

## **Project Summary**

### **Rocky Mountains Cooperative Ecosystem Studies Unit**

**Project Title:** Population Genetic Analysis of Oregon Spotted Frogs (*Rana pretiosa*) in the Klamath Basin

**Type of Project:** Research

**Project Discipline:** Natural

**Funding Agency:** Bureau of Land Management

**Other Partners/Cooperators:** Colorado State University

**Effective Dates:** 9/22/2009 - 9/22/2014

**Funding Amount:** \$50,000 [FY10: \$25,000; FY09: \$25,000]

**Investigators and Agency Representative:**

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**Project Abstract:** Colorado State University will use microsatellite genetic markers to analyze the population genetics of Oregon spotted frogs (OSF). OSF populations in Klamath basin will be targeted, but the project will also sample several site in the Deschutes/Willamette basins where large populations exist for comparison. OSF in the Klamath are of particular interest since they are genetically distinct from the rest of the species' range, persist in small populations within complex agricultural and forested landscapes, and are likely to benefit most from restoration. Three Specific questions will be addressed:

1. Which extant populations exhibit genetic signatures of recent, significant declines?
2. Over what spatial scale does genetic connectivity (gene flow) occur among populations and what landscapes features (e.g., riparian corridors, ditches, trout streams, roads, etc...) enhance or reduce connectivity?
3. What are the short-term population responses of Oregon Spotted Frog to reintroduction in restored habitat?

**Outcomes with completion dates:** September 22, 2014

**Keywords:** Oregon spotted frogs, Klamath Basin, genetics, Bureau of Land Management, Colorado State University