## Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

**Project Title:** Vegetation Classification and Mapping Project at Bighorn Canyon NRA in support of the NPS Vegetation Mapping Inventory, the National Park Service Inventory and Monitoring Program

Discipline: Natural Resources Type of Project: Technical Assistance Funding Agency: National Park Service Other Partners/Cooperators: Colorado State University Effective Dates: 1/24/2011 - 3/30/2015 Funding Amount: \$314,195

linda drees@nps.gov

Investigators and Agency Representative: NPS Contact: Linda Drees, National Park Service, Biological Resources Management Division, 1201 Oakridge Dr., Suite 200, Fort Collins, CO 80525, 970 225-3595 voice,

Technical Contact: Karl Brown, National Park Service, Biological Resource Management Division, 1201 Oak Ridge Dr., Suite 201, Fort Collins, CO 80525, 970-225-3591, karl brown@nps.gov

Investigator: Joe Stevens, Colorado Natural Heritage Program, Colorado Natural Heritage Program, 254 General Services Building, Colorado State University, Fort Collins, Colorado 80523, 970-491-7760, js@lamar.colostate.edu

**Project Abstract:** Bighorn Canyon NRA is located within the Greater Yellowstone Inventory and Monitoring Network (GRYN). The Administrative Boundary encompasses land surrounding that part of the Bighorn River where the Yellowtail Reservoir is impounded behind Yellowtail Dam. It includes 55,600 land acres (22,500 ha), and straddles the Bighorn River for approximately 70 miles (113km). Land within the legislatively approved BICA Administrative Boundary is owned by the National Park Service, the Bureau of Land Management, and the Crow Nation. The BICA Managed Area Boundary excludes those portions of the Administrative Boundary that overlap Crow Nation land.

The vegetation inventory will require approximately four years of effort to complete. This will accommodate two field seasons - one for vegetation plot sampling to support vegetation classification, and a second to collect accuracy assessment data. Based on the preliminary classification of 86 vegetation types at BICA and a minimum sample of three plots per type, a total of 258 plots will be necessary to drive the quantitative classification process. In addition, data from approximately 150-200 observation points will be collected to support mapping.

## Outcomes with Completion Dates: March 30, 2015

The products include spatial data, non-spatial data, metadata, and written documents.

Keywords: vegetation mapping, Colorado State University, Colorado Natural Heritage Program, National Park Service Inventory and Monitoring Program, Bighorn Canyon NRA