

NOTICE OF INTENT TO AWARD

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

ABSTRACT	
Funding Announcement	R12AS20014
Project Title	Monitor Lake Limnology, Quantify/Monitor Tributary Nutrient Loading, Research Fish Facility Support, Sprague River Water Quality Lab (SRWQL) Nutrient Analysis and USGS UKL Sample Analysis
Recipient	The Klamath Tribe
Program Manager	Chuck Korson
Anticipated Federal Amount	Estimated amount of the Agreement: \$844,185.00
Cost Share	None
Total Anticipated Award Amount	FY12: \$415,606.00
New Award or Continuation?	New Award
Anticipated Period of Performance	Date of execution through May 30, 2014
Award Instrument	Grant Agreement
Statutory Authority	Fish and Wildlife Coordination Act 1934, Public Law 85-624 (16 U.S.C. 661 et seq.), as amended
CFDA # and Title	15.517 - Fish and Wildlife Coordination Act
Single Source Justification Criteria Cited	Justification Criterion: (2) Continuation of the Department of Interior Single Source Policy Requirements
Reclamation Point of Contact	Judy A. Hudson, jhudson@usbr.gov

OVERVIEW

The Bureau of Reclamation has been monitoring Upper Klamath Lake water quality to understand the risks for endangered sucker species. Dissolved oxygen levels stressful to the endangered suckers occur in Upper Klamath Lake every summer due to large blooms and subsequent decline of the blue-green algae *Aphanizomenon flos-aquae*. Upper Klamath Lake is a large (120 mi²) shallow hypereutrophic lake in south-central Oregon. Wind-driven currents can concentrate *Aphanizomenon flos-aquae* in relatively small areas (e.g. bays, along shores, or at the ends of Upper Klamath Lake) where it dies, decomposes and creates localized areas of hypoxia (low dissolved oxygen concentrations) that are very stressful to two endangered sucker species in the lake. These blooms of *Aphanizomenon flos-aquae* are fueled by large external loads of Phosphorus from the watershed as well as internal loading of Phosphorous from bottom sediments in Upper Klamath Lake during the late spring and summer months. Continued monitoring of Upper Klamath Lake is important to identify improvement to water quality due to restoration efforts and land use changes in the upper watershed.

Upper Klamath Lake is a major aquatic resource in the Upper Klamath Basin and supports populations of federally endangered and threatened species. This large shallow lake is excessively productive due to anthropogenic nutrient inputs and watershed alterations. Excessive nutrients produce massive summer algal blooms, which result in poor water quality conditions that contribute to lake fish die-off events. The

water quality condition of the lake is a major limiting factor in the viability and survival of native fish that depend on the lake for part of their life history.

This program will allow for continued monitoring of water quality conditions in UKL and tributary nutrient loading. Long-term monitoring of water quality allows evaluation of lake management operations, effects of climatic variables, and evaluation of restoration activities in the watershed.

RECIPIENT INVOLVEMENT

1. Monitor Lake Limnology

Klamath Tribes will continue their long-term lake monitoring strategy. Ten standard sites on Upper Klamath Lake will be sampled biweekly from mid-April through mid-October. Winter monitoring of the Upper Klamath Lake at the Fremont Bridge, which will be sampled biweekly from mid-October to mid-April. At each site, they will quantify their standard suite of water quality (instantaneous profiles for dissolved oxygen, dissolved oxygen percent saturation, pH, temperature, conductivity and redox) and nutrient (total nitrogen, nitrite, nitrate+nitrite, ammonia, total phosphorous, ortho-phosphorous, silica) parameters, chlorophyll *a*, phaeophyton *a*, zooplankton, and phytoplankton community composition and biomass.

The outcomes under this objective will be: (1) updated long-term data sets through 2012 for phytoplankton, zooplankton and lake water quality and nutrients, in an Excel spreadsheet; (2) a summary report of the long term data set providing some basic comparisons of 2012 with previous years; (3) analyses of the long-term data set that will examine nutrient and water quality relationships with various physiological stages of the *Aphanizomenon flos-aquae* blooms.

2. Quantify/Monitor Nutrient Loading into Upper Klamath Lake

Klamath Tribes will continue quantifying and monitoring nutrient inputs to the Upper Klamath Lake system. Sites will include Williamson River at Modoc Point Road, Sprague River at Kircher's Bridge, Wood River at Weed and Dike roads, Sevenmile Canal, and Annie Creek. Sampling will be at each site biweekly through the rest of the year, with increased sampling during high flow events to catch runoff events. Data collected at each site will consist of flow measurements (either directly or via established stage-discharge relationships), water samples will be analyzed for phosphorous (total phosphorous, ortho-phosphorous) and nitrogen (total phosphorous, nitrite, nitrate+nitrite, ammonia) species and will include silica, total suspended solids and turbidity. They will include standard YSI multiparameter probe measurements (dissolved oxygen, dissolved oxygen percent saturation, temperature, conductivity, and pH) at the loading sites.

The outcomes under this objective will be to provide Reclamation with an updated long-term nutrient loading data set through 2012, included with the data set will be a data summary report.

3. Fish Research Facility Support

No additional research is planned at the Fish Research Facility in 2012. However, they are still supporting fish from past years, which may well be useful in future work. They will maintain these fish through 2012.

4. Sprague River Water Quality Laboratory (SRWQL)

The Klamath Tribes' Sprague River Water Quality Laboratory is working through the process of

attaining certification by the Oregon Laboratory Accreditation Program, and has already been through a USGS laboratory evaluation process which requires the Sprague River Water Quality Laboratory to participate in the US Geological Survey Standard Reference Sample Program semi annually, so during the Oregon Laboratory Accreditation Program certification process the Sprague River Water Quality Laboratory will be running samples for The Nature Conservancy, Klamath Basin Rangeland Trust, US Geological Survey, Bureau of Land Management and Environmental Protection Agency. They will conduct all nutrient analyses associated with this grant at the Sprague River Water Quality Laboratory

RECLAMATION INVOLVEMENT

No substantial involvement on the part of Reclamation is anticipated for the successful completion of the objectives to be funded by this award.

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.

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

(2) Continuation

Single Source Justification Description:

The activity to be funded is necessary for the satisfactory continuation/completion of activities presently being funded. Competition for this requirement would have a significant adverse effect on the continuity or completion of the activity. The Klamath Tribes have expertise and years of experience on water quality for Upper Klamath Lakes and its' tributaries. They also have current possession of the fish hatchery of endangered suckers for future studies.

STATUTORY AUTHORITY

The authority for this agreement is set forth by the Fish and Wildlife Coordination Act (The Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), as amended and delegated by the Department of the Interior Manual, 255 DM 14.

The Fish and Wildlife Coordination Act, 16 U.S.C. § 661, states in part: [T]o provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs through the effectual and harmonious planning, development, maintenance, and coordination of wildlife conservation and rehabilitation ... the Secretary of the Interior is authorized (1) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes,

255 DM 14, paragraph 1, states: The Commissioner, Bureau of Reclamation, is delegated so much of the authority of the Secretary under the Fish and Wildlife Coordination Act, 16 U.S.C. 661 et seq., as is necessary to provide assistance, through grants or cooperative agreements, to public or private organizations for the improvement of fish and wildlife habitat associated with water systems or water supplies affected by Reclamation projects.