



NATIONAL *fish, wildlife & plants*
CLIMATE ADAPTATION STRATEGY

Climate.gov

Brief Summary (Abstract):

Resource managers, policy leaders, educators, businesses and citizens are increasingly asking for information to help them understand and address climate-related challenges and opportunities. NOAA's newly redesigned climate.gov portal (<http://www.climate.gov/>) takes an innovative approach to providing climate data and information for a climate-smart nation. Climate.gov is basically four portals in one:

- News & Features presents narratives and data visualizations for climate-interested citizens seeking timely information;
- Data helps scientists and professionals quickly find and use climate data;
- Teaching Climate provides hundreds of resources to educators who want to teach about climate; and
- Decision Support aggregates authoritative reports, tools, and data for decision makers and policy leaders who want actionable information and resources to help them manage climate-related risks and opportunities.

Climate.gov has rapidly become a trusted source for relevant, high-quality science that is accessible to a wide range of resource managers, scientists, land owners, businesses, educators and others involved in natural resource conservation and management.

Project Location: National

Partners: NOAA, other agencies, nongovt

Background:

NOAA Climate.gov provides science and information for a climate-smart nation. Americans' health, security, and economic well-being are closely linked to climate and weather. People want and need information to help them make decisions on how to manage climate-related risks and opportunities they face.

Project Goals:

NOAA Climate.gov is a source of timely and authoritative scientific data and information about climate. Our goals are to promote public understanding of climate science and climate-related events, to make our data products and services easy to access and use, to provide climate-related support to the private sector and the Nation's economy, and to serve people making climate-related decisions with tools and resources that help them answer specific questions.

Each of the tabs in NOAA Climate.gov is designed to serve a different audience:

1. **News & Features** is a popular-style magazine for the science-interested public covering topics in climate science, adaptation, and mitigation. [Visit the section...](#)
2. **Maps & Data** is a gateway for scientists and specialists to find and use climate maps and data for research and analysis. [Visit the section...](#)



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3. **Teaching Climate** offers learning activities and curriculum materials, multi-media resources, and professional development opportunities for formal and informal educators who want to incorporate climate science into their work. [Visit the section...](#)
4. **Supporting Decisions** is a clearinghouse of reports, resources, and decision-support tools for planners and policy leaders who want authoritative climate science information to help them understand and manage climate-related risks and opportunities.

Strategy Goals Implemented: 6, 3

Climate Impacts Addressed: Many

Status of Project Implementation (Timeline, Milestones, Next Steps):

Site launched in 2010, phase 2 upgrade completed in 2013.

Project Outcomes:

Increased public awareness and understanding of climate science and climate-related events.

Increased access and use of climate-related data products and services.

Increase climate-related support to the private sector and the Nation's economy.

Increased support for people making climate-related decisions with tools and resources that help them answer specific questions.

Funding Sources: NOAA

Contact Info: David Herring/Roger Griffis

Photos/Attachments:

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Example Submission

Project Title: “Assessing the vulnerability of species and ecosystems to projected future climate change in the Pacific Northwest”

Headline Title (2-5 words): Pacific Northwest Vulnerability Assessment

Brief Summary (Abstract): A collaborative project to assess the vulnerability of species and ecosystems to future climate change impacts in the Pacific Northwest.

Project Location: Washington, Idaho

Partners: This project is a collaboration among researchers, managers, and planners at the [University of Washington](#), [U.S. Geological Survey](#), [The Nature Conservancy](#), the [National Parks Service](#), the [U.S. Forest Service](#), the [Washington Department of Fish and Wildlife](#), the [University of Idaho](#), the [National Wildlife Federation](#), the [Oregon Department of Fish and Wildlife](#), and [Idaho Fish and Game](#).

Background: In the Pacific Northwest temperatures have increased by about 0.8 °C and models project warming of 1.8°C by the 2040s and 3.0°C by the 2080s . Precipitation is also projected to change, with general increases projected for the Pacific Northwest, and with a more intense seasonal precipitation cycle - autumns and winters may in fact become wetter and summers may become drier. Further, regional climate models indicate that extreme precipitation in western WA will increase and the snowpack in the Cascades will decrease. Although the trend in direction of change is broadly recognized, there is uncertainty associated with what actual extent of changes may occur through time and in local areas.

Project Goals: The goals of this project are to incorporate climate change information into management planning and implementation efforts by providing: (1) downscaled regional climate models (~1km), (2) simulated shifts in vegetation, (3) an extensive database of documented species vulnerabilities, (4) models of species range shifts for selected species, (5) summaries of the extent of uncertainty in the climate, vegetation, and species changes, and lastly (6) a collaboration of resource managers working to incorporate climate change information into management planning and implementation efforts.

Strategy Goals Implemented: Goal 2, Strategy 2.2, Action 2.2.1 Use vulnerability assessments to design and implement management actions at species to ecosystem scales.

Goal 2, Strategy 2.1, Action 2.1.3 Identify species and habitats particularly vulnerable to transition under climate change

Climate Impacts Addressed: Impacts on species and habitats

Status of Project Implementation: Project is ongoing. Currently, over 570 species are in the database and nearly 200 are complete.



Project Outcomes: The Pacific Northwest vulnerability assessment includes two distinct components; first, a database that highlights and details the sensitivity of species and habitat in the study region. The estimated sensitivity of individual species will be based on the ability of the species to disperse and whether dispersal barriers exist, dependency on disturbance regimes (e.g. fire or flood), physiology (e.g., temperature, salinity), dependency on climatically-sensitive habitat requirements (e.g., alpine areas, shallow wetlands), whether the species is a generalist or specialist, and whether the species existence is tied to other specific species. The second component of the assessment involves modeling the potential effects of climate change on species and habitats. This includes: 1) downscaling the climate change projections, 2) simulating potential changes in vegetation, and 3) modeling potential effects on the distribution of 12 focal wildlife species using a hierarchical approach.

Funding Sources: USFWS, TNC, University of Washington, National Park Service, National Wildlife Federation, USGS

Photos/Attachments: www.climatevulnerability.org

Photo/Figure Credits (do we have permission to print):

Suggested Photo Caption: