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October 3, 2017

### MEMORANDUM

**TO:** Fish and Wildlife Committee members

**FROM:** Staff

**SUBJECT:** Update on Cost Savings Workgroup and Emerging Priorities Implementation

### BACKGROUND:

**Presenters:** Fish and Wildlife Division staff

**Summary:** Staff will update the Committee on the recent cost savings workgroup (CSW) activity and implementation of measures associated with the Fish and Wildlife Program's emerging priorities.

**Relevance:** The CSW implements the language on page 116 of the 2014 Fish and Wildlife Program: *'Bonneville should fund any new fish and wildlife obligations from identifying savings within the current program...'*

This item also addresses implementation of the Council's 2014 Columbia River Basin Fish and Wildlife Program emerging priorities.

### Cost Savings Workgroup:

Council member Anders chairs the CSW, which is composed of Bryan Mercier, Peter Cogswell, and Scott Donahue of BPA and Kerry Berg, Lynn Palensky, Laura Robinson and Tony Grover, all Council staff.

- CSW screw trap policy review. An [updated inventory](#) of screw traps has been compiled by Bonneville Staff. Sponsors received a [letter](#) with a list of questions compiled by Council and Bonneville staff with responses due by the end of October. A workshop with sponsors, BPA and Council representatives and some ISRP observers, will be held at the Council office in Portland on December 14<sup>th</sup>. Council member Norman is leading the screw trap review.

**Table of cost savings source and allocation:**

|                        |                    | <b>Cost Savings Budget Tracking</b> |           |             | updated 8/29/2017 |             |
|------------------------|--------------------|-------------------------------------|-----------|-------------|-------------------|-------------|
| Credit                 |                    | FY2016                              | FY2017    | FY2018      | FY2019            | FY2020      |
| 2007-404-00            | Captive Brood      |                                     | \$355,007 | \$355,007   | \$355,007         | \$355,007   |
| 2007-404-00            | Captive Brood      |                                     |           | \$77,773    | \$77,773          | \$77,773    |
| 1982-013-03            | CWT-USFWS          |                                     | \$29,162  | \$29,162    | \$29,162          | \$29,162    |
| 2006-006-00            | HEP                | \$90,502                            | \$90,502  | \$90,502    | \$90,502          | \$90,502    |
| 2010-076-00            | Snake River        | \$92,244                            | \$92,244  | \$92,244    | \$92,244          | \$92,244    |
| 2010-033-00            | RRS-Methow         |                                     | \$85,000  | \$85,000    | \$85,000          | \$85,000    |
| 2003-063-00            | RRS-Abernathy      |                                     |           | \$196,670   | \$393,340         | \$590,010   |
| 2007-299-00            | RRS-Deschutes      |                                     |           | \$110,000   | \$220,000         | \$330,000   |
| 2010-034-00            | WDFW - LCM         |                                     |           | \$75,000    | \$75,000          | \$75,000    |
| Total savings found    |                    | \$182,746                           | \$651,915 | \$1,111,358 | \$1,343,028       | \$1,649,698 |
| Debit                  |                    | FY2016                              | FY2017    | FY2018      | FY2019            | FY2020      |
| 2016-003-00            | Blocked area       |                                     | \$100,000 |             |                   |             |
| 1994-043-00            | N. Pike            |                                     | \$40,000  |             |                   |             |
|                        | Sturgeon RFI       |                                     |           | \$283,000   | \$233,000         |             |
|                        | O&M - Hatcheries   |                                     | \$115,000 | \$324,000   |                   |             |
|                        | O&M - Fish screens |                                     |           | \$150,000   |                   |             |
| Total savings utilized |                    | \$182,746                           | \$255,000 | \$757,000   | \$233,000         | \$0         |
| Unspent savings        |                    | \$182,746                           | \$396,915 | \$354,358   | \$1,110,028       | \$1,649,698 |

\*unallocated funds will be moved to BPA reserves on Sept. 30

**Emerging Priorities:**

The Council identified seven emerging priority areas in its 2014 Fish and Wildlife Program. These are:

1. Provide for funding *long-term maintenance* of the assets that have been created by prior program investments
2. Implement *adaptive management* (including prioritized research on critical uncertainties) throughout the program by assessing the effectiveness of ongoing projects, developing program objectives when appropriate and taking into account the effects of *climate change*

3. Preserve program effectiveness by supporting: (1) expanded management of *predators*; (2) mapping and determining hotspots for *toxic contaminants*; and (3) aggressively addressing *non-native and invasive species*
4. Investigate *blocked area mitigation* options through reintroduction, passage and habitat improvement, and implement if warranted
5. Implement additional *sturgeon* and *lamprey* measures (passage and research)
6. Update the *subbasin plans* most in need of updates
7. Continue efforts to *improve floodplain habitats*

Staff will update the Fish and Wildlife Committee on the recent activity to implement measures associated with these priorities and provide an opportunity to hear from the Committee members if they have any concerns or questions.

- EP-1: *Long term maintenance*. Actions to address priority needs of Program hatcheries and fish screens has been initiated through the use of cost savings funds. (See the O&M subcommittee memo in the full Council packet for this meeting.) M. Fritsch
  - The majority of the mission critical O&M needs at program hatcheries have been addressed or are in process of being addressed. To continue progress in addressing important hatchery needs, the O&M Subcommittee requested identification of priority needs of the essential maintenance elements from the managers for FY2018 -2019. Essential Maintenance and Improvements are items considered important for the facility to continue to perform the mission that was originally identified as the purpose for the facility relative to the Program.
  - Fish screen O&M needs were defined as part of the asset management framework associated with the development of the long-term O&M Strategic Plan. Council and Bonneville staff have been working with the Program's fish screen managers and project sponsors over the past 3 years to identify priority needs. These fish screen needs have been identified and developed in a similar fashion as the hatchery mission-critical elements were last year.
- EP-2: *Implement adaptive management (including prioritized research on critical uncertainties)*. The Council adopted a research plan in June 2017. The purpose of this research plan is to help the Council, Bonneville, project sponsors and the independent science panels: 1) continue to improve organization of research conducted under the Program and reporting of results and conclusions; 2) organize critical uncertainties for the Program; 3) identify priority areas of current and future research; 4) inform adaptive management; and 5) along with other considerations, guide funding recommendations.
- EP-2: *Develop program objectives*. As called for in the 2014 Program, the Council has been working with numerous entities in the Basin to identify, collect, organize and make accessible existing quantitative objectives for a subset of focal species and their habitat. This inventory is large, consisting of different

types and scales of objectives, and may not be effectively used to assess and report on Program progress. Given that inventory, the Council may be able to assist the region in the upcoming program amendment process in determining what type and scale of objectives and related indicators are best suited for assessing and reporting on the Council's Program's progress. N. Leonard

- EP-2: *Taking into account the effects of climate change.* EPA, Oregon DEQ, the USACOE and LCEP are collaborating to compile a report and map of cooler-water areas along the mainstem Columbia used by salmon and steelhead. Also, selective withdrawal technologies were implemented at Lower Granite Dam by the COE. The COE is also designing water temperature control structures for some high head Willamette subbasin dams.
- EP-3: *Preserve program effectiveness.* The Council is supportive of federal legislation intended to effectively reduce the predation of salmon and steelhead by sea lions downstream of Bonneville Dam. The Council has continued to support pike minnow reward fisheries and has supported assessment and control actions focused on Northern Pike in Lake Roosevelt.
- EP-3: *mapping and determining hotspots for toxic contaminants.* The Toxic contaminants workgroup has gathered data around the Columbia basin for Polycyclic Aromatic Hydrocarbons (PAHs) and is proceeding to implement a story map of PAH data. L. Bach / T. Grover
- EP-3: *Invasive and non-native species.* The Council supported aggressive watercraft inspections on the periphery of the Columbia basin designed to detect and prevent the establishment of quagga or zebra mussels anywhere within the basin. At the region's urging, Congress has appropriated funds through the Army Corps of Engineers to partner with states to strengthen the network of watercraft inspections stations. L. Bach
- EP-4: *Investigate blocked area mitigation.* The 2014 Program includes a strategy for anadromous fish mitigation in blocked areas, including investigation of reintroduction of salmon and steelhead above Chief Joseph and Grand Coulee dams, to be conducted in a phased approach. As part of phase one, staff completed an inventory and summary of fish passage at high head dams. Also, the Spokane Tribe of Indians and Colville Confederated Tribes, with state and federal partners, are in the process of assessing the suitability of habitat for salmon and steelhead upstream of Chief Joseph dam to the Canadian border. The phase one work is nearing completion, which will cause the Council to consider moving to phase two, as described by the 2014 Program. L. Robinson
- EP-4: *Investigate blocked area mitigation.* The Willamette BiOp requires the action agencies to implement fish passage at several high head dams in the Willamette basin. The Configuration and Operations Plan (COP) Phase II recommendation includes the following actions:
  - Downstream fish passage at Detroit through the Selective Withdrawal Structure (SWS), Weir Box, and the Floating Screen Structure (FSS)

- Downstream fish passage improvement at Foster with an upgraded fish weir
  - Downstream fish passage at Cougar through the Floating Screen Structure (FSS)
  - Upgraded adult fish facility (AFF) at Fall Creek
  - Continued deep winter drawdown for downstream fish passage at Fall Creek
  - Although the RPA indicates downstream fish passage in the Middle Fork is required, the COP determined that the prudent path forward is continued evaluation of feasibility and review of the need for providing fish passage in the Middle Fork, in consultation with NOAA Fisheries.
  - Hatchery fish management changes
- L. Bach / K. Weist / T. Grover

- EP-5: *Implement additional sturgeon measures.* At the June, 2017 Council meeting, the Council recommended 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 recommended 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. L. Palensky
- EP-5: *Implement additional lamprey measures.* Council and Bonneville staff are working with lamprey managers and partners to develop opportunities for the use of cost savings funds to support on-the-ground lamprey work. See this [Lamprey presentation](#) which provides details. M. Fritsch
- EP-6: *Update the subbasin plans most in need of updates.* No tribal, state or federal fish managers have recommended updating any subbasin plan.
- EP-7: *Continue efforts to improve floodplain habitats.* Habitat actions, as off-site mitigation in the Columbia River tributaries, has been a major part of the Program since the early 1980's. In 2016, direct expenditures in the habitat restoration and protection category (from the Council's Columbia River Basin Fish and Wildlife Program Costs Reports) were nearly \$118,000,000. Most habitat work under the program occurs in the tributaries, usually to improve floodplain habitats, and is primarily intended to benefit focal anadromous and resident salmonids. In addition, other native aquatic species often benefit from habitat actions either directly, through the intended scope of a project, or indirectly, as a result of the fish-focused project. Habitat work is implemented in all four states, from the estuary to the upper reaches of the Columbia River tributaries.

Floodplain improvement accomplishments since 2014: 938 miles of habitat made accessible to fish, 38,029 acre feet of water screened, 3,026 stream miles, or

194,264 acres of habitat restoration, and 134,084 acres of other lands protected, 480,161 acre-feet of water acquired or secured and, finally, 2,395 acres of wetlands and shallow-water habitat were restored in the lower Columbia River and estuary in 2015 and 2016.