



LOWER SNAKE RIVER COMPENSATION PLAN



FISH FOR THE FUTURE

MATT HOW GRAPHIC - USFWS



WALLOWA REARING PONDS

Lower Snake River Compensation Plan

FISH FOR THE FUTURE

COORDINATOR'S CORNER



If it doesn't
challenge
you...It
doesn't
change you.

Welcome to 2021! If you're reading this, you survived final level of 2020 - congratulations! Joking aside, this has been a long slog, and I personally lost some good friends in the last month. James Runningwater from the Mescalero Tribal Fish Hatchery died from Covid on December 10th. He was still hauling fish at 70 years old, and the memorial service included his fish stocking truck overlooking the mountains of New Mexico. Mark Dietrich, Uvalde National Fish Hatchery, also died in December after a short battle with cancer. I certainly wish Jimmy and Mark were here with us today, but I know they're proud we're carrying their legacies to provide Fish for the Future.

Along those lines, we've made the decision to host the Annual LSRCP meeting virtually on April 27-29. We will be reaching out for topics/ideas, and please keep those dates free on your calendar.

I had a chance to fish Cascade Reservoir over the Holidays with my family. We didn't manage a ton of fish, but we broke the magic 15-inch mark on several yellow perch. Those certainly eclipsed anything I'd ever caught growing up in northern Wisconsin. Being a fish nerd, I found the Cascade story fascinating - remove surplus pikeminnow, re-stock with perch, and create a world-class fishery almost 20-years later. Sometimes we as fishery managers hit grand slams - I'd argue this is one of them.

Onward to 2021! I hope you've set some ambitious goals for this year and plan to take some swings for the far fence. Guys like Mark and Jimmy lived great lives working in this rewarding career and I'm confident we can hit the next Cascade success story with the Lower Snake River Compensation Plan. Don't wait, if 2020 taught me anything, it was that the time for taking action is now.

Stay safe and have fun out there!

Nate



ASSET MANAGEMENT

THE VIEW FROM MARMES, LYONS FERRY FISH HATCHERY

Asphalt. For anyone that has been around this stuff, you start to realize the astronomical costs of our roads. A quick Google search will give you a cost of \$4 to 11 million dollars per mile for a 4-lane highway. Incredible, but reality.

Anyhow, as many of you know, our asphalt is nearing and exceeding its lifespan. We've cracked sealed, patched, and bumped our way to 2021, but with all things, eventually you have to bite the bullet.

So, this was a long introduction to say we are tackling a re-surfacing project at Lyons Ferry Fish Hatchery in 2021. Now, I write this with trepidation, because we have asked all of you to tighten your budgets - and you have significantly. And, asphalt investment has historically been one of the last things we invest in. Frankly, I don't think our fish care one way or another how bumpy our roads are..... except maybe on the truck ride to the river.

Through Eric Bergey's efforts in Portland during 2018, we were able to secure an \$800,000 cost match from Federal Highway resources for this Fiscal Year. There are a lot more details packed in there, but this will stretch our resources significantly.

Lyons Ferry was identified from our previous condition assessments and engineering work. As with everything, there is a phased bidding approach as we won't likely be able to tackle the entire project this year. Hopefully this goes well, and we can secure additional funds into the future. Fingers crossed. So, if you get to Lyons in 2021, bring your roller blades - it should be smooth blading!

One last thing in asset management. Chris Starr will be convening the Asset Management Team virtually in early February. That group hasn't met in multiple quarters now due to Covid, but we'll be convening them more regularly to provide feedback on priority projects. This is where we need your help. We want to see more "outside the box" projects geared towards not just maintaining our current program, but moving the needle towards more adult returns. So Management muckity-mucks, keep encouraging our newest staff members to move our feet out of the mud.

If your manager is hopelessly floundered, float those ideas up to Chris Starr or the Asset Team: Marc Garst, Becky Johnson, Jon Lovrak, Steve Rodgers, Andrew Gibbs, Lytle Denny, and Ace Trump. They'll take it from there.



A FAMILIAR SIGHT ON OUR 40-YEAR OLD ASPHALT



STARTING TO BE A BUMPY RIDE ACROSS THE FACILITIES

RELEASE SITES MATTER

SOUTH FORK ADULT HOLDING

I would argue to say that we don't suffer from a lack of datasets to review. Thanks Matt Belnap, IDFG, for this data taken from his Spring/Summer Chinook smolt emigration work and adult returns and release years. The take-away on this dataset is that release sites matter. In general, Columbia Basin modeling suggests a strong correlation between river migration miles and expected adult return rates. That isn't a hard leap to make. Where it gets more interesting is diving into the details of what release sites start outperforming others. Keep in mind that Powell, Selway, and Clear Creek are all upriver release sites originating from Clearwater Fish Hatchery. North Fork of the Clearwater (Clearwater Hatchery) is essentially the same release location as Dworshak. And Kooskia is essentially the same release location as Clear Creek (Clearwater Hatchery again).

We highlighted this in another monthly narrative, but size at release is 16 fish per pound (fpp) at Clearwater and 20 fpp for Dworshak and Kooskia.

Clearwater Basin Releases - Parental Base Tagging adult return rates							
	Powell	Selway	Clear Creek	Red River	NF Clwtr	DWOR	Kooskia
2018*	0.11	0.05	0.08	0.11	0.09	0.09	0.12
2017	0.07	0.32	0.19	0.13	0.11	0.06	0.05
2016	0.47	0.48	0.39	0.29	0.46	0.13	0.22
2015	0.38	0.29	0.25	0.20		0.13	0.27
2014	0.42	0.44	0.85	0.21		0.34	0.34
2013	1.02	0.79	0.68	0.48		1.06	1.32
2012	0.41	0.95	0.98	0.54		0.70	0.57
Mean	0.41	0.47	0.49	0.28	0.22	0.36	0.41
Production Goals	640,000	400,000	650,000	1,280,000	709,000	1,650,000	720,000
Adults (exp)	2,624	1,899	3,185	3,574	1,569	5,915	2,971
	*PIT Tags Only						



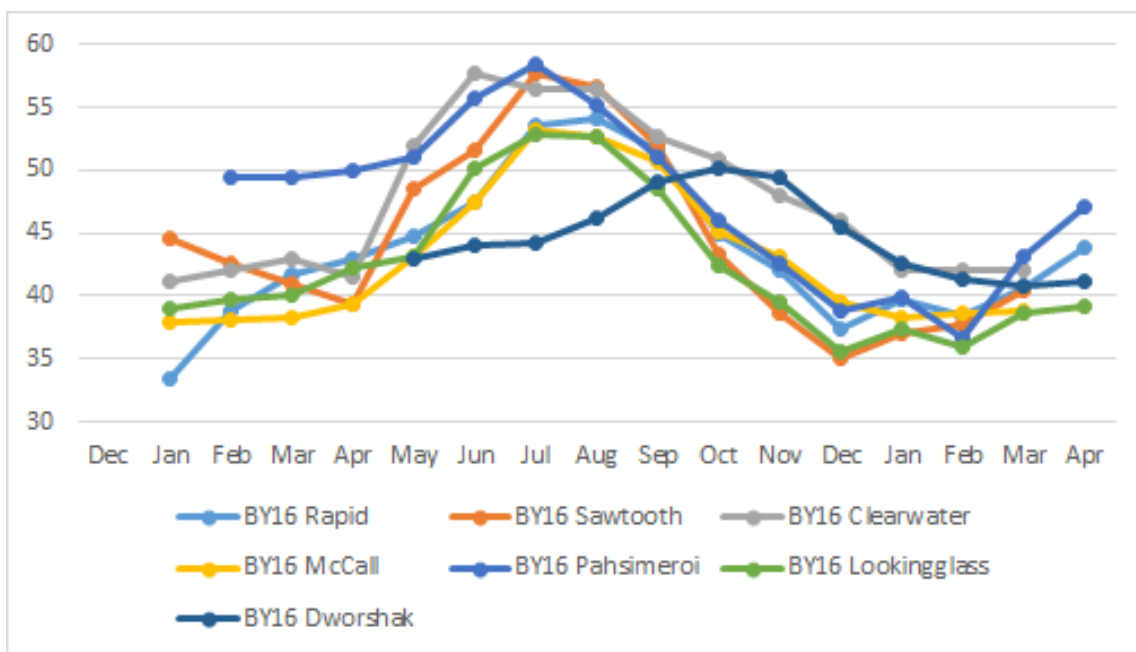
SAWTOOTH RACEWAYS

CHINOOK REARING WATER TEMPS

LOOKINGGLASS RACEWAYS

A big shout-out to Brian Leth and Beau Gunter for gathering water temperature data from a bunch of the Spring/Summer Chinook facilities. The impetus of this data request is teasing apart Chinook rearing and release differences from Clearwater and Dworshak hatcheries in regards to increasing Smolt to Adult survival rates. Since the Clearwater basin is one of the lowest facilities (Lyons Ferry notwithstanding) we'd generally expect some of the highest SAR rates there, yet that hasn't been the case in recent years.

This data look came out of anecdotal notes from Brian's crews visiting multiple Chinook facilities just prior to release and noting differences in smoltification across the facilities. Certainly not unexpected, but it is intriguing to see the majority of our Chinook facilities falling in a temperature pattern and both the Clearwater facilities (Dworshak and Clearwater) breaking out. This is one of multiple topics (release timing, size at release, etc.), to continue discussing and we expect to see at our annual meeting in April.



LOOKINGGLASS CHINOOK

FINAL FY20 EXPENDITURES



Program	Grant	Expenditures	Balance	Percent
CTUIR	\$ 248,303	\$ 217,024	\$ 31,279	87.4%
IDFG	\$ 8,440,797	\$ 8,190,710	\$ 250,087	97.0%
NPT	\$ 1,588,778	\$ 1,535,633	\$ 53,145	96.7%
ODFW	\$ 4,964,403	\$ 4,953,323	\$ 11,080	99.8%
SBT	\$ 601,592	\$ 569,553	\$ 32,039	94.7%
WDFW	\$ 3,924,406	\$ 3,904,699	\$ 19,707	99.5%
PSMFC	\$ 760,877	\$ 722,947	\$ 37,930	95.0%
USFWS	\$ 10,220,844	\$ 9,960,816	\$ 260,028	97.5%
Total	\$ 30,750,000	\$ 30,054,706	\$ 695,294	97.7%



Nice work on budget execution this year. We ended the reporting cycle with a 97.7% expenditure rate which significantly eclipsed the 5-year average of 95%. That also means we found operational efficiencies of \$695,000. That's the good news. The other news is that of \$695,000, only \$500,000 can be applied to our maintenance backlog needs per our current Memorandum of Agreement with Bonneville Power Administration (BPA). The remainder will return to BPA to address unmet needs in the rest of their suite of obligations.

What does this mean? We certainly want to keep finding efficient ways of doing business and conserving budget resources. But, as a program, we need to identify those efficiencies within the Fiscal Year (Oct 1 to Sep 30), and then apply those to the greatest needs. We'll plan on meeting with all of you mid-Fiscal Year (April 2021) to minimize any resources left un-obligated on September 30, 2021.

**IF YOUR DREAM
MATCHES YOUR
BUDGET.....
YOU'RE DREAMING
TOO SMALL**

-ANONYMOUS



LSRCP STAFF



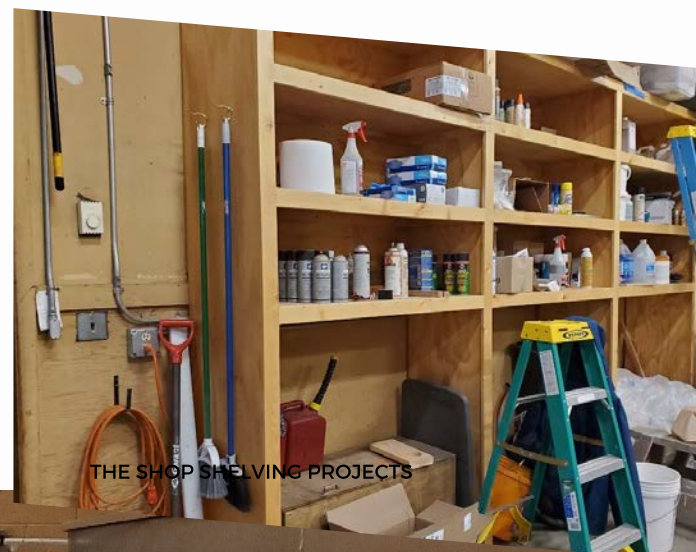
EMPLOYEE SPOTLIGHT - Tom Otto - McCall FH

Tom has been the Maintenance Craftsman at the McCall Fish Hatchery since 2015. He has lived in McCall Idaho all of his life, raised his two children here and has built many, many homes in the area. He is a carpenter by trade, but really is capable of anything. In his spare time he is an avid fisherman. There is nowhere around the McCall facility and the trapping facility that you can't see something that Tom had a hand in building or improving. Some of the projects that he has done for us include, but certainly aren't limited to, the roof at the trapping facility, built a shelving unit for the shop, helped install the new incubation head tank, painted the office and refurbish the cabinets (they are no longer Mac and Cheese orange for folks who have been here), built cabinets in the incubation area, built a work space for net and tray repair, built two out of three backyard fences on the hatchery, stained and installed all the base boards in the office and the dorms, etc., all while handling the miscellaneous day to day mechanical and repair things that pop up. Tom is a huge asset to the McCall Hatchery team and in turn is a huge asset to IDFG and LSRCP.

Thanks Tom for your exemplary work towards Fish for the Future!



TOM WITH THE REWARDS OF HIS
SERVICE - GREAT FISH!



THE SHOP SHELVING PROJECTS



INCUBATION HEADBOX PROJECT