

## **Project Summary**

### **Rocky Mountains Cooperative Ecosystem Studies Unit**

**Project Title:** Soil Process Modeling for the Yukon Basin

**Type of Project:** Research

**Project Discipline:** Natural

**Funding Agency:** USGS

**Other Partners/Cooperators:** University of Colorado at Boulder

**Effective Dates:** 9/1/2009 - 9/30/2013

**Funding Amount:** \$79,968 [FY11: \$50,000; FY10: \$29,968]

**Investigators and Agency Representative:**

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**Project Abstract:**

The overall goal of this research is to provide reliable parameters that can be used as inputs for other biogeochemical models to simulate the boreal OC dynamics in the regional-scale within the Yukon River Basin, Alaska. Several specific objectives include:

- 1) Developing theoretical and mathematical models of soil organic matter decomposition,
- 2) Inversely estimating the important parameters associated with the developed model through computer modeling based on laboratory and site-scale observations.
- 3) Developing methods for scaling process/site-level information up to larger spatial scales.

**Outcomes with completion dates:** The final report shall be submitted within 90 days of the end of the project period.

**Keywords:** Soils, modeling, Yukon Basin, Alaska, USGS, University of Colorado at Boulder