



LOWER SNAKE RIVER COMPENSATION PLAN



MATT HOW GRAPHIC - USFWS

FISH FOR THE FUTURE



LSRCP ANNUAL MEETING

WHAT'S BEEN HAPPENING IN LSRCP

APRIL/MAY 2022

Lower Snake River Compensation Plan

FISH FOR THE FUTURE



COORDINATOR'S CORNER

It's been a great Spring at LSRCP. The highlight was seeing many of you in Boise for the annual LSRCP meeting. Thanks for everyone that attended both in-person and online. The in-person contingent probably probably heard the tale of shooting the grizzly bear at 7 yards a few too many times as we bbq'd bear bratwurst. I'm certainly fortunate to have a brother living in Kotzebue, Alaska that is willing to tour me around his backyard. and volunteer as bait periodically.

It's been a roller coaster of highs and lows. On my return from Kotzebue, Alaska, I was excited to see some really high Chinook numbers coming over Bonneville. It's great to see a glimmer of hope out there. That said, Laurie Weitkamp and Brian Beckman from NOAA gave us some sobering reminders on the general ocean trends in the wrong direction. And, the article by ProPublica on Titled "\$2Billion and the Fish are Vanishing Anyway", wasn't a flattering account of salmon efforts.

I hope many of you left the LSRCP annual meeting re-energized for Fish for the Future. I certainly did. I really appreciated the ideas many of you offered on what the LSRCP Coordinator should do. We're here to help, and I've saved many of those cards (and the online comments) to help guide our future.

In any case, if you didn't make the meeting in-person, don't despair. I hope to be out to visit more this summer as COVID conditions allow and I'll bring you you're own G-bear bratwursts if you drop me a line.

Stay safe and be well!

- Nate

.....
"I think that was a bluff charge...."

Will Wiese as gunsmoke curled from the bear piled 7 steps away
.....



\$2 BILLION TO SAVE SALMON

SAWTOOTH FISH LOADING, IDFG

If you didn't see it yet, be sure to read the ProPublica article about salmon recovery:

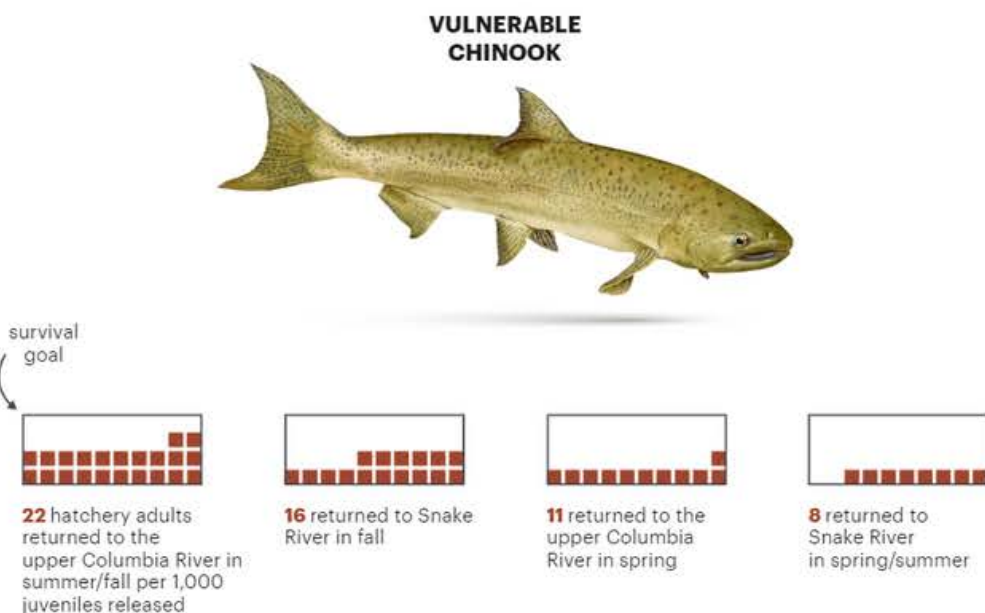
<https://www.propublica.org/article/salmon-hatcheries-government-climate-change>

I'll forewarn you up-front, they did a great job putting this together, but it's neither flattering of the efforts to maintain salmon nor does it hit the mark 100%. That said, it's an important read and I had it forwarded to me by no less than 6 fisheries colleagues across the country. Publicity is always good.....I think.

Anyhow, the article gave previous colleagues plenty of questions. One that I have a particularly hard time explaining is applying the 4% Smolt to Adult survival goal for recovery of hatchery stocks. I think the article missed the mark there, as a 4% SAR on well over 3,000 hatchery smolts/female would genetically flood habitat/future hatchery generations with limited family groups.

In any case, there are some specific LSRCP examples listed in this article. I'm sure some of you were pinged for info (including us here at LSRCP) and thanks for getting this stuff out there.

Keeping in the spotlight is certainly not bad; it highlights that we still have goals way beyond where we currently are and likely need resources to reach them.

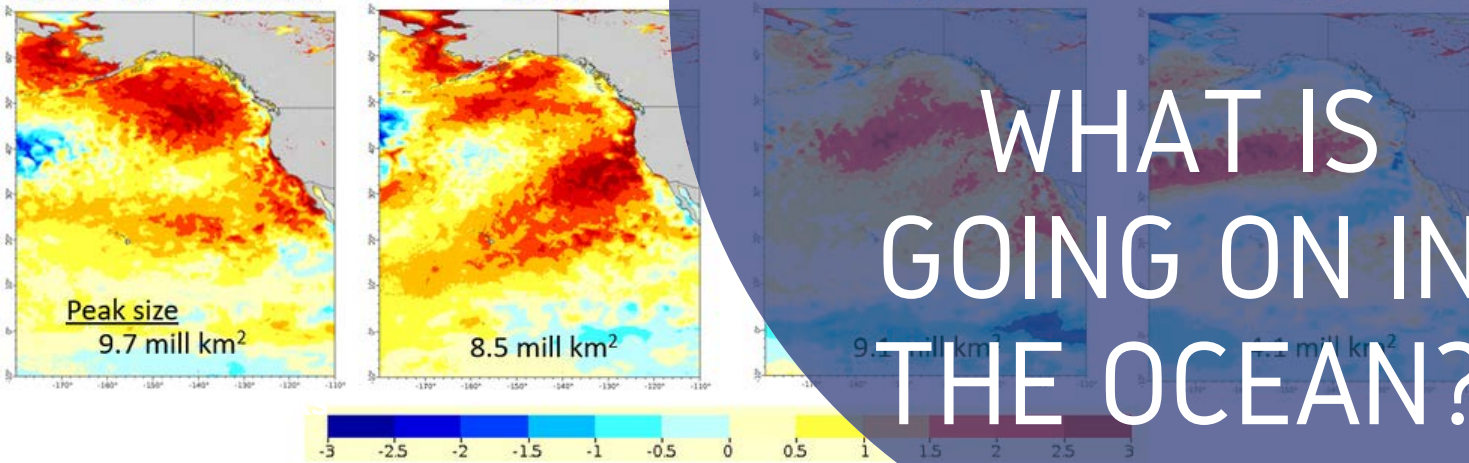


2014-16 "The blob"

2019

2020

2021



WHAT IS
GOING ON IN
THE OCEAN?

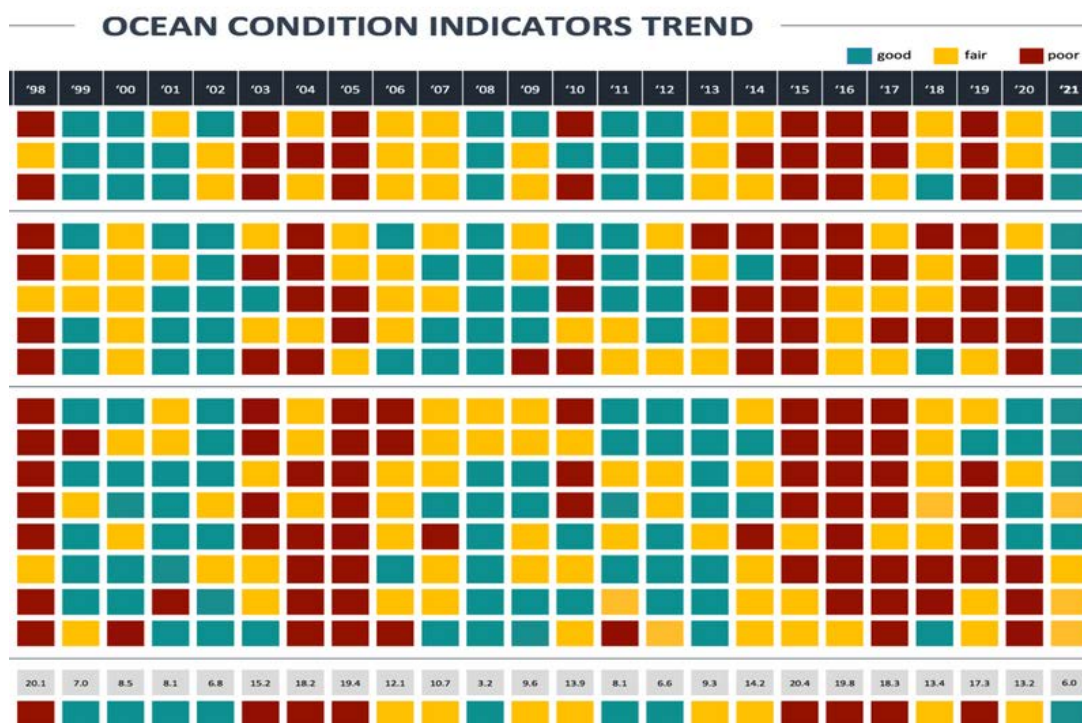
Laurie Weitkamp, NOAA

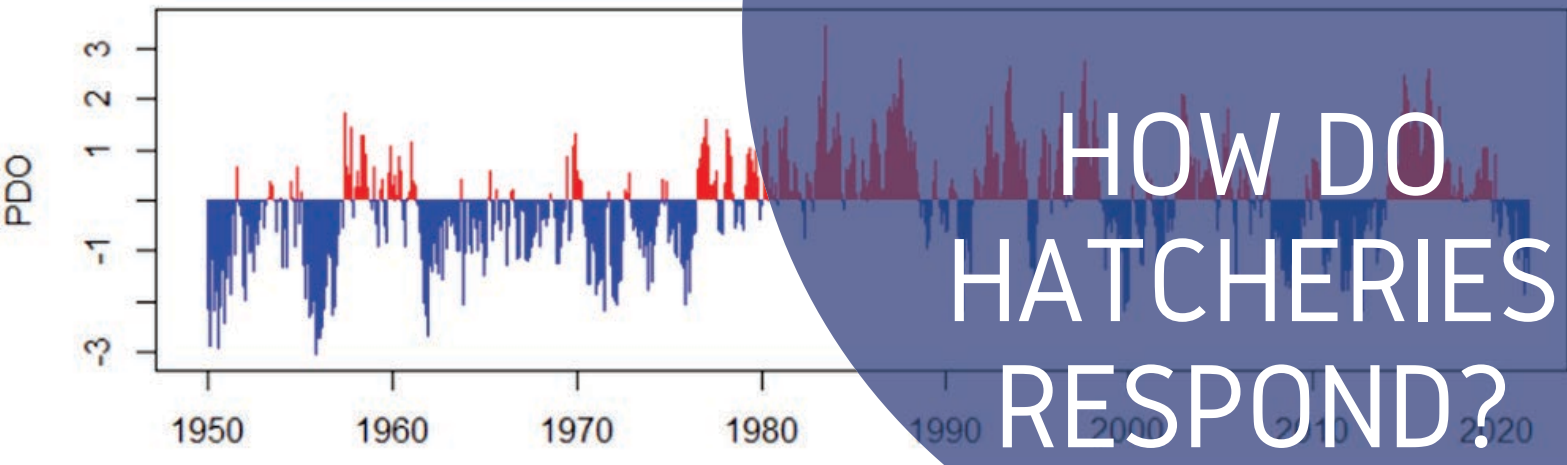
Laurie Weitkamp presented at the LSRCP annual meeting on current ocean conditions. 2022 is shaping up to possibly be the third "La Nina" weather pattern for the Pacific Northwest in as many years. This is extremely unusual, but tends to favor good ocean conditions for Pacific salmon. As such, 2021 was one of the best "ocean indicator" years on the NOAA stoplight chart.

All of this adds up to good news for Pacific salmon in the near term forecasts. Laurie also presented some information on the recent High Seas Salmon Surveys. The surveys aim to unlock some of the mysteries of salmon growth in the ocean and is a collaboration between U.S., Canadian, and Russian scientists. Unfortunately, the Russia/Ukraine conflict has disrupted some of this work and we all await anxiously to see how that will resolve.

Laurie's full presentation will be available on the LSRCP website sometime in June:

<https://www.fws.gov/office/lower-snake-river-compensation-plan/library>



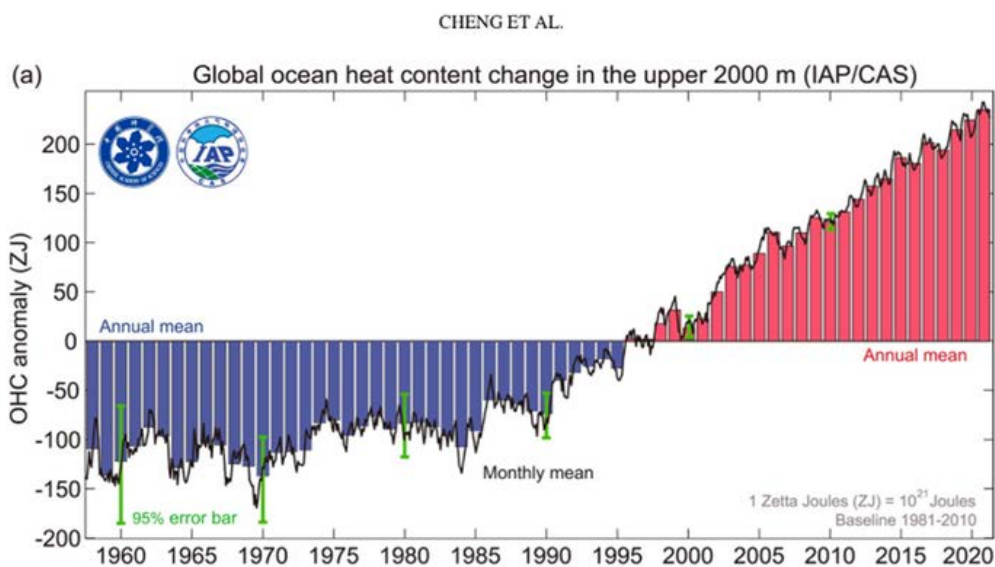


HOW DO HATCHERIES RESPOND?

Brian Beckman, NOAA

Brian Beckman presented at the LSRCP meeting to discuss how hatcheries can respond to changing ocean conditions. Brian started his presentation outlining how the Pacific Decadal Oscillation (PDO) has shifted to more warm PDO's over recent decades as compared to the 1950-70s. At the same time, we've dialed in our hatchery production and release tactics based on historical results over a snapshot of time. This strategy could be likened to a game on the roulette table. Given 100 options, we bet all of our fish production release from a particular hatchery on the same day - i.e. let's release all 2M spring Chinook smolts at 20 fpp on April 15th from X hatchery.

Or, let's send 10M LSRCP spring Chinook smolts out each Spring in a window from April to May. These are generally the highest probability of success, but not always - all of our fish are "bet" on a narrow window. Brian discussed times where other options that are generally outperformed by smolt releases: like fall parr releases, egg outplants, etc., will periodically outperform expectations and provide a more consistent adult return expectation. Food for thought when we are placing our next bets!





HAGERMAN PRAS TANKS

HAGERMAN PRAS RESULTS

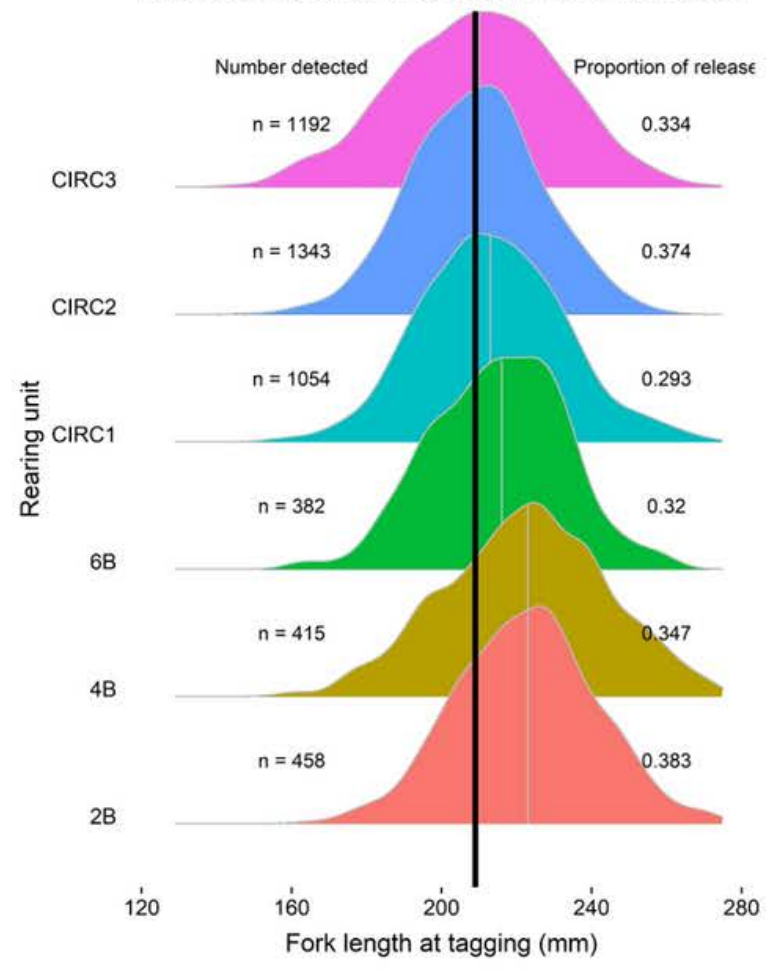
The Hagerman NFH staff, along with IDFG and Abernathy research staff have been closely monitoring downstream detections of steelhead released from the Partial Reuse Aquaculture System (PRAS) and control raceways. So far, the results look very promising for 2022.

In the past, downstream survival to Lower Granite Dam of PRAS-reared steelhead smolts has fallen well short of the control groups (raceways). However, this year, the PRAS tanks are right on track with raceways detections.

Additional effort was also put into tracking the size of fish successfully migrating. So far, a slight trend towards larger fish is emerging, but isn't significant.

With some luck, these higher downstream survivals will mean more adults returning to Sawtooth in 2024!

Detections at Lower Granite Dam as of 2022-05-16





SUNRISE OVER SAWTOOTH

SAWTOOTH STATION OF THE YEAR

Sawtooth Fish Hatchery - LSRCP Station of the Year!

Congratulations to Sawtooth Fish Hatchery for being awarded the LSRCP Station of the Year. Sawtooth staff went above and beyond on multiple fronts including backfilling Pahsimeroi smolts, transitioning the East Fork facility to the Shoshone-Bannock Tribe, troubleshooting tapping issues and rounding up the rest of the Chinook, designing new outreach and visitor signs for the facility, and working to maximize Yankee Fork acclimation.

Keep up the great work towards Fish for the Future!



FEEDING FISH AT SAWTOOTH



SYLVIA HAMILTON ACCEPTING AWARD

CORIE SAMSON USFWS FISH HEALTH

CORIE AND HER HUSBAND, MARCUS, AT DEYO LAKE, IDAHO

CORIE SAMSON, Fish Biologist, USFWS Pacific Region Fish Health - Dworshak

Corie is an Idaho native growing up on the river and in the creeks around Orofino. Corie is in her 29th year with USFWS in a career that started with a seasonal position working both at the then Dworshak Fish Health Center and the Dworshak National Fish Hatchery. She later earned her B.S. degree from the University of Idaho Aquaculture program while doing internships as an USFWS Co-op student at the Lower Columbia Fish Health Center, Leavenworth National Fish Hatchery and finally at the Arcata Fish and Wildlife Office. After graduation, Corie worked for a year at the California/Nevada Fish Health Center then transferred back home to Orofino to rejoin the Pacific Region's fish health program.

Corie enjoys spending time with her large family, especially her husband, son and daughter. Corie and her family enjoy camping, fishing, huckleberry picking, back yard birding and mushroom hunting giving them all away to people who actually like them! She especially enjoys snorkeling the clear waters of Idaho, finding fascination in the world below the surface of the water, and spending time with her constant shadow her dog Chestnut. Corie and her husband soon look forward to celebrating last year's 25th anniversary in the waters of Hawaii.

Corie feels that her biggest accomplishment is being able to work in a field that she loves while balancing work and family life and raising a special needs child. The thing she loves most about her job is being able to work with several different agencies in the Pacific Northwest and getting to know people in the fisheries field through Fish for the Future.



CORIE SAMPLING AT DWORSHAK

**GOING TO THE MOUNTAINS
IS GOING HOME
- JOHN MUIR**



LAURA SPRAGUE USFWS FISH HEALTH

Laura Sprague has had a passion for fish and wildlife since an early age. Her annual ask since the age of 4, as a birthday present, was to go fishing. Initially following in her father's footsteps, she started her college venture as a pre-med student that quickly changed into a Bachelor's of Science Degree from Humboldt State University in Fisheries, with a minor in Microbiology and Anthropology. Laura started her fisheries career in USFWS in 1995 as a Co-op student. In 1997, her dreams came true with a permanent position at the Idaho Fish Health Center at Dworshak NFH, now part of the Pacific Region Fish Health Program, where she has all kinds of interesting duties that include: hatchery health management, the National Wild Fish Health Survey, serving as the FAC aquatic invasive species coordinator in Idaho, teaching HACCP and biosecurity classes, and working on national teams that seek to protect the health of amphibians. Her biggest accomplishments include development of field disinfection protocols that are distributed by several states across the nation, and being able to share her passions and love of fish and wildlife with her 3 kids and 6 grandkids. In fact, her daughter Ciana was the 2010 USFWS volunteer of the year, at the age of 16 with over 1800 volunteer hours in helping with PIT-tagging operations, CWT removals and wild fish surveys! Outside of work, Laura and her husband enjoy all kinds of outdoor adventures Idaho has to offer: white water rafting, fishing, four wheeling, camping and they are avid hunters. Moving to Idaho has allowed her the opportunities to harvest whitetail and Elk annually, a record book pronghorn, and a 40" moose! Laura and her husband process all of their animals at home, and make their coveted cajun jerky. Laura also enjoys brewing beer, making wine, quilting, wire wrapping, and has recently developed a passion for hand painting endangered species eyes on glass and turning them into jewelry.

