

WETLAND PROGRAM DEVELOPMENT GRANTS FY 2015/2016

Alaska

Chilkat Indian Village – *Klukwan Wetland Program Plan Capacity Development Grant*

The Chilkat Indian Village (CIV) plans to develop a Tribal Wetland Program Plan (WPP). The CIV owns approximately 2,000 acres of land in the Chilkat River Watershed; the traditional territory of the Chilkat Indian Village spans from north of the Canadian border to Berners Bay. The main tasks carried out under this grant will be facilitating capacity building trainings; researching and writing a WPP; and developing appropriate monitoring, mapping, and data collection mechanisms to implement climate change monitoring and other specific activities under the EPA core element framework. The following main products will be developed within the award period: development of a Klukwan WPP; development of Monitoring and Assessment strategies, program and protocols that address how to identify wetlands and streams vulnerable to climate change; and development of methods and demonstration training projects to address species and habitats of subsistence significance that are at risk from changes or loss of wetlands and streams due to climate change.

Alaska Natural Heritage Program – *Wetlands across Alaska: providing a statewide wetland map and assessment of rare wetlands in Alaska*

The vast size of Alaska has precluded detailed wetland mapping at the statewide scale. While several wetland maps have been produced for the state, the resolution of either their mapping (Whitcomb et al. 2009, 100 m) or classification (Jin et al. 2013, two wetland classes) is too coarse to allow meaningful regional-scale assessment and monitoring. The Alaska Natural Heritage Program (AKNHP) has inferred wetland distribution on a statewide scale using landcover class as a proxy for wetland type. This grant will help to refine this map, perform an accuracy assessment using plot data from the National Wetland Inventory, produce metadata and develop an online service for the content. In addition to providing the distribution of wetland systems in accordance with classification proposed by Cowardin et al. (1979), the grant will assess, describe and map the distribution of rare wetlands for Alaska.

Idaho

Coeur d'Alene Tribe – *Coeur d'Alene Tribe Wetland Program Development: Developing Tools for Monitoring, Assessment, and Restoration*

The Coeur d'Alene Tribe will conduct Coeur d'Alene Tribal Wetland Program development building actions and activities over a 1-year period. The Tribe's main tasks and final products are: 1) Conducting at least 4 intra- Tribal Wetland Workgroup meetings for coordination and collaboration, 2) Conducting a 2 wetland functional assessment training for Coeur d'Alene Tribal staff (and possibly other tribes) on the Coeur d'Alene Reservation, 3) A map of the Coeur d'Alene Reservation that compares historic stream channels to current stream channel configurations, and 4) A summary of the Coeur d'Alene Tribal strategy and process for ground-truthing Coeur d'Alene Reservation wetlands as compared to wetlands identified in the National Wetland Inventory maps.

Idaho Department of Fish and Game – *Idaho's Large-river Floodplain Forested Wetlands: Assessing and mapping distribution, threats, conditions, function, and restoration opportunities*

Large-river floodplain wetlands, especially cottonwood forests, are highly threatened by human land uses and climate change. IDFG will develop, test, and calibrate a rapid assessment method designed to estimate the condition, function, and long-term viability of these habitats. They will also map the distribution of Idaho's floodplain forested wetlands and describe reference conditions for both minimally disturbed and altered river reaches. Results of the assessment testing will, in part, be used to prioritize river reaches in need of protection, maintenance, enhancement, or restoration. Specific activities for protecting or restoring floodplain forested wetlands will be described for high priority river reaches.

Oregon

Lane Council of Governments – *Finalizing Oregon Rapid Assessment Protocol for Local Planning*

Finalizing Oregon Rapid Wetland Assessment Protocol for Local Planning (ORWAP-LP) will establish a statewide assessment protocol which is useful for: ongoing natural resource management at every jurisdictional level; cross-program application; tracking wetland condition and extent over time in the face of climate change; informing the statewide regulatory framework; and providing tools to local jurisdictions for successful program design and implementation. Main tasks are: 1) Develop supplemental ORWAP-LP version worksheets; 2) Characterize climate change impacts on wetlands; 3) Develop ORWAP-LP guide for local jurisdictions; 4) Develop web based ORWAP-LP guide and toolkit; 5) Provide rulemaking assistance on determination of wetland significance. Products: 1) Report discussing feasibility of different ORWAP values and functions for cross program analyses and ORWAP-LP worksheets/reports for program assessment and planning; 2) Climate change impacts report, case study and white paper on key climate change tools and considerations for local land managers; 3) ORWAP-LP guide and dissemination package; 4) Web site and web based toolkit; 5) Review of rule iterations, facilitated focus groups, and stakeholder involvement package.

Confederated Tribes of the Umatilla Indian Reservation – *R 10 Tribal Wetland Working Group (TWIG) - Transition to the Future*

This effort seeks to continue work begun in 2009, at the EPA sponsored meeting in Spokane, WA, to build the organizational capacity of Region 10 Tribal wetland programs. Specifically, the grant aims to build the technical and organizational capacity of Tribal Wetland Programs in EPA Region 10 through the Tribal Wetlands Working Group (TWIG) by: 1) continuing to host Workshops of the EPA Region 10, Tribal Wetlands Working Group throughout the PNW, 2) provide training opportunities for Tribal staff on wetlands and aquatic resources, 3) distribute documentation of TWIG activities and events to the R. 10 Tribes and 4) develop a leadership transition plan for the TWIG. Additionally, the grant will continue to help develop a Tribal specific component to the EPA, Core Elements Framework. During this project period, we intend to build on our outreach to Tribes throughout Region 10, particularly to Villages in Alaska, incorporate climate change planning efforts by Tribes into our workshops and emphasize emerging GIS/remote sensing technologies as applied to wetland assessments and characterizations. Also, the grant will continue to explicitly consider the patterns of Tribal use to aquatic landscapes throughout Region 10.

Cow Creek Band of Umpqua Tribes of Indians – *Wetland Condition Assessment for Prioritizing Restoration Projects on Cow Creek Umpqua Tribal Lands*

Protecting, enhancing, and restoring wetlands within the Cow Creek Band of Umpqua Tribe of Indian's (the Tribe) ancestral territory is vital to revitalizing the Cow Creek culture, maintaining lifeways, and sustaining a connection to the land. The Tribe has been working over the last two years to identify areas where wetland associated ecosystems are located within the Tribe's ancestral territory. Having a better understanding of the location and condition of these wetland resources will help in prioritizing which areas need protection, enhancement, and restoration. Through this grant, the Tribe will complete one year of monitoring at four selected sites on tribal lands to better understand the limiting factors of each of these wetland sites. Data collected will better coordinate the Tribe's efforts in the future to restore and protect them for ecological, cultural and economic purposes. The two core elements that the Tribe will be focusing on are 1) Monitoring and Assessment and 2) Voluntary Restoration and Protection. The final product will be a report on the condition of these four wetland sites with a list for actions to be completed to restore, protect and enhance culturally important plants. The Tribe will be working with key partners on this project and will be sharing the results to advance the study of wetland science in the Pacific Northwest.

Siletz Tribes – *Siletz Tribes' WPP*

This project will allow for the construction of the Tribe's first WPP covering the full Siletz Basin 5th field HUC. The project focuses on the partnership led by The Wetlands Conservancy and the Tribe but encompasses other State, Federal, County, and NGO partners. The partner's main work will involve developing a coordinated landscape scale ecological framework to assist in prioritizing the conservation and restoration needs and opportunities for the Siletz Basin. Other areas of focus will include examining the datasets associated with the Oregon Explorer wetlands classification and status GIS based tool. The partners will be working to evaluate how well the tool has classified Siletz Basin wetlands, what edits need to be made, and how those classifications relate to tribal needs specific to species recovery and cultural preservation. The grant will support development of the Tribe's first WPP. Specific to the EPA's CEF, two objectives will be addressed within the new WPP. The objectives will fall within the CEF Monitoring and Assessment and Voluntary Restoration and Enhancement categories.

Oregon Department of State Lands - *Completion of an Aquatic Resources Mitigation Program for Oregon Work Plan*

The State of Oregon has a mature regulatory program that continues to move toward a functions based, watershed-scale approach for managing and regulating wetlands and streams. This grant contains three interdependent projects that will result in an Aquatic Resources Mitigation Program for Oregon. The projects are a result of collaboration between the Oregon Department of State Lands (DSL), Environmental Protection Agency Region 10 (EPA), US Army Corps of Engineers Portland District (Corps), and the Willamette Partnership (hereafter referred to as the interagency "Project Team") to develop the mitigation framework necessary for a functions-based, watershed-scale approach to mitigation for aquatic resources in Oregon. The grant will build upon substantial work already completed by these agencies to provide the necessary tools and develop the policies and processes to implement the mitigation framework.

Project #1 – Stream Function Assessment Method (SFAM): Completes the efforts currently underway to develop a function assessment for Oregon streams and to incorporate the tool into the functions-based mitigation framework.

Project #2 –SFAM Reporter tool development : Creates online tools that provide access to data and protocols to apply SFAM, allows SFAM field data to be shared with regulators, and provides needed information for stream mitigation and restoration improvements.

Project #3 - Steps necessary to administer the new mitigation program protocols: Allows DSL staff and partners to build internal capacity and develop processes and effectively implement new wetland and stream mitigation protocols and policies to t apply a functions-based, watershed-scale approach to mitigation for wetlands and streams in Oregon.

Washington

Quinault Indian Nation - *Developing a Quinault Wetland Program and Assessing Climate Vulnerability*

This 21-month project will build the Quinault tribal wetland program by undertaking knowledge-building activities in accordance with the QIN’s *Wetland Program Plan*. Five outputs will be delivered: 1) a climate change vulnerability assessment for reservation wetlands to guide future adaptation planning, 2) a five-year wetland monitoring strategy to assess wetland hydrology and habitat conditions, 3) a Quinault ethnobotany guidebook to build community support for land acquisition and restoration, 4) training sessions conducted by professional wetland scientists to improve staff knowledge of wetland characteristics and function, and 5) a new Wetland Specialist position to ensure staff time is devoted year-round to wetland issues. This project will result in science-based decision-making based on improved data and increased understanding of wetland structure and function. Ultimately the project supports the EPA’s Strategic Objective to protect and restore watersheds and aquatic ecosystems with a particular focus on coastal wetlands.

Nooksack Indian Tribe – *Advanced Wetlands Mapping and Restoration Potential Characterization to Mitigate for Water Temperature Exceedances due to Legacy Impacts and Climate Change to facilitate the temperature TMDL for the South Fork Nooksack River*

The South Fork Nooksack River (SFNR) has suffered from legacy impacts caused by land use. Climate change on top of legacy impacts will cause significant cumulative impact on the ability of the river to be resilient in the face of climate change. Wetlands on the SFNR floodplain have a direct role in maintain the integrity of the river. Wetlands on the river’s floodplain have been highly degraded and/or eliminated. Wetland restoration is known to have the potential to ameliorate existing temperature exceedances as well as address future continued climate change impacts. This grant will address both the 303(d) TMDL regulatory program applied to the SFNR as well as the recommendations made in the EPA-ORD-lead SFNR temperature TMDL/climate change pilot research project. This project will include advanced wetlands identification and mapping, functional assessment, and restoration potential. This grant directly acts on EPA Region 10’s regional priorities that focus on the role that wetlands play in maintaining ecosystem resilience to climate change and also the recommendations made in the 303(d) TMDL regulatory program applied to the SFNR as well as the recommendations made in the EPA-ORD-lead SFNR temperature TMDL/climate change pilot research project.

Confederated Tribes of the Colville Reservation - *WPP Development Activities on the Colville Reservation FY 16-FY17*

This grant includes program building activities identified in CTCR's EPA-approved Wetland Program Plan (WPP) listed above, including review/update of the WPP in 2017. Tasks include wetland assessment and monitoring, wetland mapping in areas of land development, creating and distributing wetland information, conducting training, updating Tribal code wetland protections, developing landscape level wetland mapping, updating wetlands monitoring strategy and QAPP. Products will include assessment and water quality data, wetland workshops and information for staff and community; updated Shoreline Management code; wetland maps for urban development areas; updated wetland monitoring strategy, QAPP, and WPP. The grant funds one full time position, the CTCR wetland specialist, for two years in order to carry out this work.

Tulalip Tribes of Washington – *2015-2019 Wetland Program Implementation*

The Tulalip Natural and Cultural Resources Department (TDNR) grant will implement two priority actions identified in the EPA approved 2013 Tulalip Tribes Wetland Program Plan including validation, calibration, and implementation of the first reservation wetland monitoring and assessment strategy; and development of the first “State of the Tulalip Reservation Watersheds” report to identify and communicate baseline environmental (emphasis on aquatic resources) conditions on the reservation to Tribal staff and members.

Stillaguamish Tribe – *Stillaguamish Tribe Wetland Program Plan - Monitoring and Assessment Strategies and Preliminary Condition and Function Data Collection*

Wetlands help maintain and improve the water quality of streams, rivers, lakes and estuaries. Additionally, wetlands perform functions such as providing fish and wildlife habitat, flood reduction and erosion control among many others. In order to be successful in protecting and restoring this Tribally valuable resource into the future, the Stillaguamish Tribe of Indians grant will further develop and carryout the activities described in the Tribe's EPA approved Wetland Program Plan. Project objectives are; developing a monitoring and assessment strategy document and using the methods described in the aforementioned document, to conduct preliminary condition and function data collection on one or two wetlands of interest on Stillaguamish Tribal Land.

Washington Department of Ecology – *Guide on Wetland Mitigation in Washington State: Improving environmental outcomes in wetland management*

Applicants proposing to affect wetlands are subject to regulation on the federal, state and local levels. In cases where the three levels of government do not agree or, worse yet, have conflicting requirements, the applicant is stuck in the middle and the permit process drags out. Various permit streamlining initiatives have identified the need for clear standards so that applicants know what is needed and the agencies get adequate information from the applicant. This grant will develop wetland mitigation guidance that reflects changes in wetland science, policy and regulation. In 2006, Ecology, the US Army

Corps of Engineers (Corps), and EPA developed a joint guidance and policy document on compensatory mitigation. This guidance is outdated and inconsistent with current regulatory conditions and policies. Updates in wetland science, court cases, and the revision of federal requirements and their approach to compensatory mitigation have occurred over the last eight years. During that same time, Ecology developed a series of technical tools for improving wetland regulation and mitigation and updated the wetland rating systems to reflect the current state of the science. The proposed guidance will describe these changes in regulation and descriptions and uses of these tools. Development of the guidance would include coordination with the Corps and EPA, state agencies, local governments, and tribes, with public review of the document. Project results will be disseminated through notices and presentations to state and federal agencies, local governments including at planners' forums, Ecology's website and our wetlands email listserv.

Washington Department of Ecology – *Improved Wetland Identification for Conservation and Regulatory Priorities*

The ability to identify and characterize wetlands is paramount to effectively protect and successfully restore these valuable resources. This project will improve our ability to more efficiently and accurately identify the location, size, and type of Washington's (WA) wetland resource. This will be accomplished using remote sensing data to identify (digitally map) wetland locations and classify wetland types.

Ecology will develop a systematic process that will result in an updated, statewide map of wetland locations, with attributes covering multiple classification schemes including Cowardin, NWIPlus LLWW (landscape position, landform, water flow path, and waterbody type), WA HGM classes, WA Natural Heritage types, and Level 1 Ecological Integrity Assessment (EIA). For Phase One of this project, we will determine the most efficient and accurate statewide approach for remotely mapping and classifying wetlands. We will apply the approach in two areas representative of land use and ecological diversity of WA. This will allow us the opportunity to estimate the accuracy of mapping in areas where unique challenges have contributed to errors in existing maps (e.g., densely forested areas, agricultural areas, slopes, and aridlands). Future phases will focus on applying the approach in additional watersheds and counties in priority order based on criteria established in Phase One.

Project results will be available as a publicly accessible, web-based map. Information about the maps, and any analyses using the data, will be disseminated through articles and presentations to state and federal agencies, local governments and planners' forums, on Ecology's web page, and through Ecology's wetlands listserv.