

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Preliminary evaluation of environmental DNA for monitoring amphibians in Yellowstone National Park

Discipline: Natural
Type of Project: Research
Funding Agency: National Park Service
Partner/Cooperator: Washington State University, Vancouver
Effective Dates: 3/15/2014-3/31/2016
Funding Amount: \$8,813

Investigator and Agency Representatives:

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Project Abstract: Amphibian monitoring in long-term catchments of Yellowstone National Park has been carried out each year since 2005 using traditional visual detection approaches. Modern molecular techniques now allow detection of species using environmental DNA (eDNA) identified from water samples. In 2014, Greater Yellowstone Network (GRYN) will collaborate with Dr. Caren Goldberg at WSU to develop and validate species-specific molecular markers for four species of native amphibians in Yellowstone and begin evaluating the potential use of eDNA to detect the presence and abundance of native amphibians in a long term monitoring program.

Outcomes with Completion Dates: March 31, 2016

Keywords: Washington State University, National Park Service, Greater Yellowstone Network, amphibians, Yellowstone National Park, monitoring, DNA