STATEMENT OF INTEREST PACIFIC NORTHWEST OR COLORADO PLATEAU CESU NUMBER W912HZ-18-SOI-0013 PROJECT TO BE INITIATED IN FY 2018

Project Title: Archaeological Research Portland District, Willamette Valley Project, Oregon

Responses to this Request for Statements of Interest (SOI) will be used to identify potential researchers to oversee an archaeological applied research and field investigations project to be funded by the U.S. Army Corps of Engineers (USACE), Portland District, Willamette Valley Project (WVP) covering 13 Operating Project locations in Northwest Oregon. Approximately \$270,000 is expected to be available to support this project for one (1) year. Additional funding may be available for follow on work for up to four (4) years at \$370,000 per year for a total of \$1,750,000 over five (5) years.

Background:

Congress authorized Portland District Corps, to acquire lands within the Willamette River Basin and construct 13 dams and their associated lakes or reservoirs, which include Detroit, Green Peter, Blue River, Cougar, Fall Creek, Lookout Point, Hills Creek, Dorena, Fern Ridge, and Cottage Grove dams and the Big Cliff, Dexter and Foster reregulating dams, creating the Willamette Valley Project. At the time of dam construction (1940-1969), the federal laws protecting historic properties were not yet in place. The defined purposes for these various dams include flood risk management, hydropower generation, water quality improvement, irrigation water supply, recreation, navigation, and fish and wildlife habitat. In addition to the management of these facilities for these authorized purposes, management of project lands that are not routinely inundated includes activities such as land-based support facilities for water control, facilities and measures for recreation, general public use, access, and the enhancement of the environment, fish and wildlife. Combined, both the direct operations of these projects as well as supporting activities result in adverse effects to evaluated and unevaluated properties potentially eligible for listing in the National Register of Historic Places.

The majority of project lands have not yet been systematically surveyed for cultural and historic resources, and many previous survey efforts do not meet current standards. There are over 300 known historic and pre-contact sites on 55,000 acres of WVP lands with large gaps in landscape-level knowledge of human habitation. Roughly 45% of the acreage is seasonally inundated lakebeds of dammed reservoirs, which are drawn down from October through February to capture winter rainfall. Prior survey efforts that followed existing state guidelines have not been effective in answering WVP cultural resource management questions. Corps Technical Report EL-96-7: Impacts to Historic Properties in Drawdown Zones at Corps of Engineers Reservoirs, does not provide specific guidance for our unique situation in the Columbia and Willamette basins.

The Willamette Valley reservoirs have long been locations for artifact collectors because of the seasonal draw downs and the exposed artifacts on the surface. Important temporally diagnostic artifacts, such as projectile points and old bottles are illegally collected on a regular basis continuously reducing the available record.

The purpose of this project is to develop new methodologies and/or protocols to effectively survey for and evaluate cultural resources in Pacific Northwest reservoir and floodplain environments. Additionally, the project will update the pre-contact and historical context from a regional perspective. The WVP lands are uniquely suited to answer these larger research questions on settlement, subsistence or land use patterns since they are located along major tributaries which were prominent lifeways for native peoples. The research may also reflect cultural adaptions to changing climate and resource availability.

Brief Description of Anticipated Work:

This project will develop new surface and subsurface methodologies and/or protocols to effectively gather useful information through surveys and evaluations of cultural resources in Pacific Northwest reservoir and floodplain environments. These guidelines should include localized sub-drainage basin variability for both the upland and seasonally inundated environments, and be field tested for practicality and effectiveness. The new standard methods in the valley and foothills depositional environments will address the particularities of reservoir effects, such as erosion, deflation, sedimentation and lateral artifact movement.

Protocols should include seasonal guidelines for surveys, testing current standards of late summer and fall when vegetation is dormant to improve ground visibility, or October through February for seasonal reservoir draw-downs. However, regional differences will exist based on elevation, snow and rainfall levels, and lake erosion and sedimentation rates. This methodologies and survey protocols will be tested in the field using traditional field methods (pedestrian survey, shovel tests, test units) and new technologies, such as remote sensing, ground penetrating radar, or advanced GIS modeling, as appropriate.

The project will also update the pre-contact and historical context from a regional perspective. This could include regional radiocarbon synthesis, including Bayesian analysis, or improving and refining projectile point classifications and seriation with digital analytic procedures. Data analysis will be for new and previously recorded archaeological resources, and may examine slope, inundation levels, property boundaries, and environmental variants that may have influenced pre-contact and historic settlement, transportation, and resource procurement strategies. Geomorphic modeling, such as flow rates and release velocities and their effects on sediment depth, erosion, and accretion, may be investigated to inform future long term management considerations of cultural resource sites.

This project will support improved current and future management of cultural resources on WVP lands, and contribute to the greater regional understanding of cultural resources for all researchers working in the Pacific Northwest. The information generated will be applicable in research of other reservoir environments, and contribute to flood risk, navigation, hydropower, and other water management practices.

In subsequent years, additional anthropological and/or archeological support may be required to evaluate and report out on the volume of collected data and perform overarching syntheses of information in relation to overall cultural resources management.

Public Benefit:

The research results will be tabled, analyzed, and synthesized with the intention of contributing to broad overarching regional questions that offer refinement and new understandings about changes in archaeological materials over time and across space. It is intended to consider and incorporate the results of previous scientific inquiries towards formulating research questions that will synthesize the broader regional context of the Willamette Valley and Oregon Cascade foothills from 15,000 YBP until contact.

New approaches to field investigation, data analysis, and synthesis will attempt to address regional data gaps regarding mobility patterns such as seasonal patterns, sedentism, the rise of cultural complexity, and patterns of resource intensification. Technical reports will be generated for the scientific research community, and Oregon State site and isolate forms will be generated to contribute to the greater public knowledge base. This information will be used by federal and state lands managers, as well as private contractors conducting archaeological investigations on private lands in the region.

In order to increase appreciation and stewardship of these non-renewable resources, regular public presentations are expected. Willamette Valley archaeology and history outreach may include conference presentations, professional lectures, park ranger training, youth educational events, and development of pamphlets and brochures, signage, and interpretive panels.

Ideally the results of the research and broader regional synthesis will benefit the public by generating information on the past that can broadly and fundamentally inform regional and collective choices regarding future human settlement patterns and relationships to resources along the river systems.

Objectives:

The objectives of the proposed effort include:

Objective 1: Develop new methodology and/or guidelines for surface and subsurface archaeological inventories that are specific to inundated reservoirs and adjacent floodplain environments. This may include new technologies, a combination of existing technologies, or applying methodologies from other regions.

Objective 2: Update the regional pre-contact and historical context of the Willamette Valley River floodplain and Oregon Cascade foothills, that may include lifeways, settlement patterns, travel and trade, and resource procurement.

Objective 3: Conduct field investigations on WVP lands to test new methodologies, conduct data analysis to answer pertinent research questions, and summarize findings in reports and Oregon SHPO forms.

Figure 1. Location of 13 Willamette Valley Project Dams



Site Location:

The project area is in the Willamette Basin in Marion, Linn, Lane and Benton counties, west of the Cascade Mountains. The 13 dams were placed on six major tributaries to the Willamette River, within the Willamette Valley floodplain and eastern Cascade foothills. Field investigations sites may be both above or below reservoir pool level and because of sedimentation in the inundation zone or heavy vegetation in the uplands, the research methodologies will require shovel probing, deep hand augering, ground penetrating radar, or other methods in the floodplain.



Figure 2. Annual fall deep drawn down to support fish passage at Fall Creek Reservoir



Figure 3. Annual winter low pool at Fern Ridge Reservoir

Vendor Requirements:

Vendor must be a non-federal partner of the Pacific Northwest CESU or Colorado Plateau CESU willing to accept the negotiated CESU indirect cost rate of 17.5%. Successful applicants should have knowledge of, and experience in, Pacific Northwest archaeology, experience in effective subsurface investigations in floodplain environments, and the ability to apply new methodologies or technologies to this specific region. Vendor must supply the technology to efficiently complete

field investigations to support research, and generate technical reports for the work accomplished. The candidates shall have established procedures capable of completing the archaeological inventory and report generation, establishing appropriate database records and controls, assessing state of disturbance, erosion, etc. in each research locale. Execution of effective background research and map generation should be part of the skill set upon entering into the agreement. It is anticipated that the work will take one to five years to complete. The candidates will also be required to submit three (3) quarterly status reports and one (1) annual report each year of the cooperative agreement to provide updates on implementation of the project.

Government Participation:

The Willamette Valley Project will work cooperatively with the investigator to identify key issues the research must address, review research designs, test new field methods, evaluate data as it becomes available, and adjust methods accordingly. Key staff is located at the Fern Ridge office, west of Eugene, Oregon, and the Portland District Office. WVP will provide copies of previous research reports, existing GIS and other databases, and participate in technical meetings for planning purposes and where the results of this work are discussed. WVP personnel may accompany researchers in the field investigations and participate in data collection as appropriate. The Government may also assist in data analysis review and provide workspace and equipment as necessary.

Materials Requested for Statement of Interest/Qualifications:

Please provide the following via e-mail attachment to: Deberay.R.Carmichael@usace.army.mil Maximum length: 2 pages, single-spaced 12 pt. font.

- 1. Name, Organization and Contact Information
- 2. Brief Statement of Qualifications (including):
 - a. Biographical Sketch,
 - b. Relevant past projects and clients with brief descriptions of these projects,
 - c. Staff, faculty or students available to work on this project and their areas of expertise,
 - d. Any brief description of capabilities to successfully complete the project you may wish to add (e.g. equipment, laboratory facilities, greenhouse facilities, field facilities, etc.).

Note: A proposed budget is NOT requested at this time.

Review of Statements Received: Based on a review of the Statements of Interest received, an investigator or investigators will be invited to prepare a full study proposal. Statements will be evaluated based on the investigator's specific experience and capabilities in areas related to the study requirements. Additionally, the evaluation method and selection criteria for research and development awards must be: (1) The Technical merits of the proposed research and development; and (2) Potential relationship of the proposed research and development to the Department of Defense missions.

Please send responses or direct questions to:

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Timeline for Review of Statements of Interest: Review of Statements of Interest will begin after the SOI has been posted on the CESU website for 10 working days.