Rocky Mountains Cooperative Ecosystem Studies Unit Project Summary

Project Title: Improving Distribution Models Using Species-Specific Variables for High Priority Invasive Plants

Task Agreement #: G18	AC00283 Modification(s):
Discipline: Natural	
Type of Project:	Technical Assistance
Funding Agency:	USGS
Other Partners/Cooper	ators: Colorado State University
Student Participation:	
Effective Dates:	8/1/2018 – 7/31/2019
Funding Amount:	\$49,521

Investigators and Agency Representative:

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Project Abstract: The goal of this research is to advance capacity for early detection of and rapid response for high priority invasive plants through Species Distribution Models (SDM) development, provide advanced methods and tools to forecast future distributions, and inform strategic planning and policy-making.

Objectives include:

1. Test and develop a suite of species-specific predictor variables for SDMS that can be used with Software for Assisted Habitat Modeling (SAHM).

- 2. Build SDMs for the highest priority invasive plant species in the United States.
- 3. Evaluate the trade-offs between spatial scale and predictor sensitivity.
- 4. Explore novel predictor layers tied to species physiology.