

Oil Sands Monitoring (OSM)

2016-2017 PROJECT PLAN SUMMARY

Project Name:	WE1-1-3 Waterfowl Effects-Based Monitoring
Type of Project:	Focused Study
Delivery Agent:	Ducks Unlimited Canada
Project Contact:	Stuart Slattery (DUC) - iwwr@ducks.ca Joel Ingram (ECCC) - joel.ingram@canada.ca
Budget:	\$ 300,000

Project Description:

This work will improve waterfowl monitoring by identifying: a) potential cause and effect relationships between energy sector activities, specifically roads, pipelines, and seismic lines, and both abundance and productivity of waterfowl and, b) important areas for breeding waterfowl. These outcomes will help determine which stressors should be monitored and where monitoring would be most effective. Similar outcomes may also be possible for water birds, specifically loons and grebes. Additional stressors may be included in final analyses to assess cumulative effects. The project also collects baseline data for ongoing monitoring and future assessment of in situ oil sands development. This project is part of a larger, multi-year project being led by Ducks Unlimited Canada.

Project Objectives:

The objective of this project is to provide information that will enable governments and stakeholders to make more scientifically sound resource allocation decisions for not only the design and implementation of monitoring programs, but also the management of oil sands activities.

Key Outcomes:

Identification of:

- Potential cause and effect relationships between energy sector activities, specifically roads, pipelines, and seismic lines, and both abundance and productivity of waterfowl and,
- Important areas for breeding waterfowl.

Geographic Scope:

Peace River and Athabasca Oil Sands Lease Areas and adjacent lands. In 2016, ~fifty 2.5km X 2.5km aerial survey plots will be sampled across a range of habitats and a gradient of linear feature density in the OSM area. All water is sampled within plots, permitting plot and wetland-level analyses of cause and effect relationships.

Associated Data and Reports:

Data digitized from high resolution imagery is entered into a database housed on DUC's main corporate server which is backed up daily.

Report on 2015 field activities and results of preliminary analyses for relationships between linear features and waterfowl settling and productivity.