

**Phil Rockefeller**  
Chair  
Washington

**Tom Karier**  
Washington

**Henry Lorenzen**  
Oregon

**Bill Bradbury**  
Oregon



## Northwest Power and Conservation Council

**W. Bill Booth**  
Vice Chair  
Idaho

**James Yost**  
Idaho

**Pat Smith**  
Montana

**Jennifer Anders**  
Montana

July 31, 2015

### MEMORANDUM

**TO:** O&M Subcommittee members

**FROM:** Mark Fritsch, project implementation manager

**SUBJECT:** Hatchery material for August 4<sup>th</sup> O&M Subcommittee

As a follow-up to Subcommittee Chair Booth's update July 8, 2015 and in preparation for the O&M subcommittee meeting on August 4<sup>th</sup> the following information has been prepared.

This information, regarding the hatchery category, will be presented by Council and Bonneville staff as the part of the third agenda item at the O&M Subcommittee meeting.

#### Hatchery Category

Council and Bonneville staff have completed the direct Program hatchery list (Phase I - Inventory) and are now transitioning to implementation of the condition assessment (Phase II) of the asset management strategy.

#### Phase I - Inventory

The following table (please see attached Table 1) reflects Fish and Wildlife Program (Program) hatcheries and the projects explicitly linked or associated with them. In order to capture all the sites and facilities associated with certain hatcheries the table reflects the hatcheries as "facility/program". Staff developed the table to show what each facility/program and associated project(s) need to participate in an inventory (Phase I) and assessment (Phase II) as part of the O&M Strategic Plan. In addition, the table shows other Program hatchery projects that are dependent on facilities that are not funded by and the responsibility of the Program. The proposed inventory and assessment review focuses on projects that reflect capital investments and infrastructure. The facilities/programs warranting an assessment are bricks and mortar structures, not the associated facilities that provide non-Program support for the

hatcheries. Of the 36 projects listed, staff recommend 14 facility/programs (involving 23 projects) for an assessment (please see shaded boxes in the following table). There are six facility/programs that do not warrant an audit due to the lack of Program capital investment. Seven projects are currently in step review and need to be tracked and appropriately incorporated into the strategic O&M plan for hatcheries. These 13 facility/programs and associated projects do not justify audits at this time, but remain an important component of the hatcheries in the Program.

## Phase II – Assessment

At this time, Council and Bonneville staffs are not aware of any emergency needs for the Program hatchery category. Generally, staff believes that assessments of older hatcheries should probably be completed first. The assessments will be implemented in a joint effort by the Council and Bonneville.

With the assistance of an independent contractor, a technical work group will define the assessment to meet the Program goals of creating an asset management strategy. Following is a general outline of the assessment and general information that will be collected.

### Facility/Program Assessment

#### Introduction

- *Project Description*

#### Water Supply System

- *Surface*
- *Ground*
- *Infrastructure*

#### Trap and Weirs

#### Transport

- *Ladders*
- *Other*

#### Adult Holding

#### Incubation

#### Rearing

- *Rearing/Grow-out*
- *Raceways*

#### Release

- *Volitional*
- *Other*

#### Effluent

#### Buildings

- *Hatchery Buildings*
- *Housing*

#### Grounds

- *Access*
- *Utilities*

## Capital (Support) Equipment

It is important to remember that the information gathered is intended to support an asset management strategy that develops a long-term mechanism to address O&M requirements to maintain the Program's hatchery capital investments ensuring proper function of infrastructure investments intended to benefit the fish and wildlife in the Columbia basin. The assessment needs to be basic and collect just enough detail to inform the asset management strategy. That said, as part of the review, alternative approaches to replacement or repair of capital investments at a hatchery should be assessed. In addition, the assessment should identify energy efficiency opportunities.

Once the process is detailed and outlined, Council and Bonneville staff will bring it to the O&M Subcommittee for review and recommendation. Staff hope to concurrently define a procurement option for funding the assessment process and that the entire package can be taken to the Council in the near future. Table 2 shows a draft line item budget proposed for the hatchery assessment reflecting a cost of \$16,988 per facility/program. As you will note it includes personnel costs and site visits. Based on this cost and the understanding that some facilities/programs will cost less and some will cost more it seems that the total budget for Phase II activities will approach \$238,000

Once all site visits are complete Phase III (Prioritization) will be conducted per the asset management and a long-term mechanistic process will be developed to address O&M needs in the long-term (Phase IV) for the hatchery category as part of the O&M Strategic Plan.

**Table 1:** Direct Fish and Wildlife Program hatcheries and facilities and the associated project numbers. Shaded boxes reflect the 14 programs that are proposed to be part of the assessment phase for the O&M strategic Plan. Also identified are the associated facilities that are non-Program that some hatchery projects use are part of their project implementation, but are not the responsibility of the Program.

<b>Direct F&amp;W Program (capital investment)</b>				<i>Associated Facilities (non-Program) and Comments</i>
<b>Facility/Program</b>	<b>Project #</b>	<b>Assessment</b>	<b>Facilities</b>	
Nez Perce Tribal Hatchery	1983-350-00	X	2 rearing sites (NPTH and Sweetwater Springs) and 5 acclimation sites (Cedar Flats, Luke's Gulch, North Lapwai Valley, Newsome Creek, and Yoosa Creek)	
Colville Hatchery	1985-038-00 2008-117-00	X	Colville Tribal hatchery	Project #2008-117-00 (Rufus Woods net pens) is being combined with #1985-038-00
Hood River Production	1988-053-07 1988-053-08	X	2 rearing sites (Parkdale Fish Hatchery and Moving Falls Fish Facility)	<i>MOU with Oak Springs Hatchery (ODFW), Pelton Ladder and Round Butte Hatchery (PGE/CTWSRO). Neal Creek Acclimation is equipment only.</i>
Kootenai River Native Fish Conservation Aquaculture	1988-064-00	X	2 rearing sites (Tribal Sturgeon Hatchery and Twin Rivers Hatchery)	Twin Rivers just came on line and upgrades made to sturgeon hatchery
Umatilla Hatchery	1989-035-00 1983-435-00 1983-436-00	X	Umatilla Hatchery, Thornhollow Satellite Facility, 5 acclimation sites (Bonifer, Minthorn, Imeqes C-mem-ini-kem, Thornhollow, and Pendleton) and 3 adult holding sites (Minthorn, Three Mile Dam and South Fork Walla Walla) and Westland Irrigation District Sampling Facility	Adult holding and eggs taken and transferred from Walla Walla
	1988-022-00	NA		Equipment only
Sekokini Springs Westslope Cutthroat Trout Isolation Facility	1991-019-03	X		Continues to be constructed
Lake Roosevelt Resident	1991-046-00 1991-047-00 2001-029-00 1995-009-00	X  NA NA	Spokane and Sherman hatcheries. Spokane Hatchery audit is complete.	<i>MOU Ford Hatchery (WDFW)</i> Equipment only – 8 Lake Roosevelt net pens

Select Area Fisheries Enhancement	1993-060-00	NA		<i>MOU, Gnat, Greys and Kaskanine hatcheries.</i> Equipment only. 5 net pen sites (Deep River, Blind Slough, Tongue Point, Youngs Bay).
Kalispel Tribal Fish Hatchery	1995-001-00	X		This program has been proposed to phase out of LMB to native trout recovery.
Nez Perce Trout Ponds stocking	1995-013-00	NA		Equipment only. Stocking 3 ponds (Mud Creek, Talmaks and Tunnel)
Duck Valley Reservation Fish Stocking	1995-015-00	NA		Equipment only. Stocking 3 reservoirs (Mountain View, Sheep Creek and Lake Billy Shaw)
Mid-Columbia Reintroduction Feasibility Study	1996-040-00	In Step review		
Johnson Creek Artificial Propagation	1996-043-00	NA		<i>MOU, McCall Hatchery (LSRCP).</i> Equipment only.
Cle Elum Supplementation and Research Facility	1997-013-25,	X	3 acclimation sites (Clack Flat, Easton and Jack Creek) and Prosser hatchery and Marion Drain Fish Facility.	Project is comprehensive. Other species are being dealt with in this project and/or other projects (e.g., sturgeon, kelts). Coho in Step review (Holmes Ranch). Prosser Fish Facility and Marion Drain Fish Facility (kelts, sturgeon and fall Chinook). In addition, some activities are mixed with non-Program efforts. Nelson Springs mobile acclimation equipment only. <i>Roza Adult Trapping Facility (BOR owned--MOA between BOR, WDFW, BPA).</i>
Klickitat River Operations and Maintenance (O&M)	1997-013-35	X	Castile Falls trap, Lyle Falls trap. Proposed – Wahkiacus acclimation.	<i>MOU, Klickitat Hatchery (Mitchell Act).</i> In Step review.
Grande Ronde Supplementation	1998-007-02	X	Lostine River – weir and acclimation	<i>MOU, Lookingglass NFH (LSRCP), Bonneville Hatchery Captive Brood Facility (ODFW).</i>
	1998-007-03		Catherine Creek and Upper GR Rivers - weir and acclimation	
Fall Chinook Acclimation Facilities	1998-010-05	X	3 sites (Captain John Rapids, Pittsburg Landing, Big Canyon)	<i>MOU, Lyons Ferry NFH (LSRCP)</i>
Walla Walla Spring Chinook	2000-038-00	In Step review		Current relation with the Umatilla Hatchery program (see above)

Chief Joseph Hatchery	2003-023-00	X	4 acclimation sites (Oroville-Tonasket Irrigation District irrigation ponds, one tribe-owned and two new ponds will be modified and/or constructed)	<i>MOU, Oroville-Tonasket Irrigation District irrigation ponds</i>
Okanogan Basin Locally Adapted Steelhead Broodstock Step 1 and 2 (Cassimer Bar)	2007-212-00	NA		No activity, in Step review
Develop a Master Plan for a Rearing Facility to Enhance Selected Populations of White Sturgeon in the Columbia River Basin	2007-155-00 (and 2008-455-00)	In Step review		Marion Drain Fish Facility and 1 other site (Ringold, MaNary and Bonneville). Addressed under CRITFC (Objectives 2 and 3) and YN (Objective 1).
Snake River Sockeye Propagation	2007-402-00	X	2 sites (Springfield and Eagle)	<i>MOU, 2 sites (Manchester and Burley Creek)</i>
Lamprey - implement an experimental safety-net lamprey artificial production facility for the conservation of the species	2008-524-00 (and 2008-470-00)	In Step review	proposed	Addressed under CRITFC (Objective 6) and YN (Objective 8)
Crystal Springs Planning and Operations/Maintenance	2008-906-00,	In Step review	Crystal Springs Hatchery and 2 sites (Yankee Fork and Panther Creek)	<i>Activities link to LSRCP</i>
Upper Columbia Spring Chinook & Steelhead Acclimation	2009-001-00	NA		<i>MOU, acclimation sites in the Wenatchee and Methow PUD's. Equipment only.</i>

Table 2: Draft line item budget proposed for hatchery assessment reflecting a cost of \$16,988 per review.

<b>Contractor Name</b>						
<b>Project/Contract Name # YYYY-xxx-xx</b>						
<b>Contract Period</b>						
<b>CR-xxxxxx</b>						
	<b>Qty2</b>	<b>Qty1</b>		<b>Unit Cost</b>	<b>COST</b>	
<b>PERSONNEL</b>						<b>\$11,754</b>
Engineer		40.0 hrs.	@	\$100 /hr.	\$4,000	
Engineer		40.0 hrs.	@	\$100 /hr.	\$4,000	
Specialist		10.0 hrs.	@	\$60 /hr.	\$600	
		<b>FTE Technical</b>			<b>90.0</b>	
Secretary		10.0 hrs.	@	\$20 /hr.	\$200	
		<b>FTE Admin</b>			<b>10.0</b>	
				<b>Subtotal Salaries</b>	<b>\$8,800</b>	
		<b>Fringe:</b>		Engineer @ 35.00%	\$2,800	
				Specialist @ 15.00%	\$90	
				Admin @ 32.00%	\$64	
				<b>Subtotal Benefits</b>	<b>\$2,954</b>	
<b>TRAVEL</b>						<b>\$1,836</b>
Per diem: Field Work	3 pers.	3 days	@	\$39 /day	\$351	
Lodging: Field Work	3 pers.	2 nights	@	\$70 /nite	\$420	
Flight	3 pers.	1 flight	@	\$300 /flight	\$900	
POV Mileage	3 pers.	100 mi./per.	@	\$0.550 /mi	\$165	
<b>PROFESSIONAL MEETINGS &amp; TRAINING</b>						<b>\$0</b>
<b>VEHICLES</b>						<b>\$0</b>
<b>SUPPLIES/EQUIPMENT</b>						<b>\$0</b>
<b>Office Supplies/Non-Capital Equipment</b>						
<i>(list large items and categories of items)</i>						
			@		\$0	
			@		\$0	
			@		\$0	
				<b>Subtotal Office</b>	<b>\$0</b>	
<b>Field Supplies/Non-Capital Equipment</b>						
<i>(list large items and categories of items including equipment rentals)</i>						
			@		\$0	
			@		\$0	
			@		\$0	
				<b>Subtotal Field</b>	<b>\$0</b>	
<b>RENT/UTILITIES</b>						<b>\$0</b>
<b>OVERHEAD / INDIRECT</b>						<b>\$3,398</b>
		<b>25.00% of Items 1 thru 6:</b>		<b>\$13,590</b>		
<b>CAPITAL EQUIPMENT</b>						<b>\$0</b>
			@		\$0	
			@		\$0	
<b>SUBCONTRACTS</b>						<b>\$0</b>
<b>TOTAL THIS CONTRACT PERIOD</b>						<b>\$16,988</b>