

2014 Fish and Wildlife Program - Investment Strategy

Operation and Maintenance Strategic Plan for Screen, Hatcheries and Lands

September 2017

Background

- BPA has made substantial investments in the Columbia River Basin through the Council's Fish and Wildlife Program.
- O&M strategy is the highest priority in the 2014 Program Emerging Priorities.
- O&M strategy will ensure that existing Program-funded infrastructure remains properly functioning and will continue to benefit the fish and wildlife in the basin.
- Intent to provide the ability to address non-recurring maintenance needs.
- Hatcheries, fishways and traps; Screens and diversions; Lands*

*BOG will continue to be used as a tool to address natural events, emergencies and misc. needs

Asset Management Strategy

- Phase 1: Inventory
 - Shared understanding of scope and scale for each category
 - Standardize data for development of system support
 - Clarity on rolls and responsibilities
- Phase 2: Condition and Needs Assessment
 - Safety – compliance – condition
- Phase 3: Criteria for Prioritization
- Phase 4: Strategic Planning
 - Planning – funding – transition to prioritized implementation

O&M Strategic planning

- Fish and Wildlife Committee and Council presentations
- O&M Sub-committee meetings
- IEAB (IEAB 2015-1)
 - Long-Term Cost Planning for the Fish and Wildlife Program
- Bonneville
 - Project Managers assigned
- FSOC
- Hatchery Managers
- Consultants
 - HDR Engineering, Inc./McMillen Jacobs Associates
 - QW Consulting, LLC

Program Hatcheries

- Nez Perce Tribal Hatchery
- Colville Hatchery
- Hood River Production
- Kootenai River Native fish Conservation Aquaculture
- Umatilla Hatchery
- Sekokini Springs Westslope Cutthroat Trout Isolation Facility
- Lake Roosevelt
 - Spokane Hatchery
 - Sherman Creek Hatchery
- Kalispel Tribal Fish Hatchery
- Cle Elum Supplementation and Research Facility
- Klickitat River Operation and Maintenance
- Grande Ronde Supplementation
- Fall Chinook Acclimation Facilities
- Chief Joseph Hatchery
- Snake River Sockeye

Hatcheries (cont.)

- Contract awarded to HDR in March 2016
- Mission Critical elements identified and addressed early 2017 (2018)
- Summary assessment tables provided in May 2017
- Essential Elements prioritized and initial action taken (mid to late 2017)
- Assessment Reports are currently under review, completed and posted by end of 2017.













Program Hatchery Geographic Information System Tool

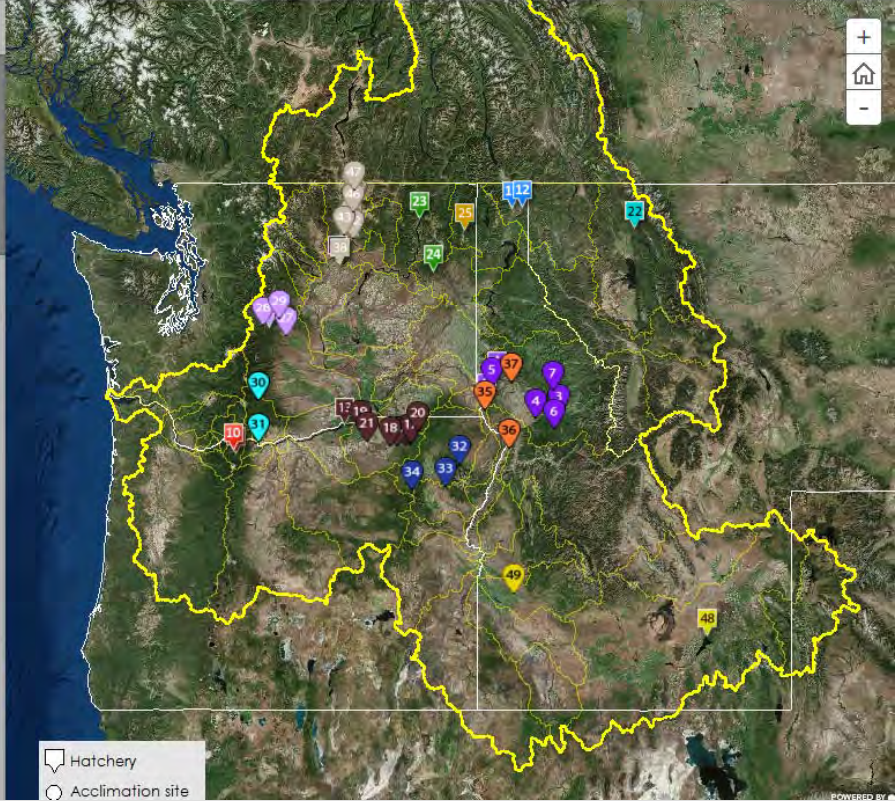
Northwest Power and Conservation Council
F&W Program - Artificial Production Programs

Topic: Artificial Production Programs
View by: O&M

Nez Perce | Colville | Hood River | Kootenai | Umatilla | Sekokini | Lake Roosevelt | Kalispel | Yakima
Klickitat | Grande Ronde | Fall Chinook | Chief Joseph | Sockeye | All

All 14 Programs

 1 Nez Perce Tribal	 2 Sweetwater Springs	 3 Cedar Flats
 4 Luke's Gulch	 5 North Lapwai Valley	 6 Newsome Creek
 7 Yoosa Creek	 8 Colville Tribal	 9 Parkdale
 10 Moving Falls	 11 Kootenai Tribal	 12 Twin Rivers



Hatchery
Acclimation site

Program Screens and diversions

- Fish Screen Oversight Committee (FSOC) facilitating the development of the screen inventory with BPA funding (2015 – 2016)
- BPA and FSOC members reconciling screen inventory with data from PISCES (contract management system), ~ 1,043 screens
- Draft Idaho Screen Template and sent to Bonneville (May 2017), currently under review
- Finalization of screen inventory may require discussion between fish and wildlife managers to determine BPA history and future role with identified screens
- MOA development



Program Screens and diversions (cont.)

- June 2017 – request for top non-recurring maintenance priority needs
- Sponsors provided lists of top 3 – 5 screen needs.
- Top priority for each sponsor totaled \$581k (5 screens).
 - IDFG, Lemhi River = \$100k
 - WDFW, Yakima = \$100k
 - ODFW, Beech Creek = \$60k
 - MFWP, Grace Creek = \$40k
 - Westland I.D., WEID = \$281k
- ~\$150k identified for FY 18
- BPA to work with sponsors to confirm costs, Environmental Compliance – shovel ready for 2018.
- Additional priorities to be addressed in FY 19 and FY 20 through O&M Strategic Plan.

Program Screens

Geographic Information System Tool













Northwest Power and Conservation Council
F&W Program - Fish Screen Programs

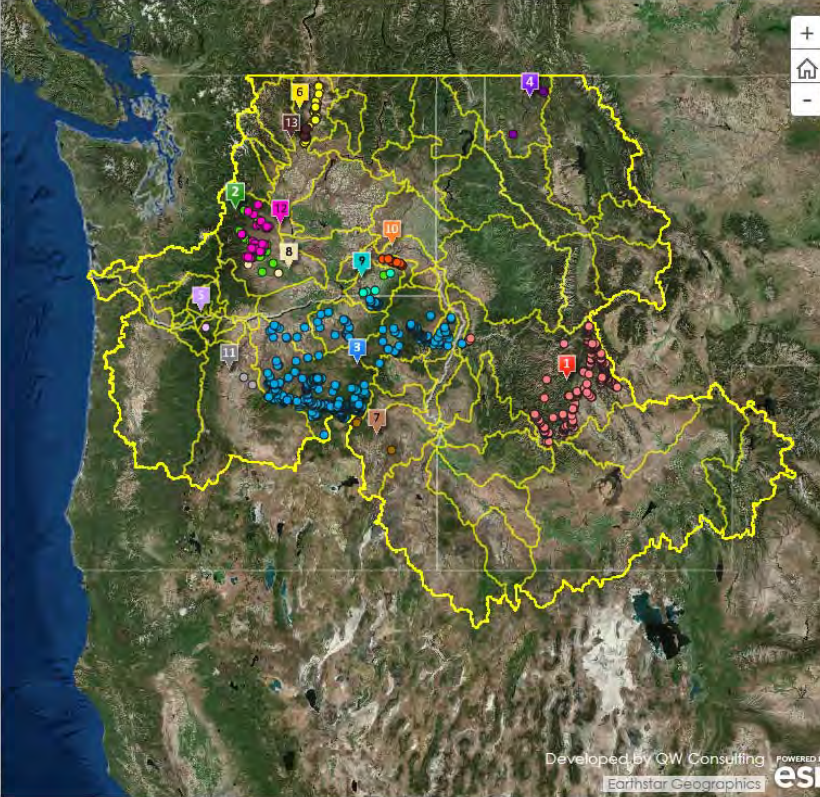
Topic: Fish Screen Programs
View by: O&M

All State Tribes Other

All Sponsors

Through the Council's Fish and Wildlife Program and BPA funding, the states, Tribes, and non-government entities have been able to install fish screens to protect and increase anadromous and resident fish populations in the Columbia River Basin. To ensure the screens work as intended to prevent fish injury or mortality associated with water withdrawals, each entity conducts routine inspections and maintenance.

 1 IDFG	 2 WDFW	 3 ODFW
 4 MFWP	 5 Warm Springs	 6 Colville
 7 Burns Paiute	 8 Yakama	 9 CTUIR
		

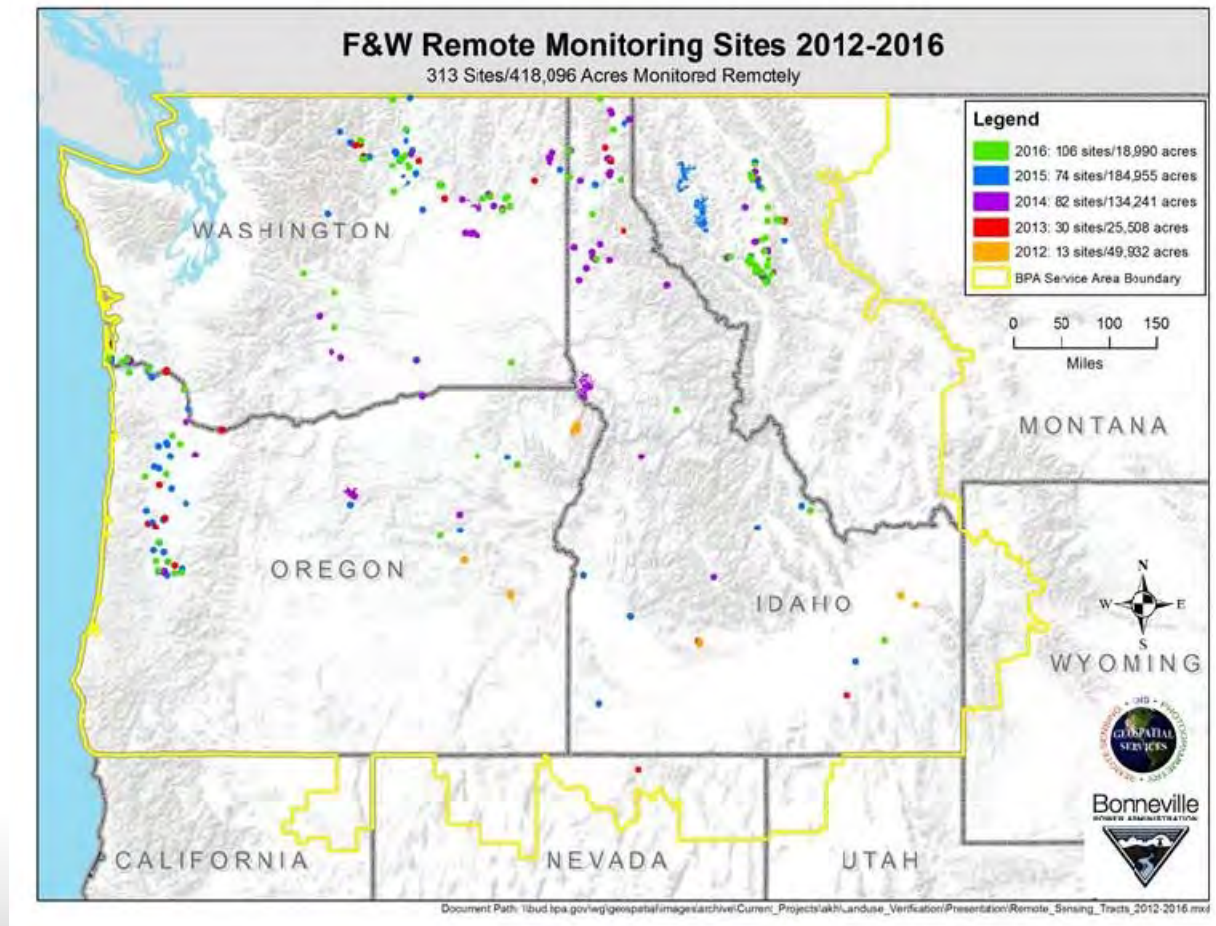


Developed by QW Consulting
Earlstar Geographics
POWERED BY esri

Lands

- BPA has protected, through either fee-title acquisition or permanent conservation easements, over 700,000 acres
- BPA conducts an annual review of about 100 parcels of land each year for compliance with the terms of the conservation easements to ensure attributes to benefit fish and wildlife are sustained
- Land Monitoring Program - compliance monitoring entails a combination of methods, including remote sensing (publically available satellite imagery), on-site visits by BPA staff, and input from project sponsors.
- Presentation on Land Monitoring Program scheduled for June Council meeting in Redmond, OR.

Land Monitoring Program



Anticipated Timelines

Categories

- Hatcheries
 - Phase II (Condition Assessment) completed, Phase III (Prioritization) initiated for Mission Critical and Essential Elements
- Screens
 - Phase I (Inventory) and II complete by mid 2017, Phase III initiated in 2017
- Lands
 - Phase I and II completed by late 2018

O&M Strategic Plan

- Define Phase III and provide draft approach for Phase IV (Strategic Plan) in mid 2018
- Plan end of 2018

FY 18 PRIORITY SCREENS

Idaho, Project # 1994-015-00	<i>L-03AO</i> . Older 45 degree screen, relocate new screen and bypass. River has moved and screen is not functional.	\$100,000
WDFW, Project #1992-009-00	<i>Snipes and Allen</i> . Replace the screen material with new fish-friendly perforated plate. In addition, structural fabrication needs for the frames (e.g., original high build epoxy coating is experiencing failure) will be completed during renovations	\$100,000
ODFW, Project #1993-066-00	<i>Beech Cr. NO. 7</i> . Update Walkways (2); Needs Guards for paddlewheel/Driveline; Gantry replacement; modify bypass trash rack; Sand Blast and paint components or replacement; bearing replacements; seals.	\$40,000
MFWP, Project #1995-004-00	<i>Grave Creek</i> . Replace screen, bypass and headgate severely damaged by tree fall in 2016. Currently the screen is non-functional.	\$60,000
Westland Irrigation District, Project #1983-436-00	<i>West Extension Irrigation District (WEID) diversion</i> . Refurbish 4 (9' diameter x 12' length) screens to meet NMFS criteria. Current screen material was grandfathered in.	\$281,316
Subtotal (estimated costs)		\$581,316
Total funds required for confirmation purposes		\$150,000