Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Amphibian and Invertebrate Community Responses to Wetland Mitigation in the Greater Yellowstone Ecosystem

Discipline: Natural
Type of Project: Research
Funding Agency: USGS

Other Partners/Cooperators: University of Montana

Students Involvement:

Effective Dates: 11/1/2015 - 10/31/2020

Funding Amount: \$34,047

Investigators and Agency Representative:

USGS Contact: Blake Hossack, Northern Rocky Mountain Science Center, 790 E. Beckwith Ave, Missoula, MT 59801, phone: 406-542-3245, email: blake_hossack@usgs.gov

Investigator: Winsor Lowe, University of Montana, Missoula, MT 59801, phone: 406-243-4375, email: winsor.lowe@mso.umt.edu

Project Abstract: The goal of this study is to quantify the effects of recent wetland mitigation efforts in the GYE on amphibian and invertebrate communities. Will compare natural, relatively pristine wetlands to recently constructed wetlands and to wetlands that sustained impacts from road construction activity. Focus on two main objectives:

- 1. Compare species richness and community composition of amphibians and aquatic invertebrates among constructed, impacted, and natural wetlands.
- 2. Compare amphibian recruitment in constructed wetlands and natural wetlands to determine if the former act as ecological traps.

Keywords: Amphibian communities, adaptation to habitat, modified wetlands, USGS, University of Montana