Rocky Mountains Cooperative Ecosystem Studies Unit Project Summary

Project Title: Distributional Changes and Reintroduction Success of Peripheral Populations of Alligator

Snapping Turtles

Task Agreement #: G19AC00045

Discipline: Natural

Type of Project: Research

Funding Agency: USGS

Other Partners/Cooperators: Washington State University

Student Participation:

Effective Dates: 3/4/2019 – 3/3/2020 **Funding Amount:** \$19,681

Investigators and Agency Representative:

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Project Abstract: The goal for this research project is to determine changes in the distribution of peripheral populations of the alligator snapping turtle and evaluate success of reintroductions.

The specific objectives are to:

- (1) Analyze eDNA samples collected from survey sites with historical locality records (literature and museum) of *M. temminkii* in western Tennessee, southwestern Kentucky, southern Missouri, and northeastern Arkansas. In western Tennessee, sampling efforts will be focused on 16 stream sites where the Tennessee Wildlife Resources Agency released captive-reared *M. temminkii* with the goal of reestablishing populations.
- (2) Analyze eDNA samples from approximately 70 historical *M. temminkii* locations and randomly-selected locations with no records of *M. temminkii*. These surveys will provide a broader perspective on the extent of declines (or recovery) of peripheral populations.