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November 5, 2019

MEMORANDUM

TO: Council Members

FROM: Mark Fritsch

SUBJECT: Annual update on Asset Management Strategic Plan

BACKGROUND:

Presenter: Ted Ferrioli, Oregon Council Member
Mark Fritsch, Project Implementation Manager

Summary: Council staff will provide a brief overview of the accomplishments to date and outline the annual process and timelines for implementation in FY 2021 as defined in the Asset Management Strategic Plan (Plan). In addition, Washington Department of Fish and Wildlife will present their drum screen refurbishment of the Westland West Extension fish screens in the lower Umatilla River in late 2018 and early 2019.

Relevance: As part of the 2014 Fish and Wildlife Program implementation, an investment strategy is outlined (Part Six; Section II, and Appendix P). On October 10, 2018 the Council approved the Asset Management Strategic Plan for implementation to address non-recurring maintenance needs for hatcheries, screens and lands to ensure longevity and integrity of the Program's past investments made for the benefit of fish and wildlife.

Workplan: The activities associated with this subcommittee are part of the long-term O&M inventory priorities identified in the annual workplan.

Background: Since the adoption of the 2014 F&W Program in October 2014, the Council staff (State and Central) has been working with Bonneville staff, Asset Management Subcommittee, Independent Economic Analysis Board (IEAB), Fish Screening Oversight Committee (FSOC), Fish and

Wildlife managers, HDR Engineering Inc., and QW Consulting in the development of the Asset Management Strategic Plan.

Hatchery site visits and assessments were completed in 2017 for the Programs 14 hatcheries by HDR, McMillen and Bonneville engineers.

Initial actions were taken on mission critical elements identified during the hatchery site visits and assessments for the Program hatcheries in 2017 either through securing savings (i.e., cost savings) from Program projects that had decreased expenditures (\$115,000) or through Accord funds.

For Fiscal Year 2018 the O&M Subcommittee spent \$474,000 in cost savings to address essential maintenance and improvement needs for hatcheries and priority non-recurring maintenance needs associated with the Program's fish screens.

On March 14, 2018 the Council supported the recommendations of the O&M Subcommittee and Fish and Wildlife Committee to use cost savings in FY2019 and FY2020 at \$589,386 and \$497,475, respectively, for non-routine maintenance for fish screens and hatcheries.

On October 10, 2018 the Council approved the Asset Management Strategic Plan for implementation with a condition that the Subcommittee provide an annual update to the Council on how the Plan has transitioned to implementation prior to 2021 actions and on accomplishments to date. Though the funding option was defined and supported by the Council,¹ discussions with Bonneville need to begin to explore the establishment of an endowment to fund the Plan.

More Info:

- Resource maps for the FW & Wildlife Program's [Hatcheries](#), [Screens](#) and [Lands](#).
- [2014 F&W Program](#) (Part Six, Section II, page 114; and Appendix P, Maintenance of Fish and Wildlife Program Investments, page 199).
- [Asset Management Strategic Plan](#)

¹ Implementation was secured from the Budget Oversight Group (BOG) placeholder starting in FY 2021 at \$250,000, and through securing savings from Program projects that have decreased expenditures at \$250,000. This fund of \$500,000 will be defined as the Asset Management placeholder and will be incorporated into Bonneville's annual budgeting process

Annual Update

Asset Management Strategic Plan

November 12, 2019

Background

- Substantial investments through the Council's Fish and Wildlife Program for the past 38 years.
- Long-term maintenance is the highest priority in the 2014 Columbia River Basin Fish and Wildlife Program Emerging Priorities.
- Provide the ability to address non-recurring maintenance needs.
- Hatcheries, Screens and Lands
- Infrastructure remains properly functioning and will continue to benefit the fish and wildlife in the basin.
- Planning initiated in early 2015 and plan adopted in late 2018

Program Hatchery, Screens and Lands

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

Topic: Fish Screen Programs
View by: O&M

All Sponsors

Through the Council's Fish and Wildlife Program and EPA 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 Mingus Fish Hatchery (OR Energy)	5 Warm Springs	6 Coville
7 Burns Paiute	8 Yakima	9 CTUR

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 | Sekokimi | Lake Roosevelt | Kalkapel | 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 Yoose Creek	8 Colville Tribal	9 Parkdale
10 Moving Falls	11 Kootenai Tribal	12 Teti Rivers

Hatchery
 Acclimation site

Northwest Power and Conservation Council
Program Land Acquisition

Topic: Lands Acquisition

All Sponsors

Helpful hints:

- Click on thumbnail to view details and zoom into the area
- Click on a parcel to display property details
- Click on home return to full extent
- Depending on the scale of the map, parcels from other sponsors are also presented in their respective color

1 Burns Paiute Tribe	2 Coast of Alene Tribe	3 Colville Confederated Tribes
4 Grande Ronde Tribes	5 IDFG (Northern)	6 IDFG (Southern)
7 Kalkapel Tribe	8 Kootenai Tribe	9 Nez Perce Tribe

Recommended Allocations and Planning Funds

Category	2017	2018	2019	2020
<i>Hatcheries</i>	\$115,000	\$238,000	\$308,070	\$259,975
Screens		\$236,000	\$281,316	\$237,500
Total	\$115,000 <i>(\$137,000*)</i>	\$474,000	\$589,386	\$497,475

* Additional Accord Funds

- Funds provided by savings from Program projects that had decreased expenditures or were closed out
- Annual adjustments between categories

Hatcheries

Programs	FY2017	FY2018	FY2019	FY2020
Sekokini - MFWP	Generator	Infiltration Gallery	French Drain	Roof & Settling Pond
Lake Roosevelt Resident– STOI and WDFW	Sanitary Lift Pumps	Generator		
Umatilla - ODFW/CTUIR/District	<i>Mainline pipe repair*</i>			
Snake River Sockeye - IDFG		Transportation Tanks & VFD Pump	Degassing Tower, Pump & Chiller repair	
Colville - CCT	<i>Generator & Chiller*</i>		Troughs	
Nez Perce - NPT	Pumps		Circular Tanks	
Grande Ronde Supplementation – NPT/CTUIR	<i>Raceway liners*</i>	Alarm System		
Fall Chinook Acclimation - NPT			Water Supply and Drain Hoses	

* Addressed through the Accords

Screens

Programs	FY2017	FY2018	FY2019	FY2020
IDFG		Screen L-03AO, rebuild		Screen L-10, replacement
WDFW		Screen Snipes and Allen - rebuild		New Cascade – screen replacement
ODFW		Screen Beech Cr. NO.7 - rebuilt		Screen Westside Diversion and Kenny Buck – both rebuilds
Westland Irrigation District			West Extension Irrigation Diversion – screen replacement	

Annual Process and Future Assessments

Annual

- January - request priorities from sponsors and managers
- February to April - review priorities received
- April - discussion and confirmation of priorities, based on available funds.
- May - Fish and Wildlife Committee discussion and recommendation to Council.
- June - Council decision and recommendation to Bonneville

Five-year Assessments

- Conducted by an independent engineer and FSOC – anticipated in 2022

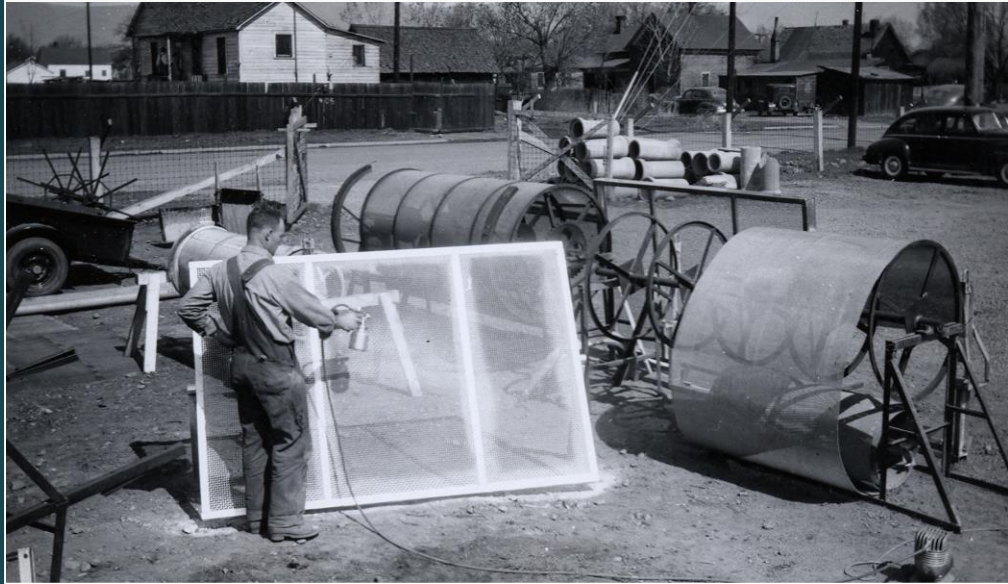
Council Qualifications

- The Plan approved by the Council on October 10, 2018
 - Provide annual updates to the Council on accomplishments
 - Establish discussions with Bonneville to explore the development of an endowment fund
 - Starting in FY2021 the current annual \$500,000 placeholder fund will be secured from:
 - \$250,000 through cost savings from Program projects that have decreased expenditures
 - \$250,000 from the Budget Oversight Group placeholder
 - Confirm implementation of the plan prior to 2021 actions

Westlund Fish Screen Refurbishment

DANNY DIDRICKSEN, WDFW FISH SCREENING SECTION MANAGER

WDFW's Long Fish Screening History



Yakima
Screen
Shop
circa
1950

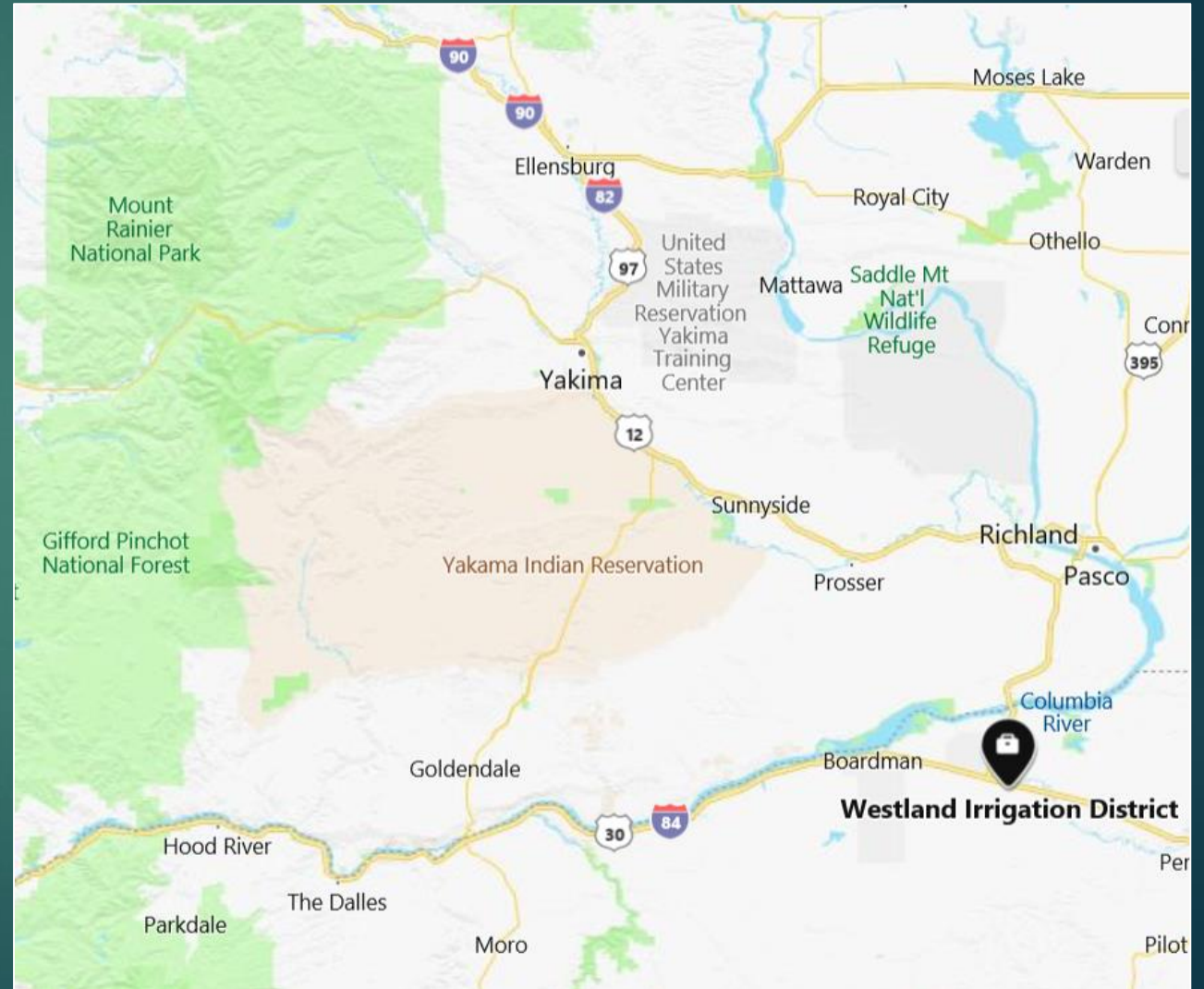
Yakima Construction Shop
2019

Westlund Irrigation District Fish Screens

- BPA contract #74314 REL 39 (CCR 43212) allowed WDFW to use \$281,316 of Cost Savings dollars to refurbish four, 9' x 12' drum screens.
- The screens were put in in 1990 and had not undergone refurbishment since then.
- The four screens facilitate the 120 cubic feet per second (cfs) water right (90 – 100 cfs normally taken).
- The woven wire mesh screen material was not compliant by federal standards.



Westlund Irrigation District

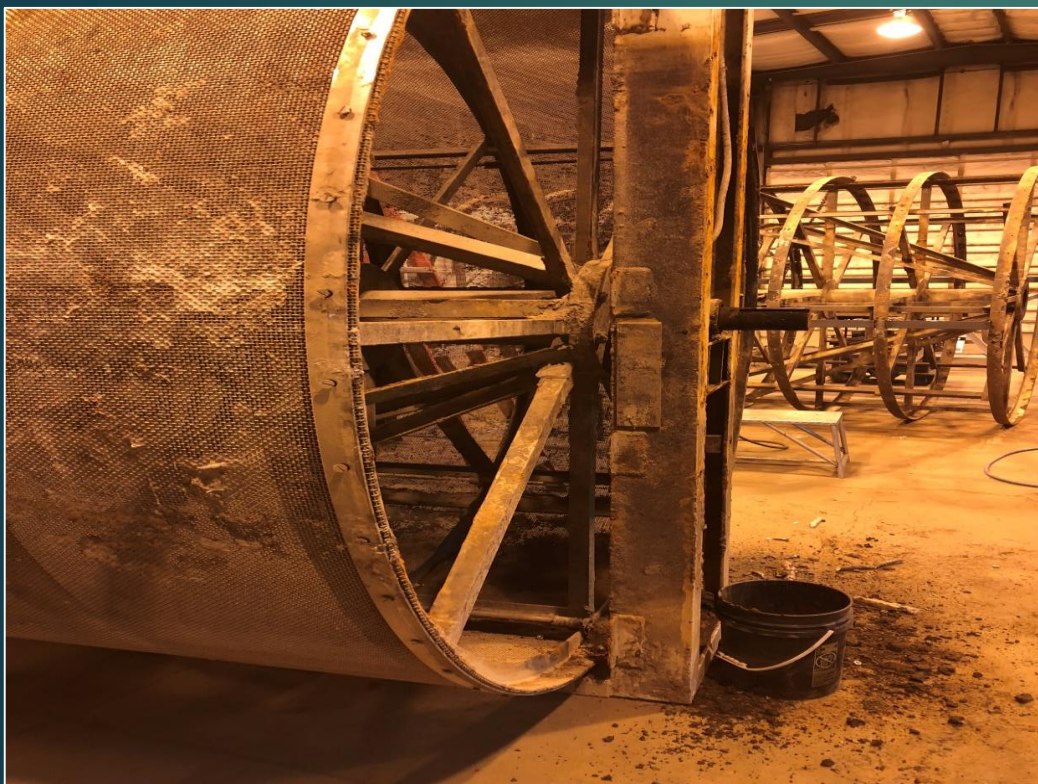




What We Were Up Against



Taking The Screens Apart



Rust or Metal?



Metal deterioration and rusting made determining parts from corrosion difficult. Yakima Construction Shop (YCS) crews worked diligently to differentiate and re-use what original parts could be saved.





Metal rot
resulted in
the need
to re-make
some parts



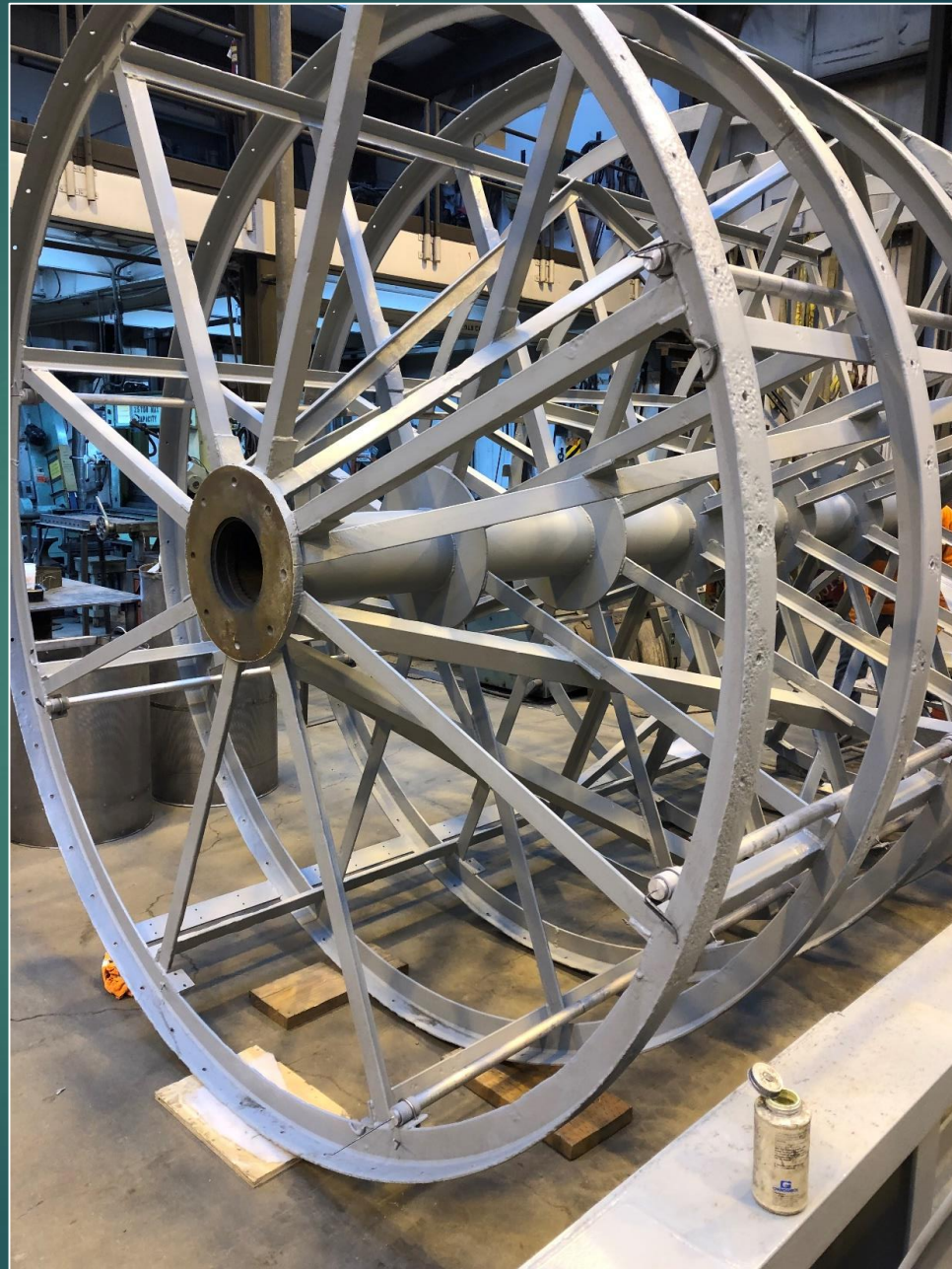
12/19/2018

Blast and Paint









Drum
screen
frames
before and
after blast
and paint







The four fish screens were transported back down to the Westlund Irrigation District site and ready for install prior to irrigation season. In total, the screens took a about three months to undergo the refurbishment process.



Questions?

Thanks to NPCC
and BPA for
funding

Thanks to Bob
Haverfield of the
YCS for his FSOC
presentation

Thanks to the
Westlund Irrigation
District for working
with us

