#### 1- YEAR LONG-TERM DATA MANAGEMENT ACTIVITY WORK PLAN

### Changes to this Work Plan are only accepted via an Approved Addendum.

General Information							
Monitoring Category:  (From OSM long-term plan; choose from drop-down menu)	Standards, QA/QC, Data Mgt.						
Strategic Monitoring Objective: (From OSM long-term plan; choose from drop-down menu)	Objective: Establish and Maintain an Integrated Data Management System for Archiving and Retrieval of Oil Sands Monitoring Program data.						
Work Plan Unique Identifier:	D-6-1718						
Monitoring Activity Title:	ECCC Data Publishing and Improve and Master Data Management	ements to Standardization, Storage					
Geographic Location (choose from drop-down menu, if Project Location is in more than one area choose from second drop-down)	Location Not Applicable						
Monitoring Site(s) Coordinates (latitude and longitude)	N/A						
Monitoring Organization and Responsible Manager:	Environment and Climate Kevin Kelly Change Canada						
Date Activity initiated:	2012						
Specific Project Objective: (State the activity objective)	Provide a robust Oil Sands Monitoring (OSM) data management framework for public dissemination of OSM data, as outlined in the plan.  The objective is to continue to make available and to improve the access, use, automation and completeness of OSM data through the						
	implementation of data standardization and data management service delivery. This is to ensure that data products are as complete, accessible and flexible as possible to meet the OSM Government of Canada Open Data, and general data collaboration/sharing requirements. The intention is to begin by ensuring discovery metadata is captured and shared so that all OSM data is discoverable through a single portal. The work will ensure that OSM data is consistently and predictably accessible to enable increased flexibility and scalability.						





Deliverables (2017/18):	<ul> <li>Ensure Environment and Climate Change Canada (ECCC)         OSM portal remains operational, including data         management and data publication support for release of         ECCC OSM monitoring data.</li> <li>Implement processes and tools to Extract, Transform and         Load (ETL) some ECCC OSM data into Open Geospatial         Consortium (OGC) standards.</li> <li>Upgrade data access tools and interface to improve sharing         and usability of newly standardized ECCC OSM data         products.</li> <li>Work with Alberta Environment and Parks (AEP) to provide         access to ECCC OSM metadata from ECCC's data catalogue         in International Organization for Standardization (ISO)/OGC         standardized formats and enable linking to partner         federated data from ECCC managed portal.</li> </ul>





**Project Plan Summary**: Please summarize the monitoring including relevant information such as background, objectives, monitoring area, methods/monitoring design, assumptions, outcomes, and references. These should align with the information provided in Appendix 1: Annual Monitoring Schedule.

#### Overall

Over the next five years, the intention of Environment and Climate Change Canada's (ECCC's) Oil Sands Monitoring (OSM) Data Management Component is to continue to improve the access, usability, standardization and completeness of ECCC OSM data. This will be achieved through the implementation of data standardization and improving data management service delivery, and will be done in conjunction with our federal responsibilities around Open Government, which have similar requirements. The desired end state is to have ECCC's OSM collected data high-quality, complete, transportable, machine-readable, and well described in order to support OSM deliverables and to contribute to a central OSM portal, which will require collaboration between OSM partners and solidification of the federated data model.

#### 2017-18

The focus for this fiscal year is to continue to improve standardization of monitoring data produced. We will advance storage solutions and implement monitoring specific data standards and services, while working in partnership with ECCC monitoring delivery leads to improve data completeness and quality.

- Ensure ECCC OSM portal remains operational, including data management and data publication support for release of ECCC OSM monitoring data.
- Implement processes and tools to Extract, Transform and Load (ETL) some ECCC OSM data into Open Geospatial Consortium (OGC) standards.
- Upgrade data access tools and interface to improve sharing and usability of newly standardized ECCC OSM data products.
- Working with Alberta Environment and Parks (AEP), provide access to ECCC OSM metadata from ECCC's
  data catalogue in International Organization for Standardization (ISO)/OGC standardized formats and
  enable linking to partner federated data from ECCC managed portal.





# Appendix 1 – Detailed Multi-Year Financial Breakdown: if changes are to be made then an Addendum must be Complete and Approved.

(Complete the following detailed financial breakdown; add or delete categories as required)

Budget requirements	Year 1 (2)	017- 2018)	Year 2 (20	Year 2 (2018- 2019)		Year 3 (2019-2020)		Year 4 (2020- 2021)		Year 5 (2021- 2022)	
	OSM Funding	External Funding									
1) Salaries and benefits											
a) Planning, oversight, management, architecture	70 135										
b) Tool support, data modelling, architecture, ETL, etc.	171 075										
<ul> <li>c) Data publication support, metadata support, training, system monitoring, etc.</li> </ul>	62 984										
2) Operations and Maintenance											
a) Contracting & students (student, professional services for ETL process optimization and configuring)	20 000										
b) Software License Renewal (FME desktop & server, XMLSpy, MS Azure Cloud, ESRI Arc Server, etc.).	15 000										
c) Software/hardware purchases (Shared Services Canada infrastructure)	9 000										
Consumable Materials and supplies											
a) (Describe Consumable Supply)											
4) Travel											

a) Conferences and meetings (JOSM planning meetings, partner planning)	6 000					
b) Project-related travel						
5) External Contracts						
a) (Describe External Contractor)						
Grand Total	385 000	TBD	TBD	TBD	TBD	

## Appendix 2 – Staffing Plan

(Complete the following detailed staffing plan; add or delete categories as required)

	Year 1 – Budget		Year 2 – Budget			- Budget	Year 4 – Budget		Year 5 – Budget	
	Alloc	ation	Alloc	ation	Allocation		Allocation		Allocation	
Responsible Role	OSM Funding	External Funding	OSM Funding	External Funding	OSM Funding	External Funding	OSM Funding	External Funding	OSM Funding	External Funding
Project Manager (Planning, oversight, management, architecture)	70 135									
Work Package	171 075									
Managers/ETL/Modelers										
(2) (Tool support, data										
modelling, architecture, ETL, etc.)										
ETL/Modeler Support	62 984									
(Data publication support,										
metadata support, training,										
system monitoring, etc.)										
Grand Total (inserted	304 194		TBD		TBD		TBD		TBD	\$
into Appendix 2)										

## **Appendix 3 - Approvals**

Project Submitted by:		
Name: Kevin Kelly		
Organization: Environment and Climate Change Canada	Signature:	Date:
Project Approved by:		
Dr. Monique Dubé (AEP)	Dr. Kevin Cash (ECCC)	
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Date	Date	