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June 6, 2017

DECISION MEMORANDUM

TO: Council Members

FROM: Lynn Palensky

SUBJECT: Council decision to implement additional sturgeon activities on existing projects

PROPOSED ACTION: Council recommends that Bonneville fund three sturgeon proposals that expand existing sturgeon projects. The timeline for this work will be through FY 2019. One proposal will be funded with existing Accord funds (\$150,000 for FY 2018-19), and the other two by funding identified by through the Cost Saving Workgroup (CSW) totaling \$283,000 for FY2018 and \$233,000 for FY2019. The Fish and Wildlife Committee recommends this body of sturgeon work for funding based on the sponsors' proposals and responses to the Council's clarifying questions; and with the condition that Bonneville and sponsors develop objectives, deliverables and timelines specific for this work, implementation is consistent with the Council's proposed final research plan, and sponsors submit an annual report in 2018 and final findings report in 2019.

SIGNIFICANCE: This recommendation makes progress on the Program measure to *implement additional sturgeon measures*, identified by the Council as one of the emerging Program priorities. Implementation of the three proposals is consistent with the

[Request for Information](#) (RFI) and the Program measures for white sturgeon.

BUDGETARY/ECONOMIC IMPACTS:

The cost-per-year to implement the three sturgeon projects (below) would be within the currently-available cost savings funds for FY 2018 and FY 2019. Both the Washington Department of Fish and Wildlife (WDFW), and Oregon Department of Fish and Wildlife (ODFW) proposals are associated with the existing sturgeon project #1986-050-00 and would be modifications to existing contracts. The Columbia River Inter-Tribal Fish Commission (CRITFC) proposal is associated with existing sturgeon project #2008-504-00 and would be funded with CRITFC’s available Accord funding.

Sponsor	Project Name	Est Budget FY 18	Est Budget FY 19
WDFW, et.al	White Sturgeon Population Status Assessments for Isolated at-Risk Populations in the Lower Snake River Impoundments	\$193,000 (Non-accord)	\$157,000 (Non-accord)
CRITFC and Yakama Nation	Discovery and Development of a Genetic Marker for Sex Determination in White Sturgeon	\$130,000 (Accord)	\$20,000 (Accord)
ODFW, et.al	White Sturgeon Spawning Habitat and Use in the John Day Reservoir	\$90,000 (Non-accord)	\$76,000 (Non-accord)
	Total	\$283,000 (Non-accord)	\$233,000 (Non-accord)

BACKGROUND:

On January 13, 2017, the Council, in coordination with Bonneville, solicited for a Request for Information (RFI) on work that would address a Fish and Wildlife Program measure and emerging priority for white sturgeon:

The Council, in coordination with Bonneville Power Administration (Bonneville) is requesting information from white sturgeon managers and scientists on ready-to-implement Columbia and Snake River White Sturgeon assessments. We are inviting responses regarding ready-to-implement Columbia and Snake River White Sturgeon assessments pertaining to one or more of the following topics: population status, spawning success, spawning habitat use or susceptibility to predation.

In response, the Council received information (proposals) from six entities on February 28. Nine interesting opportunities for potential work were proposed in the Columbia and Snake Rivers. Two of the seven represent expansions of existing program-funded work, while another adds a new work element to an existing sturgeon Accord project. The other four opportunities are for new work.

At the March Fish and Wildlife committee meeting, staff was directed to move forward with clarifying questions to the sponsors of four proposals: WDFW, CRITFC, ODFW and Golder Associates. The questions were intended to help us understand what additional scientific information would be necessary for a full proposal. In addition, we asked for a detailed implementation timeline and a confirmation of interest to proceed to next steps. The responses to the questions helped staff to shape funding and implementation recommendations and identify any additional review steps necessary. WDFW, CRITFC, and ODFW provided answers to the questions. The Golder Associates proposal would have required development of a full proposal and ISRP review since it was a new project versus an existing one. Golder chose not to commit to that lengthier review process.

ANALYSIS:

The RFI yielded several interesting and potentially valuable ideas for additional sturgeon work in the basin. The ISRP noted, in their [initial impressions report](#) that:

In general, the RFI responses have merit and are innovative, at least in the sense that they propose several cutting-edge technologies to aid in our understanding of sturgeon and potentially to improve their management. The responses are very method-driven, rather than question-driven. They describe how information and analyses will be performed rather than emphasize what we need to know and why that is important for sturgeon management. If implementation of the studies described in these responses is pursued, it is important that these new methods be optimized for their benefit to sturgeon and that full proposals and realistic, testable hypotheses be developed. Without that approach, improvements in sturgeon management under the Fish and Wildlife Program will not necessarily occur.

The Council can decide to solicit for full proposals at any time and receive more detail on these proposals and/or more proposals from around the region. There is still much to be learned about Columbia River white sturgeon. The Program calls for many measures focused on research and gaining a better understanding where and how we can improve conditions to increase recruitment and survival in the system. The energy, interest, and capacity exist for increasing efforts for sturgeon in the Program.

The current spending for sturgeon work totals about \$13 million of the \$274 million Bonneville-funded Program budget. Roughly \$10 million of that is directed to the Kootenai River White Sturgeon Program for ESA-listed sturgeon. The remaining \$3 million is directed to the mid and lower Columbia, and no spending occurs below Bonneville Dam. While many in the Basin use other funding sources to complete work on sturgeon (e.g., Idaho Power, Mid-Columbia PUDs and the Spokane Tribe), the overall level of effort for sturgeon is a fraction of what is spent for other fish in the Basin. Approving these projects for implementation, as well as others in the near future, will help the Council and the region better understand sturgeon population levels and management needs in particular areas of the Basin.

ALTERNATIVES:

If the Council members are inclined to pursue additional details from the current RFI slate of proposals, or decide to release an RFP for full proposals, staff believes that a full proposal and ISRP review process could be completed in about five months (before the end of calendar year 2017). The CSW expects to have funds available in FY 2018 and FY 2019.

Below is a summary of the proposals received in response to the January 2017 RFI and see this [link](#) for details on each:

Sponsor	Project Name	Short Description
WDFW, et.al	White Sturgeon Population Status Assessments for Isolated at-Risk Populations in the Lower Snake River Impoundments	Stock assessment for isolated at-risk populations between Ice Harbor and Lower Granite Dam
CRITFC & YN	Discovery and Development of a Genetic Marker for Sex Determination in White Sturgeon	Development of a genetic marker for sex determination for use in status assessments
ODFW, et.al	White Sturgeon Spawning Habitat and Use in the John Day Reservoir	Tagging, tracking & analysis to assess spawning staging areas, behavior and habitat in John Day reservoir
Golder Assoc.	White Sturgeon Spawning Investigations	Conduct spawning monitoring (larvae collection) below Ice Harbor Dam to understand current use of habitat
PNNL #1	Simulate White Sturgeon Early Life History in Columbia Basin Reservoirs	2D model on effect of river flow and transport of juvenile sturgeon above Grand Coulee (to understand recruitment failure) and adapt elsewhere
PNNL #2	Lifecycle Acoustic Transmitters for White Sturgeon	Implant long-lived (no battery) acoustic tags for tracking movement and habitat use in Snake and Columbia Rivers
USFWS & USGS	Sturgeon Population Status, Spawning Habitat and Predation	Scope 1: eDNA to assess tributary use in Lower Col; Scope 2: Construct and test spawning habitat models using existing data and develop habitat suitability maps; Scope 3: Assess feasibility of side scan sonar and u/w video to locate carcasses below BON4 from predation