

# 2018-19 Work Plan Template

All fields with an \* are mandatory

Project Description Summary			Co-Chair Decision (March 8, 2018)
Date *	Project/Work Plan Identifier (if applicable)	Program Type and Strategic Alignment *	<p><b>* Decision Pool A: Workplan approved but at a reduced funding level.</b></p> <p><b>* Approved at \$250,000</b></p> <p>* It is a requirement of funding that key members of the project team participate in a Water Monitoring Integration Workshop to be informed by the Oil Sands Monitoring Secretariat to ensure this project links to related monitoring projects under OSM.</p> <p>*Funding in 2018/19 is dependent upon key project members participating in Oil Sands Process Water release discussions occurring provincially and federally. The scope and timing of this monitoring must be based on direction of the OSPW science team and policy directions federally and provincially. Depending upon the outcomes of these discussions, activity will be considered for further funding.</p> <p>* Deliverables for this level of funding are to be clarified and an amended workplan submitted before March 23, 2018 to the Oil Sands Monitoring Secretariat.</p> <p>*Funding expectations: as a minimum an annual progress report is required by February 28, 2019. All publications or products resulting from this work requires acknowledgement of funding from the Oil Sands Monitoring Program and are to be provided to the Oil Sands Monitoring Secretariat for tracking and any programmatic communications purposes. Work funded through the Oil Sands Program will be available for public dissemination.</p>
19/01/2018	New project currently lacks a Project Code	OSM - Focus Study	
Program Category *	Status *	Dept. ID	
Watershed Sciences (Surface Water and Groundwater)	New Project		
Project Leadership / Contact information			
Project Title *	Key Words (max 10) *		
Enhanced monitoring of the Lower Athabasca	Enhanced monitoring, Lower Athabasca River, possible release of OSPW Syncrude Canada		
Surname *	Given Name *	Title *	
Scrimgeour	Garry	Executive Director, Environmental Monitoring and Science Division (EMSD)	
Organization *	Department	Division	
Alberta Provincial	Environment and Parks	Environmental Monitoring and Science	
Branch *	Section/Unit (if applicable)	Phone *	
Environmental Observations and Monitoring		7802297299	
Email *	Mailing Address	City	
<a href="mailto:garry.scrimgeour@gov.ab.ca">garry.scrimgeour@gov.ab.ca</a>	9th Floor, 9888 Jasper Avenue, Edmonton, AB T5J 5C6		
Postal Code	EMSD Executive Owner (If Applicable)		
T5J 5C6	Garry Scrimgeour		
Project Information			
Project Objective(s) (Bullet Form) *	<ul style="list-style-type: none"> <li>The primary objective of this study is to design and deploy enhanced monitoring in the Athabasca River for 2 years prior to the possible release of treated OSPW to the Athabasca River.</li> <li>It describes the collection of samples to describe spatial patterns in: i) water physico-chemistry, ii) aquatic life, and iii) burdens of contaminants in benthic algal, benthic macroinvertebrate and small bodied fish and iv) descriptions of fish health.</li> <li>This information will be collected in each of two years from multiple sites located upstream (likely 3 sites) of the potential water release site and at multiple sites (likely 9 sites) located at increasingly distances downstream of the potential release site.</li> <li>While several aspects of the proposed are described in moderate detail several important aspects need to be further developed. This includes the location of the most downstream sites and the integration of monitoring endpoints of importance to Indigenous peoples.</li> </ul>		
Plain Language Overview (100 words) *	<ul style="list-style-type: none"> <li>Syncrude Canada has developed a coke slurry technology that may be capable of treating oil sands process affected (OSPW) water such that it can be released into the Athabasca River.</li> <li>Syncrude Canada is creating a medium-scale treatment facility (ca. 10 ha in size) to assess the efficacy of this method at a larger scale.</li> <li>The potential release of treated OSPW water is being evaluated using phased approach. A potential phase includes the short-term release of treated OSPW to the river accompanied with a program to monitor the effects of the release on the river.</li> <li>The ability to detect an effect of the release of treated OSPW to the river requires detailed information on the physical, chemical and biological characteristics of the river prior to possible releases.</li> <li>This study proposes to design and deploy enhanced monitoring at 12 sites in the Athabasca River for 2 years prior to the possible release of treated OSPW to the Athabasca River.</li> </ul>		
Project Duration *	Project Original Start Date *	Estimated Completion Date *	
Multi-Year	1/4/2018	31/3/2020	
Specify Objectives This Project Will Address in 2018/2019. *	<p>Design and deploy an enhanced monitoring program likely comprising three sites located upstream of the potential OSPW treated water release site and likely at 9 sites downstream of the potential site where treated OSPW might be released to the Athabasca River.</p> <ul style="list-style-type: none"> <li>Identify chemical and biological monitoring endpoints of relevance from a classical science perspective and those of importance to Indigenous peoples</li> <li>New information gained by the study will be integrated with existing data and knowledge gathered as a part of existing environmental monitoring in the Athabasca River.</li> </ul>		
Specify Objectives This Project Will Address Beyond 2018/19 (if multi-year). *	<ul style="list-style-type: none"> <li>Efforts in 2019-2020 will focus largely on continued deployment of the field sampling program and initial analyses of data whereas efforts in 2020-21 will focus on the completing of a detailed technical report that describes the results of the study.</li> <li>The result of the work will be shared extensively in multiple formats including a technical report, presentations to scientific conferences and to northern communities.</li> </ul>		
List Key Questions/Hypotheses Related to Each Objective Stated Above. *	<ul style="list-style-type: none"> <li>What is the spatial and temporal variation in water physio-chemistry, and aquatic life at sites upstream and downstream of the potential release site?</li> <li>Given inherent variance, what sampling intensities are required to be able to detect impacts should they occur?</li> </ul>		

Main Assumptions, Constraints, Dependencies. *	<ul style="list-style-type: none"> <li>Information used to define conditions prior to the potential release require will be based on: i) monitoring at new sites, ii) obtaining data from sites currently being monitored through the oil sands monitoring program and iii) historical data.</li> <li>Integrating these datasets into a single and comparable data base, recognizing changes in sampling methods and analytical methods may pose modest challenges.</li> <li>The work will be reviewed and overseen by an Oil Sands Process Affected Water Science Team that was recently created by Alberta Environment and Parks' Chief Scientist. This proposal represents initial considerations that will be presented to the science team. It describes several aspects of the work but recognizes that additional components need to be more fully develop once the program is funded. This includes identifying: i) monitoring endpoints that are of interest to Indigenous communities and ii) the sampling design, i.e., number and location of monitoring sites in the lower Athabasca River</li> <li>Identifying monitoring endpoints of interest to Indigenous people is a key component of the study and will require time and funds to engage, listen and learn from Indigenous partners in the project.</li> <li>Effort will also be required to coordinate information and data collected by several other monitoring activities in the lower extents of the Lower Athabasca River and possibly in the Peace Athabasca delta.</li> </ul>	
Partner Categories (select all that apply) * A partner is an individual, group, agency, community etc. that is an active participant in the project and in achieving the project deliverables.	Knowledge System *	Location (select all that apply) *
<input checked="" type="checkbox"/> Federal Government <input type="checkbox"/> Another AEP Division <input type="checkbox"/> Another GoA Department <input checked="" type="checkbox"/> University/Academic Institution <input type="checkbox"/> Solely delivered by GoA <input type="checkbox"/> Citizen Science <input checked="" type="checkbox"/> Indigenous Community or Organization <input type="checkbox"/> ENGO <input type="checkbox"/> Other	Both	<input checked="" type="checkbox"/> Office or Laboratory <input checked="" type="checkbox"/> Sub-regional <input type="checkbox"/> Transboundary (provincial/territorial) <input type="checkbox"/> Lower Peace Region <input type="checkbox"/> Upper Peace Region <input type="checkbox"/> North Saskatchewan Region <input type="checkbox"/> Red Deer Region <input checked="" type="checkbox"/> Lower Athabasca Region <input type="checkbox"/> Upper Athabasca Region
<b>AEP ONLY: Strategic Alignment to EMSD Outcomes</b>		
<b>AEP ONLY:</b> Strategic Alignment to EMSD Science Plan, select 1-2 areas that apply (if Applicable) Ecosystems and Predicting Change Human Relationship with the Environment		
<b>AEP ONLY: Strategic Alignment to AEP Departmental Outcomes</b>		
<b>AEP ONLY:</b> Environmental and Ecosystem Health and Integrity Water (Surface and Ground)	<b>AEP ONLY:</b> Sustainable Economic Diversity Yes	<b>AEP ONLY:</b> Social Well-Being Yes
<b>AEP ONLY:</b> Protected Public Health and Safety from Environmental Yes		
<b>AEP ONLY:</b> IMAG/IMSC Information Needs, Please Specify Which Need(s) is Being Addressed. File location M:\EMSD\Common\Portfolio Mgmt System Shared Docs	Biodiversity (Priority 19 Provincial scale monitoring of Alberta's aquatic and terrestrial species)	
<b>AEP ONLY:</b> How This Project Will Address Each Strategic Theme Selected Above.	Provides the data and interpretation to quantify current accumulated state and predict future states	
<b>Project Methodology</b>		
List the Key Project Phases and Provide Bullets for Each Major Task Under Each Project Phase. *	<ul style="list-style-type: none"> <li>Phase I. Finalize sampling design, sampling methods (including QA/QC procedures) and develop the operational plan to complete the field work (April-May). Deploy enhanced sampling program (likely weekly sampling of sites in mid and late June, July, August) and bi-weekly sampling September, Oct, early November (if water conditions are suitable) at 12 sites.</li> <li>Phase II. Continue field sampling as described in Phase I in addition to data entry and initial analyses and development of communication and reporting plan</li> <li>Phase III. April to September. Completion of full technical report and deployment of the communication plan.</li> </ul>	
Describe How Changes in Environmental Condition Will Be Assessed. *	<ul style="list-style-type: none"> <li>The focus of the proposed work is quantify spatial and temporal patterns in water physico-chemistry, structure of biological communities and burdens of a suite of contaminants and metals in select biological communities.</li> <li>Evaluation of change potentially as result of the discharge of treated OSPW will be quantified after the release of treated OSPW</li> </ul>	
Are There Benchmarks (e.g., objectives, tiers, triggers, limits, reference conditions, thresholds, etc.) Being Used to Assess Changes in Environmental Condition? If So, Please Describe, If Not, State "NONE". *	* Benchmarks and triggers are in the process of being developed	
Provide a Brief Description of the Methods By Project Phase. *	Application of Nationally recognised standards associated with collection of water e to: i) collect and handle fish as described by the Canadian Council of Animal Care, ii) adoption of all relevant occupational health and safety protocols and iii) protocols to ensure data quality and standards.	

List the Key Indicators Measured. *	<ul style="list-style-type: none"> <li>Water physico-chemistry. Basic descriptors including, water temperature dissolved oxygen, conductivity, anions and base cations, multiple nutrient fractions, total and dissolved trace metals, and Naphthenic acids (NA's) and polycyclic aromatic hydrocarbons (PAH's) and recoverable hydrocarbons [at select sites and times]).</li> <li>Structure of biological communities</li> <li>Benthic algae - community structure. Algal abundance measured as chl a and ash free dry mass, species composition and abundance. Benthic macroinvertebrates – community structure. Application of the rapid bio assessment Canadian Aquatic Biomonitoring Network protocol. Fish community structure. Electroshocking</li> <li>Burdens of organic contaminants and metals in biological communities (algae, benthic macroinvertebrates, fish). The frequency of sampling of water physico-chemistry, collection of samples to describe the structure of biological communities, and determining burdens of contaminants in biota has not been finalized. However, it is likely that water samples will be conducted at one to two week intervals between June and November in 2018 and 2019. Where as sampling of community structure and contaminant loadings will be conducted two to three time between June and November in 2018 and 2019.</li> <li>Indicators of relevance to Indigenous peoples need to be identified and costs to sample these need to be added to the work plan</li> </ul>
Describe Sample Handling Procedures, If Not Applicable, State N/A. *	Application of numerous nationally recognised standards to: i) collect water and biotic endpoints including algae, benthic macroinvertebrates and fish. We will collect and handle according to protocols described by the Canadian Council of Animal Care. Lastly, we will adopt all: i) relevant occupational health and safety protocols and iii) protocols to ensure data quality and standards.
List SOPs that Will Be Used, If Not Applicable, State N/A.*	N/A
Describe the QA/QC Plan, If Not Applicable, State N/A. *	Not currently available but will be developed by April 2018 prior to deployment of field collections. This will include QA/QC for: i) water and sediment samples including duplicates and field blanks, ii) benthic macroinvertebrate as described by Environment and Climate Change Canada.
Describe How Indigenous Communities are Involved in the Project Design, Data Collection, and Analysis (Knowledge Co-creation) and How is their Consent Sought. If Not Applicable, State N/A.*	We will engage Indigenous peoples to identify endpoints that are of interest to them and to the extent possible include them in field collections. These discussion will be included in discussions by an Oil Sands Process Affected Water Science team that was recently created by Dr. Fred Wrona, Chief Scientist, Alberta Environment and Parks, Government of Alberta. The first meeting of this team is schedule for Q1 2018.
<b>Components Delivered by Others</b>	
List by Project or Project Phase Each Component That Will Be Delivered by An External Party (including analytical laboratories) and Name the Party. State None if Not Required. *	<ul style="list-style-type: none"> <li>The majority of the field work will be led by staff from Environmental Monitoring and Science Division.</li> <li>Commercial analytical laboratories will be retained to process water and sediment samples, and samples of benthic of algae and benthic macroinvertebrates and fish.</li> </ul>
Will These Components be Delivered Under Grant or Contract or Both? Please Describe and Name the Associate Work Plan/Grant/Contract for These Services if Not Included Within This Work Plan. *	<ul style="list-style-type: none"> <li>Commercial analytical laboratories will be retained to process water samples and samples of benthic of algae and benthic macroinvertebrates and fish.</li> <li>We will retain commercial service providers to complete analytical work as described above. Payment will be completed through contracts.</li> </ul>
<b>Monitoring Site Locations and Coordinates (for all sites, please add them to the Monitoring Site Location tab - a separate excel sheet)</b>	
Attach Map of Locations. Distinguish Indicators by Station if Necessary. Distinguish Sampling Frequency by Station if Necessary.	<ul style="list-style-type: none"> <li>The locations of sampling sites has not been finalized but will be identified by May, 2018.</li> <li>The sampling design also includes using data from existing sites sampled as a part of ongoing projects funded by the Oil Sands Monitoring Program.</li> <li>These include core water quality monitoring and studies of benthic macroinvertebrates, and biodiversity and health of fish in the mainstem of the Athabasca River. Sample sites will be determined based on input from recently the OSPW Science Team.</li> </ul>
<b>Project Schedule</b>	
<b>FOR OIL SANDS MONITORING PROJECTS ONLY:</b> A coordinated field monitoring schedule for the OSM Program is required. Please complete the attached document named "OSM Program Field Monitoring Schedule" in addition to this work plan. Fill as much as you can recognizing that scheduling changes will occur and the scheduling document will be updated regularly. Please note the scheduling document will be shared with stakeholders.	<ul style="list-style-type: none"> <li>The sampling design also includes using data from existing sites sampled as a part of ongoing projects funded by the Oil Sands Monitoring Program.</li> <li>We will be coordinating our sampling program to benefit from those conducted on core water quality monitoring and studies of benthic macroinvertebrates, and biodiversity and health of fish in the mainstem of the Athabasca River.</li> </ul>
<b>FOR OIL SANDS MONITORING PROJECTS ONLY:</b> Have You Coordinated With Other Project Leads On Field Logistics? If So, Please Specify. *	<ul style="list-style-type: none"> <li>We will be coordinating our sampling program to benefit from those conducted on core water quality monitoring and studies of benthic macroinvertebrates, and biodiversity and health of fish in the mainstem of the Athabasca River.</li> </ul>
<b>Other</b>	

Additional Details.		
Will Capacity Building and Training be a Component of the Project and If So, Explain How. If Not, State N/A.*	Yes. We EMSD has recruited two biologists to lead and support (respectively) the delivery of the program and will benefit for technical support by existing staff within Environmental Monitoring Division, Alberta Environment and Parks. Both new staff member joined EMSD in February 2018.	
Environmental Impact and Considerations.	None	
<b>Data Management and Digital Assets</b>		
Will Data be Produced as a Result Of This Project? *	Type of Quantitative Data Variables	Frequency Of Collection
Yes	Continuous	Annually
Data Collection Period: Start Date - End Date	data represents both continuously produced data (e.g., data from data) loggers plus spot measurements	
Summer and fall monitoring of water, sediments, invertebrates and fish	Timeline For Upload Period: Start Date - End Date	
	July to October	
Data mining of existing data sets	Throughout the fiscal year	
Is There a Data Sharing Agreement? (Yes or No).	No - the vast majority of data are produced through the oil sands program and thus are readily available.	
Will the Data Include Traditional Knowledge as Defined by and Provided by an Indigenous Representative, Community or Organization (Yes / No).	Yes, we will be requesting input from Indigenous wisdom through the OSPW Science Team and through collaborations with northern monitoring programs.	
Platform/Location of Data Storage.	Excel based and then transferred to more comprehensive data systems as they become available. Data shall be integrated into data management platform at regulate intervals as the data become available. We will provide data , plus a data summary and associated meta data at the end of each fiscal year.	
<b>Project Deliverables</b>		
<b>Proposed 2018-19 Deliverable Type (for each deliverable outline document, presentation, meeting, etc.)</b>		
<input type="checkbox"/> Peer-reviewed Journal Publication	<input type="checkbox"/> Peer-reviewed Conference Proceeding	<input type="checkbox"/> Non-peer reviewed Conference Proceeding
Q1 - Deliverable, Comments	Q1 - Deliverable, Comments	Q1 - Deliverable, Comments
Unlikely for 2018-2019	Unlikely for 2018-2019	Unlikely for 2018-2019
Q2 - Deliverable, Comments	Q2 - Deliverable, Comments	Q2 - Deliverable, Comments
Unlikely for 2018-2019	Unlikely for 2018-2019	Unlikely for 2018-2019
Q3 - Deliverable, Comments	Q3 - Deliverable, Comments	Q3 - Deliverable, Comments
Unlikely for 2018-2019	Unlikely for 2018-2019	Unlikely for 2018-2019
Q4 - Deliverable, Comments	Q4 - Deliverable, Comments	Q4 - Deliverable, Comments
Unlikely for 2018-2019	Unlikely for 2018-2019	Unlikely for 2018-2019
<input type="checkbox"/> Conference Presentation(s)	<input type="checkbox"/> Stakeholder Presentation	<input type="checkbox"/> Key Engagement/Participation Meeting *
Q1 - Deliverable, Comments	Q1 - Deliverable, Comments	Q1 - Deliverable, Comments
Choose one	Choose one	Name of Meeting, Year, Location, Dates, Participant Groups and Number of Participants.
Unlikely for 2018-2019	Unlikely for 2018-2019	Unlikely for 2018-2020
Q2 - Deliverable, Comments	Q2 - Deliverable, Comments	Q2 - Deliverable, Comments
Choose one	Platform	Name of Meeting, Year, Location, Dates, Participant Groups and Number of Participants.

Unlikely for 2018-2019	Unlikely for 2018-2019	Unlikely for 2018-2019
<b>Q3 - Deliverable, Comments</b>	<b>Q3 - Deliverable, Comments</b>	<b>Q3 - Deliverable, Comments</b>
Choose one	Platform	Name of Meeting, Year, Location, Dates, Participant Groups and Number of Participants.
Unlikely for 2018-2019	Highly likely for Q3 of 2018-2019 as part of Oil sands stakeholder communications	Highly likely for Q3 of 2018-2019 as part of Oil sands stakeholder communications
<b>Q4 - Deliverable, Comments</b>	<b>Q4 - Deliverable, Comments</b>	<b>Q4 - Deliverable, Comments</b>
Choose one	Choose one	Name of Meeting, Year, Location, Dates, Participant Groups and Number of Participants.
	Summary of field activities to be developed and synopsis report that summarizes the status of the project and including required quarterly updates on the program to the Oil Sands Office	
<b>Proposed Deliverables After 2018/2019 for the project funds received in 2018/2019</b>		
<input type="checkbox"/> <b>Peer-reviewed Journal Publication</b>	<input type="checkbox"/> <b>Peer-reviewed Conference Proceeding</b>	<input type="checkbox"/> <b>Non-peer reviewed Conference Proceeding</b>
<b>Q1 - Deliverable, Comments</b>	<b>Q1 - Deliverable, Comments</b>	<b>Q1 - Deliverable, Comments</b>
Unlikely for 2018-2019	Unlikely for 2018-2019	Likely in 2019-2020 but difficult to predict the actual conference where materials will be presented
<b>Q2 - Deliverable, Comments</b>	<b>Q2 - Deliverable, Comments</b>	<b>Q2 - Deliverable, Comments</b>
<b>Q3 - Deliverable, Comments</b>	<b>Q3 - Deliverable, Comments</b>	<b>Q3 - Deliverable, Comments</b>
<b>Q4 - Deliverable, Comments</b>	<b>Q4 - Deliverable, Comments</b>	<b>Q4 - Deliverable, Comments</b>
	Highly likely but details are not available at present.	Highly likely in 2019-2020 but difficult to predict the actual venue and audience
<input type="checkbox"/> <b>Conference Presentation(s)</b>	<input type="checkbox"/> <b>Stakeholder Presentation</b>	<input type="checkbox"/> <b>Key Engagement/Participation Meeting *</b>
<b>Q1 - Deliverable, Comments</b>	<b>Q1 - Deliverable, Comments</b>	<b>Q1 - Deliverable, Comments</b>
Choose one	Platform	Name of Meeting, Year, Location, Dates, Participant Groups and Number of Participants.
<b>Q2 - Deliverable, Comments</b>	<b>Q2 - Deliverable, Comments</b>	<b>Q2 - Deliverable, Comments</b>
Choose one	Choose one	Name of Meeting, Year, Location, Dates, Participant Groups and Number of Participants.
<b>Q3 - Deliverable, Comments</b>	<b>Q3 - Deliverable, Comments</b>	<b>Q3 - Deliverable, Comments</b>
Choose one	Choose one	Name of Meeting, Year, Location, Dates, Participant Groups and Number of Participants.
<b>Q4 - Deliverable, Comments</b>	<b>Q4 - Deliverable, Comments</b>	<b>Q4 - Deliverable, Comments</b>
Choose one	Choose one	Name of Meeting, Year, Location, Dates, Participant Groups and Number of Participants.

<b>All Completed Products</b> <span style="float: right;">if a multi-year</span>		
project, specify all completed products to date (consistent format for the fields below). Add rows as required.		
<b>Journal Paper</b>		
<b>Required Format: Author (follow APA citation format), Year, Title, Journal, Volume, Page Numbers, Open or Closed and Document Location</b>		
Example: Jacoby, W. G. (1994). Public Attitudes Toward Government Spending. American Journal of Political Science, 38(2), 336-361		
Fearon, J. D., & Laitin, D. D. (2003). Ethnicity, Insurgency, and Civil War. American Political Science Review, 97(01), 75. doi: 10.1017/S0003055403000534		
<i>Note: My preference is to allow the new employees to get established so that the work can transition the work from ECCC to EMSD and that EMSD will be able to provide more detailed and comprehensive description of communications products later in the fiscal year of 2018-1019</i>		
2)		
3)		
4)		
5)		
<b>Technical Report</b>		
<b>Required Format: Author, Year, Title, Publisher Location, Name of Publisher, Publisher, Document Location</b>		
Example: Author, F.M. (Publication Year). Title of Report (Report No. XXX). Publisher City, State: Publisher		
A detailed technical report describing the results of the study will be completed by Q3 of 2021		
Annual summary reports will be created in March of each fiscal year. These reports will describe: i) activities completed during the year, ii) identify and rationalise changes to the sampling design if completed, and ii) learning to date. It will also summarize all communication efforts.		
3)		
4)		
5)		
<b>Book Chapter</b>		
<b>Required Format: Author, Year, Title of Paper, Editors, Title of Book, Page Numbers, Location of Publisher, Name of Publisher, Document Location</b>		
Example: Hemingway, E. (1999). The Killers. In J. Updike & K. Kenison (Eds.), The Best American Short Stories of the Century (pp.78-80). Boston, MA: Houghton Mifflin		
2)		
3)		
4)		
5)		
<b>Conference Proceeding</b>		
<b>Required Format: Author, Year, Title of Paper, Editors, Title of Proceedings, Name of Conference Location of Conference, Publisher Location, Name of Publisher</b>		
Example: Author of Paper, A., & Author of Paper, B. (Year, Month date). Title of Paper. In A. Editor, B. Editor, & C. Editor. Title of Published Proceedings. Paper Presented at Title of Conference: Subtitle of Conference, Location (inclusive page numbers). Place of Publication: Publisher.		
As a new project commencing in 2018-19 it is difficult to predict the timing of written and verbal communications. This is true for all types of verbal and written products. Increased clarity on communication deliverables will be available in Q3 of 2018.		
2)		
3)		
4)		
5)		
<b>Public Dissemination Document</b>		
<b>Required Format: Author, Year, Title, Journal / Report, Volume, Publisher, Page Number, Number of Pages, Document Location</b>		
1)		
2)		
3)		
4)		
5)		
<b>AEP ONLY: EMSD Strategic and Operational Publication</b>		
<b>Required Format: Author, Year, Title, Publisher Location, Name of Publisher, Publisher, Document Location</b>		
1)		
2)		
3)		
4)		
5)		
<b>Other Documents</b>		
<b>Detailed Information of Other Documents</b>		
1)		
2)		
3)		
4)		

5)		
<b>Conference Presentation</b>		
<b>Required Format: Presenter, Date, Location, Title, Platform or Poster, Conference Name</b>		
1)		
2)		
3)		
4)		
5)		
<b>Stakeholder Presentation</b>		
<b>Required Format: Presenter, Date, Location, Title, Platform or Poster, Name of Meeting</b>		
1)		
2)		
3)		
4)		
5)		
<b>Key Engagement/Participation Meeting</b>		
<b>Required Format: Meeting Host, Date, Location</b>		
To be determined		
2)		
3)		
4)		
5)		
<b>Human Resources / Staffing Plan (roles and responsibilities)</b>		
<b>Name &amp; Role</b>	<b>Organization</b>	<b>Responsibilities</b>
Keegan Hicks	Environmental Monitoring and Observations Branch	Lead the design and interpretation, and reporting
Fred Noddin	Environmental Monitoring and Observations Branch	Support the deployment and reporting
Kristin Hynes	Environmental Monitoring and Observations Branch	Support the deployment and reporting
<b>AEP ONLY: Additional Human Resources Required from EMSD</b>		
<b>Name &amp; Role</b>	<b>Branch - Section</b>	<b>Estimated time (% of annual FTE)</b>
Keegan Hicks, Fish Biologist	Environmental Monitoring and Observations	65
Kristin Hynes, Invert Biologist	Environmental Monitoring and Observations	25
Fred Noddin, Fish biologist	Environmental Monitoring and Observations	25
<b>Financial Details and Budget Request</b>		
<b>Source of Funding Requested Year 1 - 2018/19</b>		
	AEP ONLY: EMSD	OSM
Salaries and Benefits - AEP Chargeback		140000
Salaries and Benefits - New OSM Staff		
Operations and Maintenance		10000
Consumable materials and supplies		12000
Conferences and meetings travel		3000
Field work travel		26000
Project-related travel		12000
Engagement		3000
Reporting		1000
External Contracts -		
Organization/Vendor/Suppliers		30000
Overhead		0
Grants		0
Capital		13000
Total budget request for the year	0	250000
Total budget approved		
<b>Source of Funding Requested Year 2 - 2019/20</b>		
	AEP ONLY: EMSD	OSM
Salaries and Benefits - AEP Chargeback		160000
Salaries and Benefits - New OSM Staff		
Operations and Maintenance		23000
Consumable materials and supplies		18000
Conferences and meetings travel		3000

Field work travel		32000
Project-related travel		27000
Engagement		2000
Reporting		2000
External Contracts - Organization/Vendor/Suppliers		125000
Overhead		0
Grants		0
Capital		15000
<b>Total budget request for the year</b>	<b>0</b>	<b>407000</b>
<b>Total budget approved</b>		

Source of Funding Requested Year 3 - 2020/21		
AEP ONLY: EMSD		OSM
Salaries and Benefits - AEP Chargeback		240000
Salaries and Benefits - New OSM Staff		
Operations and Maintenance		23000
Consumable materials and supplies		18000
Conferences and meetings travel		3000
Field work travel		32000
Project-related travel		27000
Engagement		2000
Reporting		2000
External Contracts - Organization/Vendor/Suppliers		125000
Overhead		0
Grants		0
Capital		15000
<b>Total budget request for the year</b>	<b>0</b>	<b>487000</b>
<b>Total budget approved</b>		

Source of Funding Requested Year 4 - 2021/22		
AEP ONLY: EMSD		OSM
Salaries and Benefits - AEP Chargeback		240000
Salaries and Benefits - New OSM Staff		
Operations and Maintenance		23000
Consumable materials and supplies		18000
Conferences and meetings travel		3000
Field work travel		32000
Project-related travel		27000
Engagement		2000
Reporting		2000
External Contracts - Organization/Vendor/Suppliers		125000
Overhead		0
Grants		0
Capital		15000
<b>Total budget request for the year</b>	<b>0</b>	<b>487000</b>
<b>Total budget approved</b>		

<b>Budget Request for the Entire Project</b>	<b>0</b>	<b>1,631,000</b>
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**Project Approval(s)**

**Proposal Submitted by**

Surname	Given Name	Organization

Signature	Date

**Proposal for OSM Reviewed by**

EMSD Executive Director	Signature	Date

AEP Administrator/Coordinator - Review	Signature	Date

ECCC Administrator/Coordinator - Review	Signature	Date

**OSM Project Approved by**

AEP Co-Lead for OSM	Signature	Date

ECCC Co-Lead for OSM	Signature	Date

**AEP ONLY: Proposal for EMSD Reviewed by**

EMSD Director	Signature	Date

**AEP ONLY: EMSD Project Approved by**

EMSD Executive Director	Signature	Date

<b>EMSD Chief Scientist</b>	<b>Signature</b>	<b>Date</b>
<b>OSM / EMSD Project Has Not Been Approved</b>		
<b>Project Status</b>	<b>Date Notified</b>	<b>Date Required</b>
The project is conditionally approved. The following conditions are required before approval is granted.		
List the Condition(s)		
Condition(s) Addressed / Approval Granted		
Choose one		
<b>OSM / EMSD Approval Post Removal of Condition(s)</b>		
<b>Name &amp; Title</b>	<b>Signature</b>	<b>Date</b>