



## LOWER SNAKE RIVER COMPENSATION PLAN

# FISH FOR THE FUTURE



MATT HOW GRAPHIC - USFWS



Scout Pro

4000g

DWORHSACK SPRING CHINOOK - ANGELA FELDMANN

# Lower Snake River Compensation Plan

FISH FOR THE FUTURE

## COORDINATOR'S CORNER



If I have seen  
further, it is by  
standing on the  
shoulders of  
Giants.....

Isaac Newton

November is one of my favorite months, but as with all things 2020, its not fit my previous expectations.

My first was a cancellation of Thanksgiving plans from my father, who said, "We'd rather not see grandchildren from an Alaska Air flight from Boise to Wisconsin." He was right. Although, my parents are still COVID negative, several of my North Dakota in-laws tested positive and are quarantining. Thankfully, none of them are hospitalized, but as I suspect with many of you, COVID is hitting a lot closer to home now than ever. Secondly, we received a Freedom of Information Act (FOIA) request this month. Not my favorite news and see the ESA section for more on that. Lastly, I've already written-off December Holiday visits - another 2020 casualty.

I still do love November, and have been having a great time training our new black lab puppy, Lava. She's a bundle of chewing energy and gets endless delight from nipping our two daughters. Hopefully we'll get through that phase soon.

Meanwhile, our 15-year old lab remains oblivious to the new addition, but reminds me of her puppy days at Hagerman National Fish Hatchery. It's given me time to pause and reflect on how fast 15 years go. And, to realize how fast the LSRCP program is approaching 40-years - almost as long as Gene McPherson's career (see employee spotlight). There has been truly a mountain of work applied to this program and still plenty of mountains to climb. I've been reminded that "standing on the shoulders of giants" before me is a great way to see further into the possibilities on the horizon.

Thanks for the aerial boost - I'm looking forward to our future journeys!

Stay safe and have fun out there!

Nate





# DWORSHAK BY20 SPRING CHINOOK

DWORSHAK SPRING CHINOOK SMOLT REARED IN "HIGH DENSITY" OF 0.35 DI AND FI OF 0.28

## Dworshak National Fish Hatchery spring Chinook recoveries

Sex	BY2012		BY2013		BY2014	
	Control	High Density	Control	High Density	Control	High Density
Male	189	169	129	79	89	87
Female	172	185	116	105	86	92
Subtotal	361	354	245	184	175	179

Since, 2012, Dworshak National Fish Hatchery has been evaluating rearing densities of smolts past a recommended upper Density Index (Piper DI) limit of 0.20 and Flow Index of 1.0 or 80% saturation. This DI originates from work done by Banks (1994) and is incorporated into the USFWS Hatchery Review Team (HRT) recommendations from 2013.

The HRT suggested empirical data drive rearing above 0.20, or in any case when on-station survival is below 90% eyed-egg to smolt. Preliminary Dworshak evaluation suggests that DI's of 0.35 did not negatively affect Smolt to Adult Return (SAR) rates in a high flow (FI = 0.28) rearing environment.

As the study has progressed, Dworshak has ramped up the number of rearing units utilizing a DI of 0.35 and acknowledged the increased Fish Health risks especially with Bacterial Gill Disease, Phoma, and Bacterial Kidney Disease, and potential for catastrophic failure. Fortunately, the hatchery staff in conjunction with onsite Fish Health specialists have kept average survival at the 90% rate.

Since the study, Dworshak has added Low Head Oxygenation (LHO's) to all Chinook rearing raceways. The LHO's primarily ensure complete Nitrogen de-gassing, but have a secondary benefit of ensuring DO saturations remain above 80% and mitigate water supply failures during power outages.

Brood Year 2020 Chinook collections were a challenge across the basin. However, after a US v Oregon change of parr to smolts, higher than expected fecundities, low BKD culling, and better than expected adult returns; Dworshak has an additional 540K eyed eggs seeking a grow-out option. We're excited to see how we collectively incorporate this opportunity towards Fish for the Future!"



DWORSHAK LHO'S ON A-BANK RACEWAYS

RELEASING DWORSHAK SPRING CHINOOK UNDER LIGHTS TO REDUCE BIRD PREDATION - MARCH 2020



# FY21 PERSONAL PROPERTY

LSRCP HYNDUAI SONATA

If you own something at your facility that isn't bolted down, costs over \$5,000, or has a license plate; you've probably been on Anna Copeland's list for personal property inventories. Thanks for all your help maintaining accurate records in that arena.

As a whole, the LSRCP program owns almost \$9M in personal property. Of that, about 30% or \$3M, is vehicle inventories; including light vehicles (26,000 lbs or less) and trucks (26,000 lbs or more). For FY21, we'll be trying something new in our light vehicle fleet:

## **Moving Light Vehicle Fleet to 5 years and Newer**

I've got some darn German-farmer cheapskate gene squirreled away in my sub-conscious. That is, keep fixing vehicles as long as possible to save money. And, frankly that works to a point. However, in the current fleet management picture, it doesn't make sense from a budget perspective. All of our vehicle purchases are mandated to occur through the US General Services Administration (GSA). It's not without its quirks, but using GSA offers a significant sticker-price savings on new trucks, cars, etc. When we purchase new vehicles, old vehicles are replaced in the fleet and offered for purchase through GSA Auto auctions. Sales from these auctions are returned to the Agency (LSRCP) as "proceeds" that are used to offset the price of the new vehicle.

Here's the scoop. Recent analysis of the auto markets and GSA Auto auctions have revealed that on average, replacing vehicles at 5 years of age **regardless** of mileage is the best bang for the buck. In some cases, the Auction price is nearly **exceeding** the original purchase price and on average, we are seeing a net amortized acquisition cost between \$1,000 - \$2,000 per year. The key is **age**. Older, low mileage vehicles, still see a precipitous auction value decline and the re-sale doesn't offset purchases prices.

So, thanks in advance as Anna's works with you to implement this vehicle strategy starting in FY21. We'll keep evaluating the process as we move the fleet newer, and there will always be vehicles that are exceptions (feed trucks, etc.). Anna will also be evaluating leased vs. ownership strategies and giving you numbers to understand the cost/benefit relationships of owning versus leasing depending on your mileage use, etc.



IRRIGON START-UP TANKS



# ENDANGERED SPECIES ACT

## FOIA'd!!!!

The Freedom of Information Act (FOIA) is a good thing for public transparency on Government actions. The FWS received a request to track down consultation actions for hatchery facilities within the Basin. Not sure where this is headed, but thankfully we've got great people working on this stuff keeping our "t's" crossed and "i's" dotted.

Endangered Species Act (ESA) cliff notes:

**Section 7:** For any action that may affect an ESA listed species, consultation is required with NOAA Fisheries (National Marine Fisheries Service) for anadromous fish and the US Fish and Wildlife Service for resident species, i.e. Bull Trout, Bliss Rapids snails, Snake River Physa, etc., etc. Need a new weir? Yep, going to need consultation.

**Section 10 and Section 4(d) Permits:** These tools authorize take (harming or killing) threatened and endangered species. Need broodstock? Yep, you've got a permit somewhere. Have a salmon fisher-people? Yep, covered under a permit.

**"We always lose on Procedure, not Biology," Mark Robertson**

Bold statement, but the harsh truth. When it comes to legal challenges to our work trying to recover species ( e.g. provide harvest within permit exemptions to ESA); we are more apt miss in procedural errors, not fish biology. Probably not a surprise since we've got a lot more fish biologists than lawyers in our LSRCP ranks. But, not to worry, if you have questions on ESA issues, drop a line to Mark Robertson and he'll help ensure we communicate and coordinate across the channels, and follow the needed procedures along the way.

LOOKING CLASS CREEK



LYONS FERRY SCADA SYSTEM

**DREAM BIG,  
START SMALL,  
THEN, CONNECT THE  
DOTS.....**



TUCANNON INDOOR TANKS





# LSRCP STAFF

MCCALL FISH HATCHERY

## EMPLOYEE SPOTLIGHT - Gene McPherson - IDFG

Gene McPherson will retire in December and take his status as the longest tenured IDFG employee in service. Born in Boise, Gene is an Idaho native with Idaho Fish and Game heritage. His great-uncle Harry Palmer was one of the earliest Deputy Game Wardens in the mid-1930s, and his father served 30 years as Conservation Officer.

Gene has a BS in Social Science from LCSC and UI, with a minor in fisheries biology. Via a phone call on his birthday in 1977, he was offered a job at Hayspur Hatchery as a Fish Culturist. From there he promoted to Hatchery Superintendent at Henry's Lake, then to Hatchery Superintendent II at Clark Fork Hatchery and eventually to McCall Hatchery where he was promoted to a Hatchery Superintendent III.

During his career, Gene has worked in every region of Idaho in a capacity related to fish production! Congratulations!



U.S. Fish and Wildlife Service  
Lower Snake River Compensation Plan  
Salutes

*Gene McPherson*

For your contributions and support to the  
Lower Snake River Compensation Plan Program.  
Your commitment to the hatchery program for  
43 years in Idaho has significantly improved the  
fishery resources in Idaho  
for the benefit of the region's citizens.

December 2020



McCall



From your LLCOP Team.....

# HAPPY HOLIDAYS

*The Devlin's*



*Brian, Christy, Emily, Lauren, & Kelton*

*Mark and Kay*



*Bill and Anna Copeland*



*Chris and Mary Starr*



*Donelle, Ella, Eva, and Rod Engle*



*Emy, Nate, Amber, and Harley Wiese*



*And a Happy New Year!*