## Rocky Mountains Cooperative Ecosystem Studies Unit Project Summary

Project Title: Vegetation Mapping Information Management and Delivery in support of the NPS Vegetation Inventory Program, the National Park Service Inventory and Monitoring Division

Discipline: Natural Resources
Type of Project: Technical Assistance

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Student Involvement:

**Effective Dates:** 6/1/2016 - 6/15/2021

Funding Amount: \$109,044

## Investigators and Agency Representative:

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Project Abstract: This agreement provides for the transfer of funds from the National Park Service to Colorado Natural Heritage Program of Colorado State University for the support and management of baseline biological inventory products and data across the U.S. national park service system. Completion of baseline inventories requires knowledge and expertise in ecological processes such as vegetation identification and vegetation community classification, database and data management, and geospatial skills in mapping and imagery interpretation. CNHP has been in a collaborative relationship with NPS Inventory and Monitoring Program (I&M) on the completion of vegetation inventories under the NPS Vegetation Mapping Inventory Program (VMI) for over a decade, which has been mutually beneficial. This task agreement under the master CESU cooperative agreement continues this work on baseline inventories across the NPS. While the work will be primarily focused on vegetation inventories, additional work might include NPS baseline geologic and soil inventories. Under this agreement there are two primary tasks:

TASK 1: Vegetation Inventory Data Evaluation and Management. The CNHP will work collaboratively with NPS to evaluate and manage baseline biological inventory data and products. The primary duties will be to process completed NPS Inventory and Monitoring (I&M) inventory product suites through a Standard Operating Procedure Quality Assurance Plan (QAP) required to certify that delivered data are of the highest quality. Once data are certified, the CNHP will work with NPS to ensure data products are loaded into the NPS Data Portal for broad distribution via the web to researchers, students, and the general public.

The CNHP will assist NPS in reviewing project reports for publication. These duties will require addressing questions/concerns with ecological and GIS cooperators on final report and final product formats. The CNHP will work to convert products in older data formats to the current formats. The NPS I&M staff and CNHP cooperators will collaborate directly to design and develop the database tools needed to maintain and analyze project related data. The two groups will work jointly to develop detailed requirements and work breakdown that will be documented in an internal project plan called the Quality Assurance Plan (QAP) and data portal SOP. Specifically, this includes evaluation and updating the VMI data products certification process of the QAP. The CNHP will work closely with the NPS I&M Vegetation Mapping Inventory Program Manager, VMI Program Project Manager, and NPS Data Information Staff.

TASK 2: Plots Database Review and Development. CNHP will work with NPS to provide database support for the Plots v4.0 database used as the database product for all Vegetation Mapping Inventory projects. Support under this task may involve bug fixes, updating format, and migrating older database formats into the latest NPS Plots database format (Plots v4.x).

**Keywords:** vegetation classification, vegetation mapping, Colorado State University, Colorado Natural Heritage Program, National Park Service Inventory and Monitoring Division