Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Lake Roosevelt National Recreation Area Vegetation Mapping Project Using ASTER Satellite

Data

Discipline: Natural

Type of Project: Research

Funding Agency: National Park Service
Other Partners/Cooperators: University of Idaho

Effective Dates: 9/1/2004 - 7/1/2006

Funding Amount: \$10,000

Investigators and Agency Representative:

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Project Abstract:

In FY2004 Lake Roosevelt National Recreation Area (LARO) and the University of Idaho (UI) began work on a vegetation mapping project. LARO resource staff will provide maps and field crew assistance to complete a vegetation map for the recreation area. This project will utilize ASTER satellite imagery to map variations in plant community distribution and density that results from environmental differences in slope, aspect, soils, and land management practices.

The objectives of this project are: 1) To determine the location and size of plant communities as defined in the Standardized National Vegetation Classification System at Lake Roosevelt National Recreation Area and 2) To enable the Lake Roosevelt Chief of Compliance and Natural Resources and others to monitor plant communities over time, and assess land use impacts in regards to plant communities.

In FY 05 additional funds were allocated for a companion project to be carried out by Dr. Nick Sanyal at University of Idaho to develop Weed Mapping Areas to allow for systematic inventory and control of invasive weeds in Lake Roosevelt NRA and surrounding lands.

Outcomes with Completion Dates:

Phase 1 products:

-Electronic and hardcopy version of the landcover classification

-Satellite imagery

-GIS coverages developed including:

GPS location of field survey sites

Landcover grid

10m elevation, slope, aspect, solar radiation grids

-Electronic and hardcopies of final report (July 1, 2006)

Keywords: vegetation mapping, invasive weeds, ASTER, Lake Roosevelt National Recreation Area, University

of Idaho

For Administrative Use Only:

Date Annual Report Received: Date Final Report Received: Publications, etc. on file: