

Oil Sands Monitoring (OSM)

2016-2017 PROJECT PLAN SUMMARY

Project Name:	B1-1-9 Forest Health Monitoring
Type of Project:	Long term Monitoring
Delivery Agent:	Wood Buffalo Environmental Association (WBEA)
Project Contact:	Bob Myrick (AEP) - bob.myrick@gov.ab.ca Sanjay Prasad (WBEA) - sprasad@wbea.org
Budget:	\$ 266,400

Project Description:

The acid deposition effects monitoring program established in the 1990s comprises of intensive soil chemistry, soil biology and vegetation sampling at a number of permanent acid sensitive jack pine monitoring sites every six years; previous sampling was conducted in 1998, 2004 and 2010 respectively.

For 2016-17, work will be conducted to ensure essential plot network maintenance and to assess tree conditions for insects and disease at Jack Pine (JP) and Jack Pine Edge (JPE) sites (conducted annually) as primary influences of air pollutants including predisposition to pests and drought.

Project Objectives:

To determine if short term change, or cumulative effects in soil and/or vegetation indicators of ecosystem health are occurring in the enhanced network of 25 internal stand (longer-term, regionally representative) and 25 edge (early warning for pollutant mitigation) plots, and if they are occurring due to wet/dry deposition and, if so, quantitatively assess the significance of those changes.

Key Outcomes:

Short-term ecosystem data for early warning of positive/negative change, long-term data for trending and cumulative effects, and to understand potential cause-effect relationships.

Geographic Scope:

Twenty-three internal stand sites in Regional Municipality of Wood Buffalo (RMWB) and two in Saskatchewan

Associated Data and Reports:

All data from the Forest Health Monitoring program will be catalogued and provided to public via WBEA website and reports. Summarize and report annually in support of AEP assessments. Publish results as appropriate in peer-reviewed scientific literature with open access privileges.