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May 1, 2018

MEMORANDUM

TO: Fish and Wildlife Committee Members

FROM: Kendall Farley

SUBJECT: Briefing on the final Screw Trap Report

Presenters: Kendall Farley, Washington Council staff, and Scott Donahue, Bonneville Power Administration

SUMMARY:

Consistent with on-going efforts to conduct policy reviews of relatively small groups of projects or activities, and identify possibly cost savings, Council and Bonneville staff looked closely at the array of rotary screw traps funded through the BPA fish and wildlife funds. An [inventory](#) of screw traps was compiled by Bonneville Staff. Sponsors were asked to review the inventory and to respond to a list of questions compiled by Council and Bonneville staff. Bonneville has mapped the location of all Bonneville funded screw traps currently in use.

Overall, screw traps are operated well by the sponsors and are usually getting useable data. No cost savings were identified through this review. Staff will present the map and inventory at the Council meeting in May.

MORE INFO:

There are currently 41 BPA funded projects using over 100 rotary screw traps (RSTs) in their research, monitoring, and evaluation efforts. Based on a review of project work elements in cbfish.org the collective BPA funding amount supporting RST operations (excluding the cost of PIT Tags) fluctuates between \$6,000,000 and \$8,000,000 annually for operation, data collection and related analysis. Council and Bonneville staff reached out to all program sponsors with RSTs in BPA's inventory in October, 2017 primarily to develop an accurate geospatial inventory of these BPA funded assets. By December 2017 we heard back from the majority of sponsors who helped us fill those data gaps and who also provided a better understanding of the purpose of each operational screw trap, their data collection, use, and accessibility, and their project O&M challenges. We learned that the deployment of each trap is unique; there exists a diverse array of protocols for operating each trap given vastly different geographic, hydrologic and environmental conditions that pose distinct challenges at each site. We were also able to get a better sense of the dynamic job of maintaining a RST and that each one is staffed by dedicated technicians who have special expertise pertaining to their individual RST projects. Coordination is common between and across entities, from timing the release of juveniles from upstream hatcheries, to an O&M inventory exchange exceeded expectations. Finally, we further developed knowledge of the varied goals of each project, assessed the level of data flow coming from each trap, and the level of confidence in the data, helping to manage expectations moving forward.

In December 2107, Council and Bonneville staff was able to have meaningful discussions with some of the sponsors to facilitate a deeper understanding of the unique qualities and challenges of each trap and to clarify general and technical staff questions. We learned that most program sponsors are aware of the areas of strength and areas in need of improvement pertaining to their traps, which made for thoughtful and productive dialogue. Through this collaborative process, we have accomplished our primary objective of updating the condition and location of each trap and ultimately confirming Bonneville's inventory. Additional information continues to flow in to fill lingering gaps, and we intend for this inventory and an accompanying map of screw trap

locations to be living documents which can be continually updated as we gain further data. Bonneville staff are continuing to work with a couple of sponsors to clarify data standardization, availability and usefulness for a few rotary screw traps.