk and concerns (e.g harvesting areas, culturally important sites) including risk assessment criteria, environmental impacts, and cumulative impacts from oil sands development, if any.
- Gather information from community elders through interviews, focus group conversations regarding aquatic health and community concerns.

Field data collection

- Review the Previous years TLU data, CBM data for OSM program, western science data and available data through community knowledge holder's hence identify the more relevant locations for surface water and near surface groundwater locations.
- identifying the Community members to participate in the field trip, essentially with those involved in the training programs from 2021-22 workplan.
- Field trip with community members, western science experts, and government representatives.
- Reviewing the SOP for water quality sampling , Snowpack sampling outlined by ECDC and AEP by the project lead.
- Collect surface water quality samples, fish and benthic invertebrate tissue samples at designated sites.
- Collecting snow sampling to look into the contaminant levels before runoff.
- Sample analysis by the qualified lab.

Data Analysis and reporting

- Analyze data using statistical techniques to evaluate the Aquatic health, water quality parameters and contaminants in surface water / surface water with groundwater interaction.
- Interpreting results, and presentation of the overall project findings and results to ORMCA members and further inputs would be added if required.
- Final technical reporting summarizing the results and observations made, would be presented to the partners and the government.
- Review and gather the feedback from community members about the program and objectives moving forward.

10.2 Describe how changes in environmental Condition will be assessed *

Changes to surface water quality will be assessed using the following indicators: vegetation community composition, water quality, groundwater levels, access and traditional use and cultural activities. Changes in environmental condition will be determined by comparing results to historical data (including Indigenous knowledge). Where no data is available, the first year of monitoring will be used as existing conditions for comparison in future years. The results will be used to answer the community's questions related to changes in wetland condition in the vicinity of industrial oil sands development and expansion.

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

According to ORMCA, the Elders have been describing changes in their regional watersheds which may indicate many potential environmental triggers including declining fish population and changing watercolor, taste, and odor. This Traditional knowledge will be the benchmarks which will be identified and used in conjunction with the available western scientific data to communicate the environmental conditions.

(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 *

<p>1. Conducting 21-22 Program (in progress)</p> <p>Phase 1: Training and Scoping Develop a list of questions and concerns from the Owl River Métis community relating to surface water quality and the surface water/groundwater interface.</p> <p>Methods:</p> <ul style="list-style-type: none"> - Literature review/search of community data base. - Community meetings to identify areas of concern, record questions and concerns. - Training of monitors on site (both WS methodologies, CABIN training, industry standards), identification of Indigenous Indicators (Community meeting to develop a list of indicators and choose monitoring locations, - Develop a monitoring plan and prepare for the field assessment, Community member training in the field to collect the required data). - Preliminary sample collection - Reporting <p>Proposed for 22-23</p> <p>Phase 2: Monitoring Project Initiation</p> <p>Methods:</p> <ul style="list-style-type: none"> - Field data collection - Snow Sampling as per Snowpack Sampling for Oil Sands Monitoring (J. Kirk and A. Gleason. Environment and Climate Change Canada, Burlington) - Water quality: site locations water measured for dissolved oxygen, pH, conductivity, visual qualities (e.g., colour, odour, surface residue, and transparency), and samples will be sent to a lab for analysis of additional parameters. - Fish sample collection as described in SOP's from Mark McMaster(ECCC). - Reporting to Environment and Climate Change Canada to summarize the program methods and discuss results. - Sampling with Alberta Lake Management Society (ALMS) as apart of the lake keeper program. - Validation of the reporting and program recommendations with community members <p>For Field Data collection, Based on the standard operating procedures outlined in the ECCC public document for water sampling and snow sampling, this will be reviewed by the project lead with the associated scientific researcher (AEP/ECCC) of the proposed project and communicated to the community members identified in Phase 1. This will be carried out with the necessary health and safety training ,required PPE would be provided to the team assisting in field sampling and following the COVID-19 restriction protocols set by the province. community members along with the project lead and the western scientists will collect the samples from the identified sites and the Qualified labs will analyse the samples. All the SOPs are consistent with the procedures outlined by the OSM program.</p> <p>Proposed for future monitoring</p> <p>Phase 3: Potential for Expanding monitoring to include a new site in a different, important areas.</p> <p>Methods:</p> <ul style="list-style-type: none"> - Meet with the Owl River Metis community to choose a site important to the community, consider access routes, coordinate monitoring teams, and confirm methods. - Review any existing data from nearby environmental monitoring programs to ensure efforts are not duplicated.



- Continue working with community members to identify and train additional community members to support monitoring activities.
- Possibly expand indicators used initially and modify western science data collection to incorporate methods used by the Oil Sands Monitoring program Surface Water, Groundwater and Benthic Invertebrate TACs.

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

The key Parameters to be measured as a part of the proposed project would be as follows: Surface water/ Groundwater: dissolved oxygen, electrical conductivity, pH, temperature, turbidity, hydraulic head, dissolved gases, general organics, microbiological parameters, petroleum hydrocarbons, polycyclic aromatic hydrocarbons, physiochemical properties, stable isotopes, total and dissolved metals including methylmercury and rare earth metals, stable water isotopes, and total and dissolved nutrients.

Snow sampling: PAH, multielement/water chemistry, mercury (Hg)/ methyl mercury (MeHg) other samples TBD

The analysis will be confirmed based on community concerns and other constraints such as the budgets and the number of sampling locations. Analysis will be conducted at Bureau Veritas and in the future be conducted in the community.

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.

Community based monitoring Knowledge gained will first be shared with ORMCA and then the OSM Program Community based monitoring Knowledge gained will first be shared with ORMCA and then the OSM. The methods, and results, will be included in a report completed after each year of monitoring. The end-users of the monitoring program will be the Owl River Metis community who have reports documenting their concerns relating to surface water and the interface between surface-groundwater. This report will add to their collection of data documenting change on their land. The results will also be presented in poster format in the community where the community can discuss the results and provide feedback for future monitoring. This poster can also be presented at science regional gathering proposed by ICBMAC. Should there be opportunity to further partner on work Owl River would look at sharing indigenous indicators developed through the program.

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

Phase 1:

Task / Deliverable: Meeting with community members / Indigenous knowledge holders
 Team: Mr. Jack Quintal (president), Janani Shivasankar (Environmental Scientist), Mr. Patrick Quintal (Community Elders Representative) and the ORMCA members,
 Paul Drevnick – Lead- Water Quality Scientist (AEP)
 Cynthia McClain – Hydrogeologist, Groundwater TAC (AEP)
 Adi Adiele- Program manager, FMMN
 Mark McMaster (ECCC)
 Erin Ussery (ECCC)

Phase 2: Analysis : Bureau Veritas, Amanda Gleeson (ECCC), Janani Shivasankar (Environmental Scientist- ORMCA)

Phase 3: Reporting : Janani Shivasankar (Environmental Scientist).

*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:

Discrete

13.3 Frequency of Collection:

Annually

13.4 Estimated Data Collection Start Date:

2022-08-01

13.5 Estimated Data Collection End Date:

2022-10-01

13.6 Estimated Timeline For Upload Start Date:

2022-12-01

13.7 Estimated Timeline For Upload End Date:

2023-03-31

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>Environmental Sample Analysis Results</i>	Laboratory reports	Format provided by Laboratories	Open by Default
<i>ORMCA Community Traditional Knowledge- Western science integrated Data</i>	Reports provided by ORMCA	Pdf and Docx	Protected by Default

14.0 2022/23 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
Technical Report	Q4	ORMCA Community based Monitoring Report to be delivered by March 31st 2023

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.

President of Owl River Métis

Mr. Jack Quintal (Bringing indigenous knowledge and experience to the table, Making recommendations for action.)

Janani Shivasankar (Environmental Scientist) (Overall Project lead, Field data collection, results interpretation, and presentation, Review of the program to ensure alignment with objectives, Attending CBM related meetings and workshops.)

Mercy Carcido (Administrative Manager) (overall management of services and program budgets)

Community elder's Representative.

Mr. Patrick Quintal (Explaining, stirring interest, and motivating other elders to participate, bringing indigenous knowledge and understanding to the table, Answering interview questions to facilitate discussion)

Bureau Veritas and InnoTech (potential partner) (Surface water/Groundwater sample Analysis)

Alberta Lake Management Society (ALMS)

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
Paul Drevnick	Water Quality Scientist, Government Lead	0%
Cynthia McClain	Hydrogeologist, Government Lead	0
Michal Gnitecki	Groundwater Technologist, Grant Manager	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
Greg Bickerton	Hydrogeologist, Government Lead	0%
Mark McMaster	Fish Biologist	0
Erin Ussery	Click or tap here to enter text.	0%
Amanda Gleeson	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
Salaries and Benefits <i>(Calculated from Table 16.1.1 above)</i>	0.00%	\$0.00
Operations and Maintenance		
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
Total All Grants <i>(Calculated from Table 16.4 below)</i>		\$305,000.00
Total All Contracts <i>(Calculated from Table 16.5 below)</i>		\$22,500.00
Sub- TOTAL <i>(Calculated)</i>		\$327,500.00
Capital*		\$0.00
AEP TOTAL <i>(Calculated)</i>		\$327,500.00

* 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 <i>(Please manually provide the number in the space below)</i>		
Salaries and Benefits		\$0.00
Operations and Maintenance		
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
ECCC TOTAL <i>(Calculated)</i>		\$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 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	Janani Shivasankar
GRANT RECIPIENT - ONLY: Organization	Owl River Metis Community Association
Category	Total Funding Requested from OSM
Salaries and Benefits	\$85,000.00
Operations and Maintenance	
Consumable materials and supplies	\$60,000.00
Conferences and meetings travel	\$10,000.00
Project-related travel	\$35,000.00
Engagement	\$35,000.00
Reporting	\$50,000.00
Overhead	\$30,000.00
GRANT TOTAL <i>(Calculated)</i>	\$305,000.00

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	Laboratory Analysis of Fish Tissues and Fish camp training
CONTRACT RECIPIENT - ONLY: Organization	Click or tap here to enter text.
Category	Total Funding Requested from OSM
Salaries and Benefits	\$0.00
Operations and Maintenance	
Consumable materials and supplies	\$22,500.00
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>	\$22,500.00

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 <i>Sums totals for salaries and benefits from AEP and ECCC ONLY</i>	\$0.00
Operations and Maintenance	
Consumable materials and supplies <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
Conferences and meetings travel <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
Project-related travel <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
Engagement <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
Reporting <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
Overhead <i>Sums totals for AEP and ECCC ONLY</i>	\$0.00
Total All Grants (from table 16.2.1 above) <i>Sums totals for AEP Tables ONLY</i>	\$305,000.00
Total All Contracts (from table 16.2.1 above) <i>Sums totals for AEP Tables ONLY</i>	\$22,500.00
Sub- TOTAL	\$327,500.00
Capital* <i>Sums total for AEP</i>	\$0.00
GRAND PROJECT TOTAL	\$327,500.00

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.

The scope and budget for each of the subcontractors will be confirmed as part of the contracting process and they will all be fixed budgets. All subcontractors 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. This is a continuation of a project that was initiated in 2021/21 which was completed on time and on budget. Potential risks to completion could include changes in Covid restrictions that limit community participation, or access to the field by the western science subcontractors. If this occurs, ORMCA will work with OSM to identify whether remote options or additional desktop components can be incorporated.



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
TOTAL		\$0.00



19.0 Consent & Declaration of Completion

Lead Applicant Name

Janani Shivasankar

Title/Organization

Environmental Scientist

Signature

Janani Shivasankar

Date

2021-10-05

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

Paul Drevnick

Title/Organization

Water Quality Scientist

Signature

Click or tap here to enter text.

Date

Click or tap to enter a date.



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.