2016-2017 PROJECT PLAN SUMMARY

Project Name:	**WE1-1-2 Wetland Condition and Biodiversity**
Type of Project:	Focused Study
Delivery Agent:	ABMI/ UofA
Project Contact:	Erin Bayne (U of A) - bayne@ualberta.ca Dan Farr (AEP) - dan.farr@gov.ab.ca
Budget:	$ 225,000

Project Description:

This project addresses the need for reliable knowledge of wetland bird populations in the oil sands region, including regional population size, temporal trends, and impacts of oil sands development (both mineable and in situ). The project builds on past OSM-funded work to design and test methods to monitor birds using Autonomous Recording Units (ARUs). This year's work is part of a larger collaboration involving the University of Alberta (U of A), Alberta Biodiversity Monitoring Institute (AMBI), and Environment and Climate Change Canada.

Project Objectives:

- Determine the status and trend of Yellow Rails and Canadian Toad
- Determine impacts of industrial development on wetland species
- In collaboration with other wetland monitoring initiatives led by Alberta Environment and Parks, develop a plan for long-term monitoring of wetland species in the oil sands region.

Key Outcomes:

By monitoring wetland animals at a higher spatial and temporal resolution than the ABMI's provincial grid, this project contributes scale-appropriate information for local decision-makers. It enables them to avoid and mitigate impacts on specific species of concern while complementing provincial monitoring of more common species. Targeted monitoring of Yellow Rail and other wetland species at risk also allows for coordinated and effective fulfillment of existing Environmental Protection and Enhancement Act (EPEA) clauses.

Geographic Scope:

Athabasca and Cold Lake Oil Sands Deposits in the Lower Athabasca Planning Region

Associated Data and Reports:

Field data are obtained using ARUs. The Bioacoustics Unit (UofA and ABMI) has a SQL server database along with a growing server network to store the resulting audio files. This database is used to track detections from human listening and automated computer processing.

- Reports include: Theses and papers on Yellow Rails and Canadian Toads
- Reports on the status of the Rusty Blackbird in the oil sands
- Reports on the status of the Common Nighthawk in the oil sands