



NOTICE OF INTENT TO AWARD

This Funding Announcement is not a request for applications. This announcement is to provide public notice of the U.S. Geological Survey's intention to fund the following project activities without full and open competition.

ABSTRACT	
Funding Announcement	USGS-19-FA-0005
Project Title	Supporting climate-resilient design for in-stream restoration and fish passage projects
Recipient	University of Washington
Anticipated Federal Amount	\$149,633.98
Cost Share	\$0.00
Total Anticipated Award Amount	\$149,633.98
New Award or Continuation?	New Award
Anticipated Period of Performance	November 15, 2018 – November 14, 2019
Award Instrument	Cooperative Agreement
CFDA # and Title	15.820 National Climate Change and Wildlife Science Center/Climate Science Centers
USGS Point of Contact	Nicole DeCrappeo, ndecrappeo@usgs.gov

OVERVIEW

The Department of the Interior (DOI) Northwest Climate Adaptation Science Center (NW CASC) requests a 12-month cooperative agreement award the University of Washington for the period November 15, 2018 – November 14, 2019.

The DOI Climate Adaptation Science Centers (CASCs) were established by DOI Secretarial Order 3289 in 2009. The mission of the CASCs is to provide federal, tribal, and state resource managers and other stakeholders with information and decision-making tools to respond to the effects of climate change on fish, wildlife, ecosystems, and the communities they support. Through close collaboration with managers and scientists inside and outside of government, the CASCs deliver science to address stakeholder-defined priority climate needs. There are eight regional CASCs located throughout the United States; the NW CASC serves resource managers and decision-makers in Washington, Oregon, Idaho, and western Montana.

RECIPIENT INVOLVEMENT

In the Northwest, managers from federal, state, and tribal natural resource agencies must develop and implement management strategies for various salmon and trout species that are listed as threatened or endangered under the Endangered Species Act (ESA). As air temperatures rise and precipitation patterns change in Washington, Oregon, and Idaho, increasing stream temperatures and altered streamflow and sedimentation rates pose additional challenges to maintaining salmonid populations. Infrastructure that is not designed to accommodate these new stream conditions can further undermine salmonid management efforts: undersized culverts, for example, can become clogged with sediment and debris and prohibit fish from migrating to suitable habitats. Limited access to habitat leads to fragmented salmonid populations that are less resilient to environmental change.

All salmonid recovery plans in the Northwest include repairing or replacing culverts that currently block fish passage. In addition, Washington State government has been ordered by the federal court to replace nearly all state-owned roadway culverts that block fish passage within the area covered by treaties with Native American tribes (United States v. Washington 2013). The expected service life of most culverts is roughly 50–100 years. Over this time frame, climate change is projected to drive major changes in hydrology across the Northwest. In response, government agencies in Washington have conducted climate change vulnerability assessments for road infrastructure; one finding of these assessments is that current standards for culvert and bridge design may no longer be applicable under a changing climate.

The Washington Department of Fish and Wildlife (WDFW) is the state agency in Washington that has regulatory authority over culvert construction. WDFW has an internal website that agency staff can use to obtain site-level projections of future changes in stream discharge and channel width. The Climate Impacts Group (CIG) at the University of Washington (award recipient) has piloted a probabilistic approach to evaluating culvert design. The award recipient is proposing to integrate WDFW's information and CIG's culvert design evaluation technique to develop a single, publicly-accessible website that will enable users to click on a map and, in return, see projected changes in channel width and stream discharges. Users will also have the option to estimate the probability that a culvert will fail to meet design specifications. The award recipient will ensure that the most up-to-date climate and hydrologic modeling is available on the website and ensure that the information is available and applicable to state agencies in Oregon and Idaho, as well as the U.S. Fish and Wildlife Service (USFWS), National Park Service, and Bureau of Land Management. The primary utility of the work for USFWS is in Section 7 consultation under ESA: by providing design-relevant information on culvert and restoration design, the information could be used: 1) as guidance for in-stream restoration and culvert design and 2) as a basis for decisions on Section 7 mitigation proposals. The proposed project will utilize science to identify best practices to manage water resources and adapt to changes in the environment, and expand the lines of communication with state natural resource offices, Fish and Wildlife offices, water authorities, and Northwest tribes.

USGS INVOLVEMENT

Substantial involvement on the part USGS is anticipated for the successful completion of the objectives to be funded by this award. In particular, USGS will be responsible for the following:

- The DOI NW CASC will participate with and collaborate with University of Washington and WDFW scientists, technicians, and staff to carry out the scope of work and/or identify the need for additional Federal personnel to work on project efforts.
- The DOI NW CASC Director will review and approve proposed project modifications, review and approve requests for supplemental project funding for new objectives, and review award balances for funding in each Fiscal Year, prior to the award.
- The DOI NW CASC has power to halt immediately an activity if detailed performance specifications are not met.

SINGLE-SOURCE JUSTIFICATION

DEPARTMENT OF THE INTERIOR SINGLE SOURCE POLICY REQUIREMENTS

Department of the Interior Policy (505 DM 2) requires a written justification which explains why competition is not practicable for each single-source award. The justification must address one or more of the following criteria as well as discussion of the program legislative history, unique capabilities of the proposed recipient, and cost-sharing contribution offered by the proposed recipient, as applicable.

In order for an assistance award to be made without competition, the award must satisfy one or more of the following criteria:

- (1) Unsolicited Proposal – The proposed award is the result of an unsolicited assistance application which represents a unique or innovative idea, method, or approach which is not the subject of a current or planned contract or assistance award, but which is deemed advantageous to the program objectives;
- (2) Continuation – The activity to be funded is necessary to the satisfactory completion of, or is a continuation of an activity presently being funded, and for which competition would have a significant adverse effect on the continuity or completion of the activity;
- (3) Legislative intent – The language in the applicable authorizing legislation or legislative history clearly indicates Congress' intent to restrict the award to a particular recipient of purpose;
- (4) Unique Qualifications – The applicant is uniquely qualified to perform the activity based upon a variety of demonstrable factors such as location, property ownership, voluntary support capacity, cost-sharing ability if applicable, technical expertise, or other such unique qualifications;
- (5) Emergencies – Program/award where there is insufficient time available (due to a compelling and unusual urgency, or substantial danger to health or safety) for adequate competitive procedures to be followed.
- (6) Cooperative Agreements - USGS Unique Authority cited at 43 U.S.C. 36d (Federal, State, and academic partners) or DOI Authority cited at 43 U.S.C. 1457b (not-for-profit organizations).

USGS did not solicit full and open competition for this award based the following criteria:

(4) UNIQUE QUALIFICATIONS

(6) COOPERATIVE AGREEMENTS

Single Source Justification Description:

(4) UNIQUE QUALIFICATIONS - The recipient is uniquely qualified to perform the activities described above based upon a variety of demonstrable factors such as: 1) location in the Pacific Northwest, where the study is focused, 2) technical expertise in climate and hydrologic modeling, 3) technical expertise in using a probabilistic approach to evaluating culvert design as related to climate-related factors, and 4) existing working relationships with resource managers in Washington, Oregon, and Idaho fish and wildlife agencies, DOI bureaus (USFWS, NPS, BLM), and Northwest tribes, all of which are critical to the successful application of this work to improved culvert design and management of salmonids in the Northwest.

(6) STATUTORY AUTHORITY- Consolidated Appropriations Act of 2008, Div. F, Title I (P.L. 110-161) and 43 U.S.C. Section 36d