pacific northwest aquatic monitoring partnership

PNAMP June 2024 Newsletter

Upcoming Events

June 4-5	100th Meridian Columbia River Basin Aquatic Invasive Species Team Meeting
June 11-12	Northwest Power and Conservation Council Meeting
June 12-13	Washington Salmon Recovery Funding Board Meeting
July 9-10	Northwest Power and Conservation Council Meeting
July 23-24	Oregon Watershed Enhancement Board Meeting

Please check the PNAMP calendar for recently added meetings as well as meeting updates, agendas, and contact information.
If you would like your meetings posted on the PNAMP calendar, please email Megan Dethloff with details.

HCAX Project Workshop Results: Hatchery Data Are on the Way!

In case you missed the May 21, 2024 HCAX Project Workshop, here are some highlights:

- We celebrated the fact that the Coordinated Assessments (CA) hatchery indicators data exchange standard (DES) version 20230614 is actively in use to publish data to the CA Data Exchange at StreamNet. Check out the DES here: https://www.streamnet.org/resources/exchange-tools/des.
- Workshop participants provided input for the data query system for hatchery indicators currently under development by StreamNet staff. Stay tuned for more about query tools later this year.
- The CAP Fish HLIs Data Policy has been updated, including the Data Sharing/Data Use Agreement, to align with how we expect people to use these publicly accessible data and to include data citation guidance.
- A few more tasks were identified to complete the HCAX Project, including tasks of interest but outside the scope of the original EPA Exchange Network Program grant. Let us know if you'd like to participate.
- Ideas were generated to inform future data standard developments, including indicators of interest and potential proposals for funding.
- Data are beginning to flow and more will come soon!

We thank the nearly 50 attendees who participated in this workshop and many more who have assisted during the course of the project. This collaborative effort was built off previous data sharing efforts and will benefit entities for many years to come. A recording of the meeting is available here on the PNAMP YouTube channel. For more information, contact Jen Bayer (jbayer@usgs.gov) or Nancy Leonard (nleonard@psmfc.org) or see Hatchery Data Sharing (HCAX) Project.

Image Courtesy of NOAA

Mark Your Calendars! June 5th is World Environment Day

Hosted annually by the United Nations Environment Programme (UNEP), World Environment Day has grown to be the largest international platform for environmental outreach. This year's theme is land restoration, desertification, and drought resilience. It hopes to shine light on how we can help to restore generations worth of damage to the environment.

Drought and desertification threaten freshwater ecosystems across the planet, as well as other essential ecosystems. Land degradation has led to an increase of pollution in streams and rivers, which causes harsh declines in aquatic species.

If you hope to get involved with an event, register your event here. Otherwise, you can participate online by using the hashtags #WorldEnvironmentDay and #GenerationRestoration.

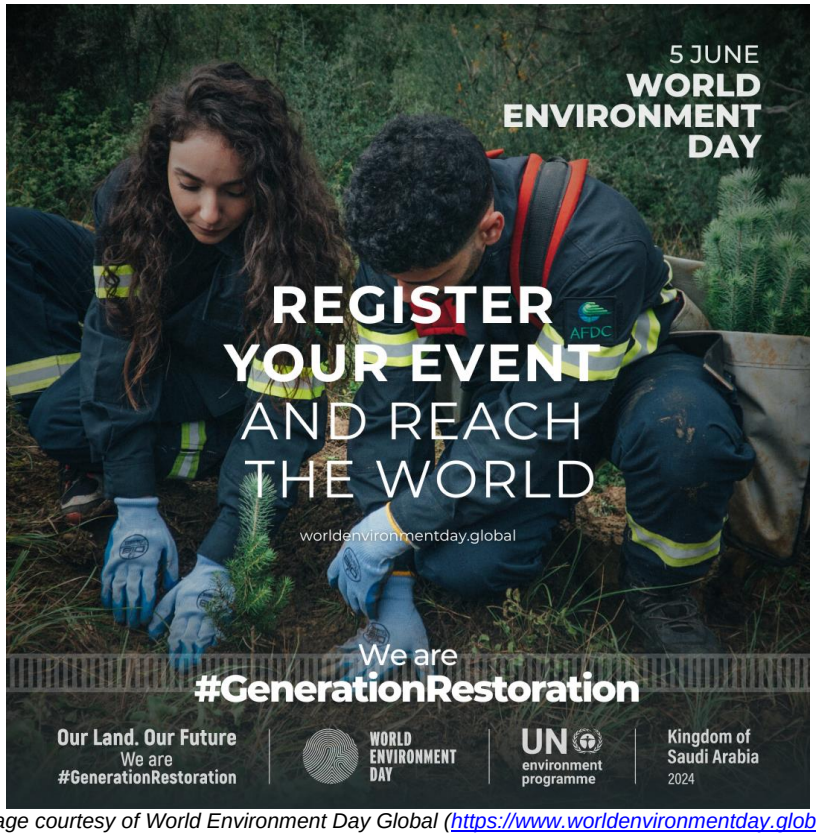


Image courtesy of World Environment Day Global (https://www.worldenvironmentday.global/)

Clean Drain Dry

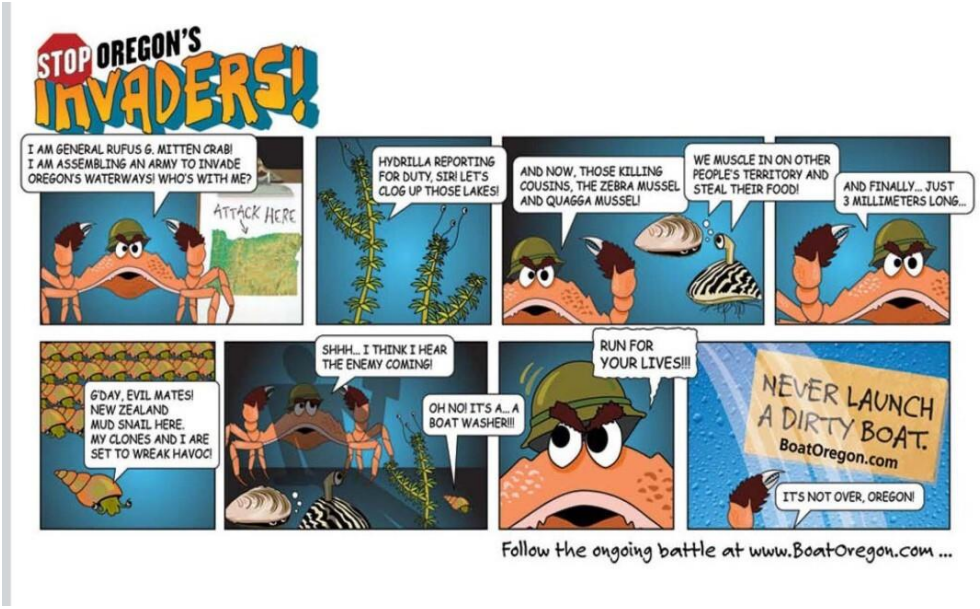
It's that time of year again when we're getting back on the water for recreation and work. And it's that time of year again when the PNAMP Newsletter reminds you to "Clean, Drain, Dry" your aquatic gear. Aquatic invasive species (AIS) pose an ongoing threat to native species, the economy, recreation, and human health and safety. Many AIS - including plants (Eurasian watermilfoil, hydrilla, etc.), fish (Northern pike, American shad, etc.), and mollusks (zebra mussels, New Zealand mudsnails, etc.) - can be accidentally transported when people go fishing, boating, or recreate in the water. By following a few simple steps every time you leave the water, we can each help prevent the spread of aquatic invasive species and protect the environment.

CLEAN off visible aquatic plants, animals, and mud from all equipment before leaving water access.

- Rinse equipment and boat hulls (with high pressure, hot water when possible).
- Rinse interior compartments of boats with low pressure, hot water (120°F).
- Flush motor with hot water (120°F) for 2 minutes (or according to owner's manual).

DRAIN motor, bilge, livewell, and other water containing devices before leaving water access.

DRY everything for at least five days OR wipe with a towel before reuse.
If you'd like more information on how you can help prevent the spread of aquatic invasive species, checkout the Stop Aquatic Hitchhikers website. Additionally, if you think you have found an invasive species, you can report new sightings to the appropriate authorities or use the USGS Sighting Report Form.



Stop Oregon's Invaders comic, ODFW, https://www.oregoninvasivespeciescouncil.org/clean-drain-dry

A Day in the Life of an IDFG Anadromous Fisheries Biologist: Underwater Rock Climbing

Written By: Alexa Ballinger, Anadromous Fisheries Biologist, Idaho Department of Fish & Game

Part of the appeal of being an Idaho Department of Fish & Game field biologist is never truly knowing what you're in for. Working with mother nature provides ample opportunity for planning, attempting, and totally pivoting on a regular basis. In Idaho, monitoring anadromous fish is no exception to this rule. Looking after these fish keeps most IDFG field biologists busy with redd counts, snorkel surveys, screw trapping, weir/dam operations, and PIT tag masterminding. As a biologist in the Wild Salmon and Steelhead Program, my job duties revolve around all things salmon, steelhead, and IDFG's anadromous parr monitoring program. Let's dive in.

First, coffee. You just can't beat a couple packets of instant coffee fresh off the JetBoil in the Idaho backcountry. That first cup of joe provides two major services: (1) it warms the body as you wait for the sun to creep down the river canyon and zap the morning dew, and (2) it provides the energy required to convince five young, brave technicians to get up, pack up, don their damp wetsuits, and hit the trail.

A typical snorkel hitch grants 6 full days to complete 20-25 snorkel surveys, with each survey lasting about 45-60 minutes. Basic math shows that most of the hitch is spent traveling to survey locations. Navigation typically consists of an InReach/GPS device and downloaded OnX maps (for landowner info and the lifesaving "slope angle" layer), used to traverse the landscape via forest service roads, backpacking, bushwhacking, stream walking, crawling, etc. It's common for our crews to hike 10-15 miles/day to get to our more remote survey locations. Thankfully, a long hike in the summer heat is almost always rewarded with a 6-15°C (45-55°F) snorkel survey plunge.

Once on site, the crew preps for survey. Aside from universal spatial and temporal info, technicians collect data for water quality (temp, conductivity, visibility) and habitat (channel type, percent habitat type, stream length/width). A data recorder is assigned, and acts as the "quarterback" for the rest of the snorkelers – maintaining optimal position and speed of each snorkeler as they work their way upstream for the survey.

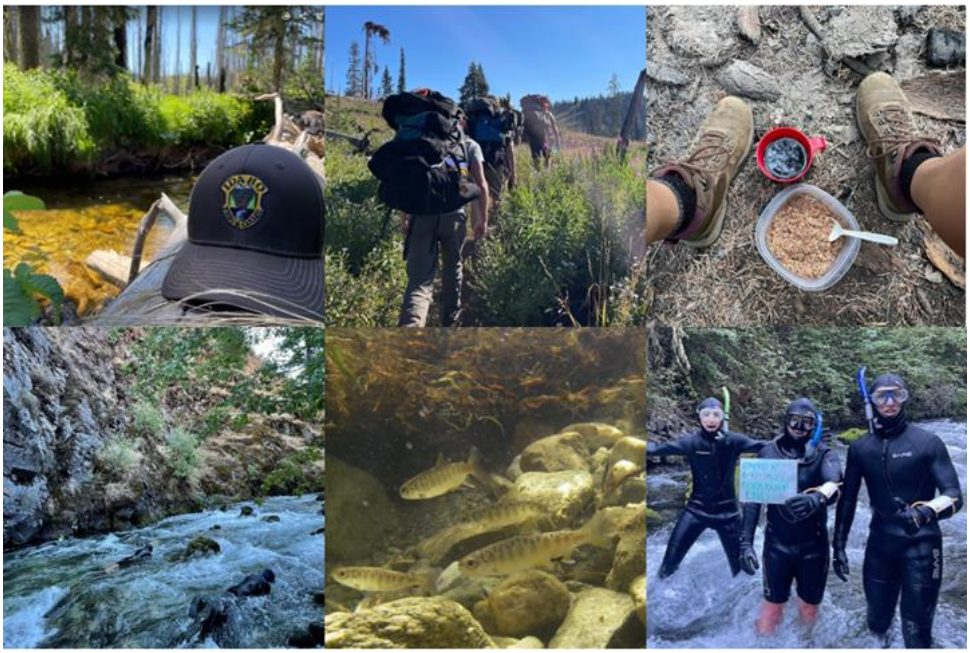
That's right, upstream. Not floating passively with the swift current characteristic of Idaho's upper tributaries… but rather fighting for your life as you climb from boulder to boulder, fighting that current. The cold water penetrates your 7mm neoprene wetsuit anywhere it can – between your goggles and hood and through holes that have formed on your fingertips, knees, and elbows from the army-style crawl

required to scale 100m of the stream bed. The cold is soon forgotten, though, as the substrate comes to life. Steelhead, chinook, and cutthroat parr dart across the horizon and lurk in carefully selected “hiding” spots. The occasional introverted sculpin or crayfish accidentally emerges from the cobble, and western pearl shell mussels sit still on the stream margin. If you’re lucky and the timing is right, you might just come face-to-face with an adult Chinook Salmon, holding in one of the cool, deep pools. Presence/absence is noted for all fish species on a top-of-the-line PVC arm cuff, using a golf pencil sharpened by someone’s field knife just moments before. Trout and salmon species are “survey sweethearts” and are enumerated and assigned an estimated length to inform long term trend data for Snake River basin populations.

After the exhausting 100m crawl, the crew exits the stream with the grace of a newborn giraffe. One at a time, snorkelers sound off to their crew quarterback, transferring fish data from the PVC cuff to a proper datasheet. Photos are required at each end of the transect and provide ample opportunity for each crew member to showcase their photogenic capabilities in an ever-so-humbling neoprene jumpsuit. Last, the crew weighs the risk-to-reward on the hike out… or more appropriately… UP. There are two options: (1) spend 10-15 minutes squeezing out of the suit and changing into dry hiking boots for an easier climb but exposed skin (bushwhacking is gnarly), or (2) leave the suit on and benefit from the extra protection while exerting twice the energy in 7mm of wetsuit resistance.

As the vicious hike-swim-hike cycle drains the crew’s caffeine reserves and the sun creeps back up the river canyon walls, we settle back at camp. Gear is laid to “dry”, datasheets are scanned for rogue data, and crew members work together to prepare the most delicious, freeze-dried Mountain House stroganoff you can imagine. The crew lead (hopefully a “veteran” technician from prior years) preps the next day’s datasheets and OnX maps and ensures all InReach devices are charged up for another surf-and-turf adventure. The crew bonds over the difficulties experienced on the landscape that day, enjoys a game of cribbage, annihilates a bag of skittles, and watches the ISS traverse the night sky without an inkling of light pollution.

And that is just one of many “days in the life” that my crew and I will never forget.



Pictures Courtesy of Alexa Ballinger

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