## Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

**Project Title:** Mapping Forecasting and Simulating Invasive Species and their Impacts on Natural and Social System

Discipline: Interdisciplinary

Type of Project: Technical Assistance/Research

Funding Agency: USGS

Other Partners/Cooperators: Colorado State University

Student Participation:

**Effective Dates:** 09/01/2016 - 08/31/2018

Funding Amount: \$281,042.00

## Investigators and Agency Representative:

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Project Abstract: The goal of the proposed research is to advance the capacity to practice early detection of and rapid response to invasive species and provide advanced methods and tools to forecast future distributions. The project will be carried out in close partnership with USGS researchers during modeling activities. The CESU partner will be integrated into ongoing USGS modeling activities. USGS researchers working closely with CESU partners will ensure understanding of standard operating procedures, historic consistency of sample collection methods and routines, and ensure permitting requirements are followed when working near federally listed species. Together the USGS and CESU scientists and students will develop modeling protocols, prepare model input data, and analyze model results. Sharing and dissemination of data will follow USGS guidelines for data management and peer review, and will be done in a collaborative manner.

**Keywords:** Invasive species, mapping forecasting, simulation, early detection, rapid response, USGS, Colorado State University