Project Title: Klondike Gold Rush National Historical Park Boreal Toad Data Analyses and the Role of Study Length on the Reliability of Management Recommendations

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Project Abstract: The goal for this research project is related to the analysis of boreal toad data from KLGO, will also evaluate the role of study length on the reliability of management recommendations. This theme is directly related to objectives (described below) of assessing the capability of current monitoring methods to detect specified trends to help managers meet conservation goals.

The objectives of this project are to:
1. Assess an existing monitoring program for Boreal Toads at KLGO and analyze data that have been collected by this program since 2007.
2. Incorporate information on the relationship between the hydrology of the Taiya River and the status of core breeding sites used by Boreal Toads, with the goal of determining toads specifically will be impacted by changes to the river hydrology and how to best mitigate those impacts during development of the Dyea area and during restoration. Year 2
3. Conduct a series of related data simulations to assess the capability of current monitoring methods to detect specified trends (e.g. a 25% decline over 5 years, 10% decline in 10 years, etc.).
4. Assess how sex, size, and site-specific factors (e.g., river floodplain vs. upland wetland) are related to the prevalence of amphibian chytrid fungus detected on sampled toads.
5. Evaluate the role of study length on the reliability of management recommendations.