Pelton Round ButteFish and Wildlife Newsletter





it's encouraging to see the widespread interest in Deschutes Basin fish and wildlife issues, as well as the progress taking place throughout the region thanks to our Central Oregon partners.

Water Quality Check-In

One year ago, we released an extensive multiyear study on water quality conditions in the tributaries, reservoirs and Lower Deschutes River. The study has been an important addition to the body of scientific data on the Deschutes, enabling Deschutes Basin managers, regulators and stakeholders to continue making-science based decisions for the benefit of fish and wildlife. You may be wondering, what have PGE, the Tribes and the Pelton Round Butte Fish Committee been doing with regard to water quality since then? Here's an update:

Fish Committee Water Quality Subgroup

Shortly after the study's release, the Fish Committee formed a smaller working group to discuss the study, explore options and propose next steps to the larger committee. The subgroup includes representatives from PGE, the Confederated Tribes of Warm Springs Branch of Natural Resources, U.S. Forest Service, Oregon Department of Fish & Wildlife, Oregon Department of Environmental Quality, Native Fish Society and Trout Unlimited.

The subgroup has met multiple times since last summer and has identified some actions that will likely benefit water quality in the Deschutes Basin, including the reduction of phosphorous and nitrogen in the Crooked River. The Fish Committee is currently exploring how best to support this ongoing work. The subgroup also recommends further study in the reservoirs to help us understand the effects of nutrient reduction as well as investigation into the potential benefits of a "flushing flow."

Prior to completing their draft recommendations for in-depth discussion with the Fish Committee, however, an error was discovered in the water quality study data. The subgroup will continue their evaluations while the study is revised, but we know it's important to have complete, accurate data at our fingertips before moving forward with a final plan.



Water Quality Study Revision

While preparing an article about water quality on the Lower Deschutes River for submission to a peer-reviewed scientific journal, our lead water quality consultant shared his draft with the lab that analyzed periphyton samples for the 2019 water quality study. In reviewing the draft, the lab discovered it had incorrectly calculated the prevalence of four periphyton taxa (out of over 400 total taxa). This laboratory error affects the 2019 report's discussion and interpretations of nutrient and algae dynamics in the Lower Deschutes River.



In light of this, our consultant is revising the report. The extent of revision required is not yet fully known, but we do know that parts of the study involving periphyton data and analysis, including conclusions made about nutrient/algae dynamics, will need to be revisited.

We don't expect the revision to affect all of the study's conclusions. Most of the parameters studied, including temperature, dissolved oxygen, pH, zooplankton, and chlorophyll, remain unaffected by the error. That said, water quality dynamics are complicated and interrelated, so some aspects of the study, especially discussions of nutrient chemistry, will need to be reviewed and may be revised.

It's unfortunate that the error was not spotted earlier, but we're grateful it has since been discovered. Correcting the error and reanalyzing the data is an important step to help inform our ongoing scientific review of Deschutes water quality. Revising the study in light of this information maintains our long-standing commitment to a science-based approach to decision making on the Deschutes. We always want to work with the best data available.

For more information about the data error and our ongoing water quality monitoring, visit portlandgeneral.com/waterquality.

THE PLAIN FACTS

The Licensees' 2019 water quality study tested a number of management scenarios that have the potential to improve water quality in the Lower Deschutes River. Why have PGE and CTWS not yet implemented any of these operational changes?

While some of the scenarios explored in the study are promising, none offer a straightforward "silver bullet" solution. There are many factors to consider. Both water quality and fish passage are important and addressing one issue cannot come at the expense of the other. Additionally, some approaches that may benefit the Lower Deschutes River would have adverse effects on the project reservoirs, or vice versa. Other scenarios would improve temperatures in the river during one part of the year, only to deplete cold water from the reservoir and cause harmful temperatures during a later season. Managing these trade-offs in an optimal way is a balancing act, and **it takes time.**

Shortly after the study's release, the Fish Committee formed a subgroup to discuss the results and explore next steps. This group has investigated several management options and drafted recommendations for Fish Committee consideration. In the summer of 2020, however, the lab that analyzed samples for our multi-year water quality study discovered an error that affects the report's discussion of nutrient and algae dynamics in the Lower Deschutes River. In light of this, our consultant is revising the report.

The Water Quality subgroup will continue to evaluate and investigate water quality management options in the meantime, but we know it's important to have complete, accurate data at our fingertips before reaching conclusions and moving forward with a final plan.

Meet Stacy Strickland, Fish Health Specialist at ODFW

Stacy Strickland plays a unique and critical role in the Deschutes Basin anadromous fish reintroduction effort. As an expert on fish diseases and parasites, Stacy helps everyone involved in Central Oregon fisheries management study and improve fish health. When mortalities occur at the Selective Water Withdrawal facility, Stacy examines the fish to determine cause of death and to help us improve our fish management strategies. Additionally, Stacy monitors parasites infecting out-migrating fish, in particular, the copepods prevalent among juvenile spring Chinook. Stacy has initiated an experimental approach in which hatchery smolts are treated with a medication prior to acclimation to provide them with long-lasting protection against copepod damage. This treatment increases resiliency, helping fish avoid infection throughout their migration.

Adult fish also receive Stacy's time and attention. All adult fish passed above the Pelton Round Butte project go through virus screening – a program Stacy initiated. Infection rates have been low so far, but monitoring remains important work, especially as climate conditions continue to change. Stacy also monitors the health of ODFW hatchery stocks at four Central Oregon hatcheries. By looking for trends in pathogens, Stacy can help inform hatchery management decisions.

Stacy took a roundabout path to fisheries work. She received a degree in fine art from the University of Oregon, followed by a second bachelors in natural resources from Oregon State University. She worked for the Oregon Coast Aquarium and contracted for the EPA and NOAA Fisheries prior to joining ODFW. "I'm a platypus and proud of it!" Stacy asserts in regard to her varied background. She's thrilled to be a part of our long-term efforts on the Deschutes. "It is a dream job and I couldn't be happier."

Juvenile & Adult Fish Passage Updates

Juvenile Species	June 2020	July 2020	Yearly Total (Jan July)
Chinook	2,940	15	28,506
Sockeye	551	0	32,845
Steelhead	3,814	7	16,410

- In June, 8,800 fish from 7 salmonid species were processed at the SWW's Fish Transfer Facility. In July, only 60 fish from 5 species were collected and processed.
- Fish passage is typically slow in July and August, as the migration window has already wrapped up.
- This was the highest yearly passage for steelhead since the SWW became operational.

Adult Species	June 2020	July 2020	Yearly/ Run Total
Spring Chinook	148	61	248 (Jan July 2020)
Sockeye	0	10	10 (Jan July 2020)
Steelhead	1	0	1,045 (Aug. 2019 - July 2020)

- Deschutes sockeye returns are off to a slow start, but we hope for stronger numbers as we reach the run peak in August. Sockeye counts past Bonneville dam are the highest they've been since the exceptional run in 2015.
- We are continuing to track Chinook through all three upper tributaries. At least two have traveled through the new Opal Springs fish ladder.
- Complete daily adult fish counts on our website

Fisheries Workshop 2020

Thank you for attending our first ever virtual fisheries workshop! Although we missed seeing your faces in person, the online format did have its benefits: this year's event was one of the most well-attended in our history, with around 100 participants. Workshop highlights included:

- An overview of habitat restoration efforts funded by the Pelton Fund and the introduction of two new funds: one in support of Crooked River work and the other focused on lamprey habitat and research.
- Juvenile fish passage efforts, including smolt acclimation, screw trap studies and passage through the SWW.
- Updates on our gravel study, large wood placement and bedload monitoring efforts.
- A recap of adult fish migration in the upstream tributaries.
- A discussion of water quality monitoring and management at the project.
- The impressive early-results at the Opal Springs' fish ladder.



One common thread throughout these presentations was the need to adapt to challenging circumstances, namely unusually high flows in the winter of 2019 and pandemic response in 2020. We're proud of our staff and partners for adjusting to these difficulties and continuing to prioritize Deschutes Basin fish and wildlife.

A recording of the workshop can be found at portlandgeneral.com/deschutesupdates.

Announcements & News

- 1. Oregon's emergency board approved \$3.58 million from state reserves to help address the water crisis on the Warm Springs Reservation.
 - → Oregon Public Broadcasting
- 2. The Source Weekly's "Water Issue" featured articles and opinion pieces on conservation, agriculture, restoration and recreation.
 - → Source Weekly
- A coalition of Central Oregon partners announced a new campaign called "Raise the Deschutes" to raise awareness about Deschutes River health.
- The U.S. Forest Service is working to control invasive Eurasian watermilfoil in Lake Billy Chinook.

 ★ KTVZ
 - → Central OR Daily News

- 5. The Oregon Fish and Wildlife Commission recently adopted a statewide Climate & Ocean Change Policy.
 - → KTVZ
 - → Columbia Basin Bulletin
- 6. The Deschutes Land Trust purchased 1,123 acres of land at Rimrock Ranch along Whychus Creek.
 - → KTVZ
 - → Deschutes Land Trust news



Know before you go:

Due to warm, dry weather, the Deschutes National Forest has implemented fire restrictions. Fires are still allowed in designated pits at Perry South, but they are prohibited at Monty Campground.









