

Oil Sands Monitoring (OSM)

2016-2017 PROJECT PLAN SUMMARY

Project Name:	F1-1-2 Real Time Water Quality Monitoring – Lake Athabasca
Type of Project:	Focused Study
Delivery Agent:	ECCC/AEP
Project Contact:	Nancy Glozier (ECCC) - nancy.glozier@canda.ca
Budget:	\$ 150,000

Project Description:

This project will focus on the application of a fully-automated lake monitoring system (ALMS) to provide, via satellite (or cell) telemetry, continuous, year-round, real-time monitoring of meteorological conditions, lake ice cover and lake water quality.

An ALMS will be deployed in western Lake Athabasca, proximate to Fort Chipewyan. Information from this system will augment other field sampling, and provide information highly relevant to other Oil Sands projects dealing with water quality and aquatic ecosystem health. In addition, the auto-monitoring will complement other auto-monitoring already undertaken as part of OSM (e.g., water quality sonde network, paired river buoy platforms).

There is potential for training and engagement of the community of Fort Chipewyan in the maintenance and operations of the automated monitoring system.

Project Objectives:

This project will focus on the application of a fully-automated lake monitoring system (ALMS) to provide, via satellite (or cell) telemetry, continuous, year-round, real-time monitoring.

Key Outcomes:

- Improved temporal monitoring (continuous, and year-round) of meteorological conditions and core water quality parameters (e.g. pH, dissolved oxygen, specific conductivity, turbidity, temperature) in western Lake Athabasca proximate to Fort Chipewyan. In addition, the system can be equipped with hydrocarbon sensors.
- Full datasets (year-round) from the ice buoy and subsurface mooring system is transmitted via satellite (or cell) telemetry to a base station that can be located anywhere.
- Potential for training and engagement of the community of Fort Chipewyan in the maintenance and operations of the automated system.

Geographic Scope:

Lake Athabasca, proximate to Fort Chipewyan

Associated Data and Reports:

No Data and reports