National *fish, wildlife & plants* CLIMATE ADAPTATION STRATEGY

Project Title: Integrated Scenarios of Climate, Hydrology, and Vegetation for the Northwest

Headline Title (2-5 words):

Brief Summary (Abstract):

Project Location: Northwest US, including parts of British Columbia, Alberta, Washington, Oregon, Idaho, Montana, Wyoming.

Partners: Collaborators on this project are from Oregon State University, University of Idaho, University of Washington, the Conservation Biology Institute, University of British Columbia, Boise State University, and the U.S. Forest Service.

Background: Environmental changes, caused by climate change and landscape transformation, such as habitat degradation and the arrival of competitive invasive species, can strain the delivery of natural resources, push rare plants and animals towards extinction, and pose a direct challenge to resource managers. As scientists work to understand and predict the effects of climate change, foundational pieces of knowledge they require are how climate, vegetation, and the water cycle will change in the future.

Project Goals: This project is integrating state-of-the-science predictive models of these environmental attributes of the Northwest U.S. The resulting datasets will be compatible with other hydrological and ecological modeling projects and will ultimately lead to a next-generation climate change framework that allows land managers to identify potentially vulnerable areas, prioritize investment in projects to increase the resilience of forests and grasslands, and incorporate projected changes in fire danger into development of water and forest management plans, state forest assessments, and other strategic land management plans.

Strategy Goals Implemented: Goal 5, Strategy 5.3, Action 5.3.4.: Develop and use models of climate-impacted physical and biological variables and ecological processes at temporal and spatial scales relevant for conservation.