



ODFW Field Reports

Oregon Fish and Wildlife Commission
December 16, 2022

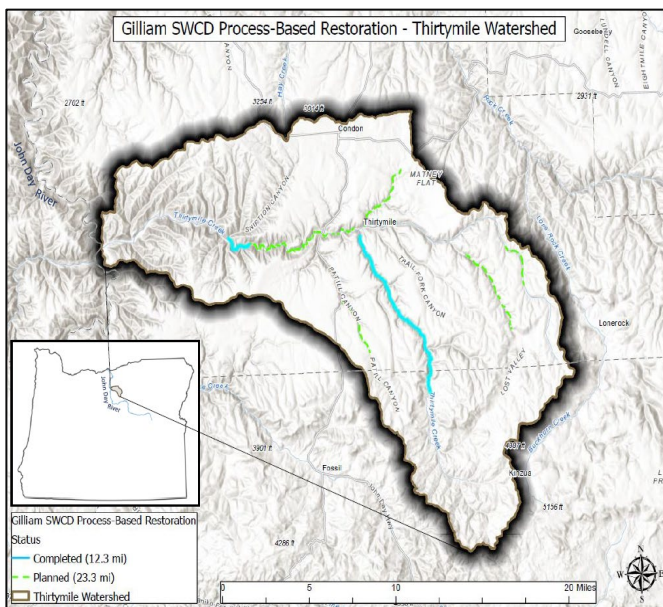
East Region

Nick Myatt, Region Manager

Thirtymile Creek beaver dam analogs

Tributaries to the Lower Mainstem John Day River are important for recovery and de-listing of wild summer steelhead because they can be highly productive, producing thousands of steelhead parr (developed scales and fins) per stream mile when core steelhead habitat needs are met. However, the naturally hot and arid characteristics of the Lower John Day means that juvenile steelhead live on a thermal knife-edge and these streams are susceptible to climate impacts tipping steelhead populations to the wrong side of the knife when habitat is degraded. Beaver-based restoration such as beaver dam analogs, can facilitate the development of core steelhead habitat needs and may ameliorate climate impacts, when implemented at a catchment scale.

Gilliam Soil and Water Conservation District (SWCD) is placing hundreds of beaver dam analogs and similar structures into Thirtymile Creek to restore natural hydrologic processes, increase natural storage of water in meadows, and improve habitat complexity for rearing steelhead. Twelve miles have been treated thus far, with twice as many additional miles planned for coming years. Oregon Department of Fish and Wildlife (ODFW) and other partners are active in Oregon Watershed Enhancement Board's (OWEB) Focused Investment Partnership which supports implementation and monitoring of habitat restoration projects in Thirtymile Creek. Building on lessons learned from the Bridge Creek Intensively Monitored Watershed (also in the Lower Mainstem John Day ecoregion), ODFW's East Region Fish Research staff are monitoring stream habitat, flow, temperature, and fish responses as these habitat projects are implemented throughout Thirtymile Creek.



Map of Thirtymile Creek, a key stream in the Lower John Day River steelhead population. Blue lines show stream reaches where the first treatment of process-based restoration has been applied, and green dashed lines denote stream reaches slated for restoration in coming years.

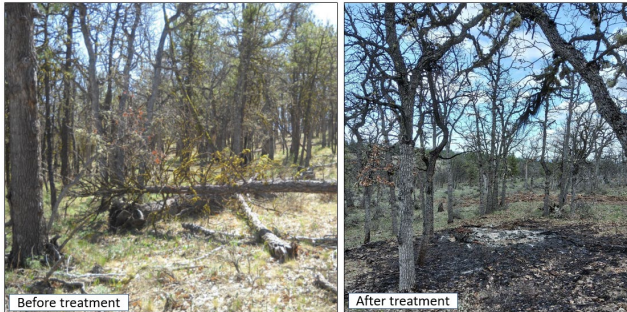


Aerial picture of Comstock Basin, upper Thirtymile Creek, showing the currently degraded riparian and stream habitat conditions.

The first phase of beaver dam analog installations was completed in 2022, with the goal of increasing water storage, creating habitat complexity, and ultimately (through multiple phases if necessary) improving stream-floodplain connectivity. Increases in surface water elevation were observed within months of beaver dam analog implementation.

East Cascades oak habitat restoration

Having a working relationship with the Natural Resource Conservation Service (NRCS) allows focused efforts to address wildlife habitat work on private lands. One such NRCS program based out of The Dalles Fish Screens and Field Office that is available to private landowners in Wasco County addresses forest health and habitat work, including Oregon White Oak restoration.



Before and after photos of a thinning treatment to reduce stand density, maintaining larger diameter Oregon White oaks and healthy Ponderosa Pine. Slash is typically piled and burned to remove excess fuel from the landscape to reduce fire risk.

Oregon White Oak woodlands on the east slope of the Cascades vary greatly from the oak woodlands west of the Cascades and are often mistakenly viewed as “scrub oak” with little habitat value. On the contrary, the oak woodlands in Wasco County are incredibly diverse and can provide essential habitat for more than one hundred wildlife species, including birds, reptiles, and mammals. These oak woodlands also provide habitat for thousands of invertebrate species that are essential food sources.



Project site with conifer encroachment; Douglas fir will be removed to release oak.

The forest health program through NRCS addresses many concerns oak woodlands are

facing, including conifer encroachment, overcrowding, and lack of information on best management practices for oaks east of the Cascades. Through partnerships with Oregon Department of Forestry (ODF) and East Cascades Oak Partnership (ECOP), as well as educational videos, word is spreading about importance and diversity of the east slope Oregon White Oak ecosystems.



Open Oak woodland after thinning, large snags retained.

Oregon White Oaks are incredibly slow-growing and can easily be out-competed for resources if fast-growing conifers creep into oak stands, or if stand density has become too great. Through mechanical treatment to remove conifers and thin overly dense stands, oaks are better able to thrive, producing greater amounts of acorns as a high-calorie nutritional food source, creating cavities and crevasses that support nesting birds and mammals or roosting bats, and dead wood that draws in decomposing invertebrates and provides further valuable food.

Landowners are encouraged to address understory needs by planting native shrubs, forbs, and grasses if those elements are lacking in the forest. They are also able to build wildlife habitat piles, install bat or bird boxes, or even create perch or nesting poles for raptors if there are insufficient downed wood, snags, or cavities available within the area.

Watch a short video about East Cascades oak habitat restoration here:

<https://youtu.be/UuxbptCgzxc>

Benthic macroinvertebrate sampling Deschutes Basin

Among other management actions, the Deschutes Basin Habitat Conservation Plan (DBHCP) outlines changes to the management of Crane Prairie and Wickiup reservoirs and flow regime of the Deschutes River from Wickiup Reservoir downstream to Lake Billy Chinook. There are many different indicators for watershed health and Deschutes district fish staff based out of the Bend office are using benthic macroinvertebrate sampling to establish a baseline to examine ecological changes from new flow management.



Sampling in Tumalo Creek with a D-framed net.

Benthic macroinvertebrates (organisms that live on the bottom of streams and rivers) are excellent indicators because they are easy to collect, live in water for all or most of their life, can be identified in a laboratory setting, differ in their tolerances to abiotic factors in the environment, often live for more than one season, and are limited in their ability to move.

Macroinvertebrates are also utilized by fish species for food and can tell us about the quality of fish forage in rivers. Macroinvertebrates can be used to determine the problems and limitations of watersheds including issues with thermal ranges, pollution, and habitat alteration.

Benthic macroinvertebrates were sampled in the mainstem of the Deschutes River from Wickiup Dam to Steelhead Falls. The North Canal Dam

delineates a change in flow conditions on the mainstem of the Deschutes; therefore, seven sites were chosen below the dam and six sites above the dam.



Collecting macroinvertebrate samples at Tumalo Creek.

An additional six sites were chosen in three of the tributaries of the Deschutes as reference sites (Fall River, Little Deschutes River, and Tumalo Creek). Samples were collected during August, September, and October of 2021. Samples will be analyzed by an accredited laboratory in spring of 2022. Reporting will include an Index of Biotic Integrity (IBI), which are used to assess ecological condition. Macroinvertebrate sampling will be repeated in late 2022 to establish a baseline condition and then again when flows have increased to levels specified by the DBHCP.

Watch a short video about the project here:

<https://youtu.be/avSIvfjmdys>

West Region

Chris Kern, Region Manager

Fish passage project wins state award

Several ODFW employees were part of a team recognized for its work in removing a major barrier to native fish migration on Three Rivers, a tributary of the Nestucca River.

In October 2022, the team was honored by the State Land Board during the 18th Annual State Land Board Awards. Governor Kate Brown, Treasurer Tobias Read, and Secretary of State Shemia Fagan recognized the Three Rivers-Cedar Creek Hatchery Fish Passage Restoration Project that opened habitat access to threatened Oregon Coast coho and other native fish.

ODFW's Cedar Creek Hatchery operated a picket weir to collect adult chinook and steelhead for broodstock. Although the weir was necessary to meet hatchery management objectives, its removal was a high priority on the state's fish passage priority list. It blocked 14 miles of habitat to coho, chinook, steelhead, and lamprey.

Cedar Creek Hatchery and Fish Passage Engineering worked with the Salmon SuperHwy Partnership to improve fish passage at the hatchery. The community-based partnership works to restore access to nearly 180 miles of blocked habitat in six coastal rivers.

ODFW led the project, and our engineers found a creative solution to the weir barrier. The existing weir was replaced with an Obermeyer (inflatable) weir. The adjustable weir lies flat when not needed for hatchery management actions. The weir is elevated to collect broodstock or restrict the number of hatchery fish in the system upstream of the hatchery. A new fishway was installed to provide juvenile and adult salmonid passage. Lamprey can pass upstream when the weir is elevated. A new self-cleaning fish screen was also installed and connected to the existing pump intake system.



The new adjustable weir lays flat when not needed for hatchery management actions.

While ODFW led the project, local, state and federal Salmon Superhwy partners supported it through funding, technical resources, and outreach to complete the project.



Partners and ODFW staff who worked on the Three Rivers-Cedar Creek Hatchery Fish Passage Restoration Project received the Oregon State Land Board Stream Award. Shown here also is Gov. Kate Brown, Secretary of State Fagan, and State Treasurer Read.

New steelhead regulations for Rogue, South Coast areas

With the Commission's approval of the Rogue-South Coast Multi-Species Conservation and Management Plan (RSP) in December 2021, staff have been working to implement new winter steelhead angling regulations for the area. District and Fish Division staff worked with Licensing, Oregon State Police and West Region Information and Education to develop the regulations and inform anglers.

The new regulations require all anglers to purchase a new Rogue-South Coast Steelhead Validation (\$2 resident, \$4 non-residents) to fish for winter steelhead in the plan area. Those who want to keep a wild winter steelhead must purchase a Rogue-South Coast Wild Steelhead Harvest Tag and record kept fish on this tag instead of the combined angling tag.

The new validation and harvest tag had wide support from the two stakeholder teams that helped staff develop the RSP. Team members recognized the need for more information on wild winter steelhead in the plan area. The new regulations will give staff better information on where anglers are fishing for and harvesting wild winter steelhead and help fund monitoring of this species.

Outreach to anglers included an article on the new regulations in the Oregon State Marine Board's guide newsletter, a new MyODFW.com web page, news release, ODFW Monthly

Messenger (December 2022 and January 2023 issues) and poster to be mailed to point-of-sale agents and ODFW field offices. Some stakeholder team members also committed to help inform anglers of these new regulations via their newsletters, mailing lists, and website.



Juvenile steelhead in the RSP plan area. The new Rogue-South Coast validation and harvest tag will provide more information on where anglers are fishing for and harvesting wild winter steelhead and will help fund steelhead monitoring.

Partnering with beavers presented at State of the Coast

The Mid-Coast Wildlife District Biologist was part of a panel discussing the benefits of “partnering with beavers” to help tackle issues including water quality and quantity, salmon recovery, wildfire, and drought. The discussion was part of the recent *2022 State of the Coast Conference* hosted by Oregon Sea Grant.

The panel discussed how beaver and their dams increase water availability and quality, elevate the water table, help mitigate flooding, and create salmon rearing habitat. Challenges beaver face were also discussed.

The District Wildlife Biologist focused on the complexity of beaver population limitations as many different factors affect them. Discussion points included the differences between beaver habitats (what beavers need) and the habitats beavers create, and primary reasons for beaver decline (habitat changes in the forest landscape). Points also included the Private Forest Accord and ODFW’s continuing collaboration with private forest lands and beavers.

Other panel members represented the Portland Audubon Society, Siuslaw National Forest, and the Pacific States Marine Fisheries Commission. The State of the Coast program is held annually and brings together the public, scientists, and industry to learn, share, and keep abreast of what’s going on in Oregon’s marine environment.



ODFW and partners cutting and preparing willow stakes for beaver food and dam building materials.

Wildlife research makes The Wildlife Society publications

A technology-focused paper written by biologists from the West Region Research Team was published in two of The Wildlife Society’s publication: *The Bulletin* (a peer-reviewed publication) and *The Wildlife Professional* magazine.

The published study is on using cellular-linked cameras to monitor live-trapping wildlife, specifically those in use for the Rogue Valley black-tailed deer winter range study. While using cellular-linked cameras to monitor traps is not new, no prior study had evaluated their use for remote trap monitoring or reviewed the benefits and limitations of this technology.

The field crew monitored 40 live traps in 12 locations for 523 camera days in 2020. Using cellular cameras, the crew saw an estimated seven-hour plus reduction in response time to deer caught in traps as compared to daily visual trap checks. Cellular cameras helped inform animal welfare considerations and allowed biologists to guide refinements to trapping efforts throughout the study.



Cellular-linked cameras were used to monitor live trapping black-tailed deer in a winter range study in the Rogue Valley. The West Region Research Team published a study on use of the cameras.

Information and Education

Roger Fuhrman, Information and Education Administrator

Hunters targeted in Chronic Wasting Disease awareness campaign

ODFW is hunting for something it hopes to never find in Oregon – Chronic Wasting Disease – an always fatal condition affecting deer and elk. Hunters are vital to the detection and prevention effort when stopping at a check station and providing tissue samples from harvested game. These tissue samples can help detect CWD and trigger additional efforts to respond to CWD in Oregon. However, not all hunters are aware of new requirements to now stop if they pass an ODFW CWD check station and have game animals tested.

In an effort to collect as many samples as possible this fall, I&E partnered with the Wildlife Division on a major information campaign. The goal was to let hunters know why they should be concerned about CWD and how they can help prevent it. The campaign began with lower-cost tactics such as emails and information on MyODFW.com and the electronic licensing system (ELS).

Website information included images of the check station signs hunters should watch for while travelling. An alert was added to MyODFW.com with information about check stations and updated information was put on the front page of MyODFW.com.

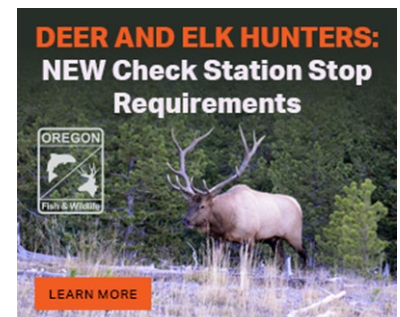
Alerts at the top of each customer's ELS portfolio highlighted the new check station requirement. Clicking on a button linked to a thorough explanation of CWD and how to help.

More than 22,000 elk hunters received emails regarding check stations and the requirement to stop. A similar targeted email was also sent to Washington hunters that hunt in Oregon.



The second phase of the campaign involved paid advertising including radio and digital advertising. This relatively modest priced advertising campaign helped increase awareness of CWD and the check station requirement. More than 450 radio ads ran during the last week of October in 18 Oregon cities throughout the state. In addition, Washington hunters were targeted with radio in Bellingham, Seattle, Wenatchee, and the Tri-Cities. An additional 222 public service radio announcements also ran at the same time.

Hyper-targeted digital advertising reached elk hunters with at least one display ad once per day over ten days and resulted in 442,000 impressions. The digital ads linked to the [CWD page](#) on MyODFW.com. The page was viewed 1,872 times with visitors averaging 5 minutes 23 seconds on the landing page. From there, visitors clicked through to other articles for more information. For example, visitors averaged more than 3 minutes reading about [how to get their animal tested for CWD](#). These measurements clearly indicate readers were very interested in the content, read the entire article, and wanted more information.



This was the department's first major effort to communicate with hunters about CWD. It was prompted by the discovery of CWD in Idaho and

expanded CWD surveillance efforts in Oregon. The outreach campaign will be refined and repeated in the future to help make all hunters part of the important effort to detect and prevent the spread of CWD into Oregon.

Oregon State Police

Captain Casey Thomas, Fish & Wildlife Division

Tag purchased after cougar harvested

A Fish and Wildlife Trooper discovered a hunter had purchased a cougar tag and validated it a few minutes later. That Trooper, along with another Fish and Wildlife Trooper,



Cougar and rifle seized by Oregon State Police Fish and Wildlife Troopers.

interviewed the subject and his brother. The subject ultimately admitted to harvesting the cougar prior to purchasing the tag. The subject was cited for Unlawful Take and the cougar and rifle were seized.

Felon takes buck deer without a tag

A Fish and Wildlife Trooper responded to a report of a subject shooting a three point buck outside Coquille. The subject and his father were

contacted at the residence and denied any knowledge of the deer. During a consent search of the property, a fresh gut pile was located on the edge of a pasture. After finding the gut pile, the subject admitted to shooting the buck because he was after it all deer season, and never got it. The subject had not purchased a deer tag for 2022 and it was also determined the subject was a convicted felon. The subject was criminally cited and released for Unlawful Take/Possession Buck Deer, and the charges of Felon in Possession of a Firearm and Hunting Prohibited Method – Caliber Restrictions are being referred to the Coos County District Attorney. A rim fire .22 rifle was seized as evidence, and the buck was seized and donated to charity.

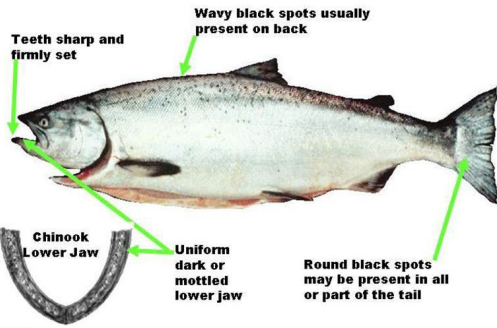


Poached deer seized and donated to charity.

Coho mistaken for Chinook Salmon

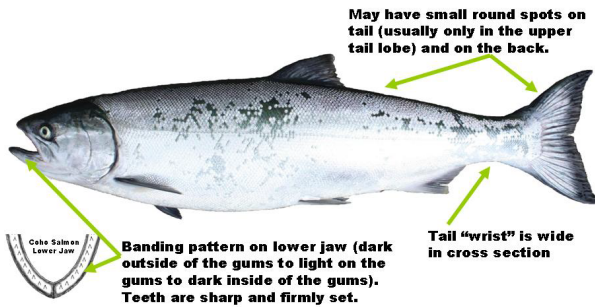
While on vacation in Waldport, a Fish and Wildlife Sergeant from the East Region was cleaning his crab at the cleaning station when a man flopped four wild Coho on the cleaning table next to him. The Sergeant called the local Fish and Wildlife Sergeant to respond. While awaiting response, the off-duty Sergeant provided a fish ID lesson to the man and his son as they had misidentified the fish as Chinook. The Alsea River was closed to retention of non-adipose fin-clipped Coho. The responding Sergeant cited the man for the violation and seized the four fish as evidence.

Chinook Salmon (*Oncorhynchus tshawytscha*)



Oregon Dept. of Fish and Wildlife - Marine Resources Program
2040 SE Marine Science Dr., Newport, Oregon 97365
(541)867-4741

Coho Salmon (*Oncorhynchus kisutch*)



Oregon Dept. of Fish and Wildlife - Marine Resources Program
2040 SE Marine Science Dr., Newport, Oregon 97365
(541)867-4741

Identification showing the differences between Chinook and Coho.

Conservation Program

Emily VanWyk, Acting Oregon Conservation Strategy Coordinator

Sierra Nevada Red Fox conservation strategy 2022 published

A new Sierra Nevada Red Fox (SNRF) conservation strategy was adopted by multiple land and wildlife management agencies from across the SNRF's range this year. ODFW staff contributed to the strategy which can be found here:

https://www.dfw.state.or.us/wildlife/management_plans/index.asp



SNRF photos by Holly Fisher, 2022.

From the strategy document, "The intent of the Strategy is to: 1) encapsulate the most up-to-date knowledge of SNRF biology, ecology, distribution, and population status; 2) guide the foreseeable future of SNRF conservation by providing recommendations for urgent research, management, and planning priorities; and 3) identify where uncertainty or lack of information hinders our understanding and ability to make educated conservation decisions."

This document will serve as an excellent tool for ODFW as it works with multiple stakeholders and agencies across the range of SNRF in Oregon and California to fill in several knowledge gaps that exist on the sub-species. It has already been employed by the agency to guide objectives for a Masters of Science degree project to survey areas of the Oregon Cascades within SNRF historical range where SNRF have not been previously detected.

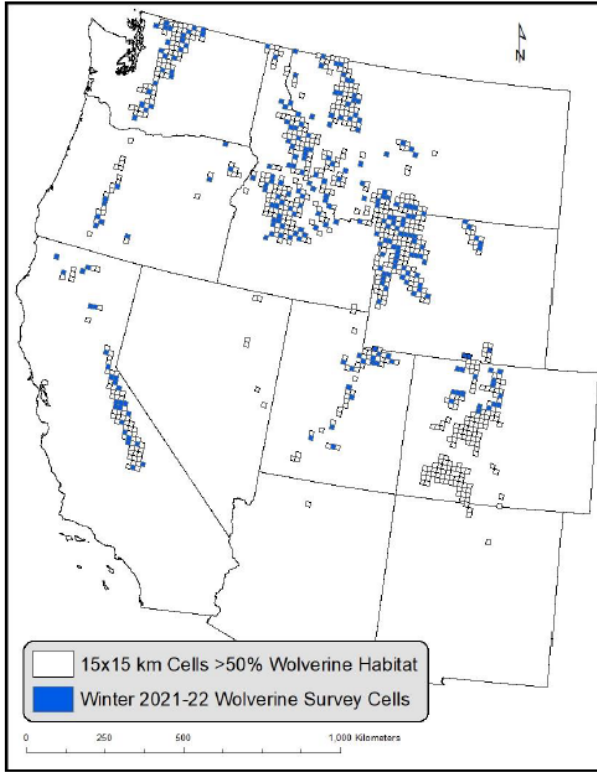


SNRF photos by Holly Fisher, 2022.

Wolverine study update

From fall 2021 to summer 2022, ODFW joined other Western Association of Fish and Wildlife (WAFWA) state agencies in a wolverine study coordinated by the Forest Carnivore

Subcommittee. This was a follow-up effort to surveys conducted in 2016-17 in four western states that resulted in an occupancy analysis and publication. The second round of surveys in 2021-22 included four more states in addition to the original four, which encompasses the entire species range in the lower 48.



States participating in 2021-22 WAFWA wolverine survey.

During the fall and winter of 2021, ODFW staff coordinated the deployment and monitoring of 19 wolverine bait stations in grid cells with modeled wolverine habitat across the Cascades and northeast Oregon. This was a huge collaborative effort with a plethora of collaborators including ODFW district staff from multiple watersheds in East and West Region, U.S. Forest Service, National Park Service, Confederated Tribes of Warm Springs, Cascadia Wild, and Willowa Wolverine Project.

Stations in locations that were inaccessible over the winter were set with a remote scent pump and a trail camera and left until conditions allowed for retrieval. Stations in accessible locations were checked and rebaited monthly from December to April.



ODFW biologist setting remote scent pump wolverine station.

Stations were collected in the spring and summer of 2022 and photos were classified to species identification.. One station in NE Oregon detected a wolverine. Based on photographic evidence of healed injuries to a front foot and unique coloration on chest, the wolverine was identified as the resident adult male that has been documented since 2011. Montane red fox and pacific marten were other Oregon Conservation Strategy species documented at stations.



Resident adult male wolverine photographed at remote scent pump wolverine station in northeast OR.

Results from Oregon photo classification will feed into WAFWA occupancy analysis similar to the 2016-17 publication. The WAFWA Forest Carnivore Subcommittee is targeting a repeat of the survey every five years.

2023 Habitat Conservation art selected

[The Western Gray Squirrel](#) by Chris Goins of Sheridan, Arkansas was selected as the winning artwork submitted to the annual competition. Visit ODFW's news release for complete details: https://www.dfw.state.or.us/news/2022/11_Nov/110722b.asp



2023 Habitat Conservation winning artwork.

Oregon Connectivity Assessment and Mapping Project implementation plan and update

Staff are in the process of selecting Priority Connectivity Areas for the final steps of the [Oregon Connectivity Assessment and Mapping Project](#). These areas will represent the parts of the landscape with the highest overall value for facilitating wildlife movement, across a wide diversity of species representing a variety of taxa, habitat associations, movement capabilities, and life history strategies. These Priority Connectivity Areas will serve as the agency's science core for conserving wildlife connectivity. The agency has developed an implementation plan outlining eight strategic actions for integrating this information into operations, planning, and technical guidance. View the plan by visiting: https://www.dfw.state.or.us/wildlife/management_plans/index.asp

Ocean Salmon and Columbia River Program

Tucker Jones, Ocean Salmon and Columbia River Program Manager

2022 Columbia River Estuary recreational white sturgeon fishery

Reduced salmon fishing opportunities during the mid-1980s through the late 1990s greatly increased the popularity and importance of sturgeon for recreational fisheries. Mainstem Columbia River recreational harvest guidelines for white sturgeon decreased steadily from approximately 54,000 fish in 1997 to about 6,000 fish in 2013 in response to declining white sturgeon abundance as well as reduced exploitation rates. During this time, sturgeon angler trips declined from over 200,000 trips per year to just over 33,000 trips in 2013. Lower Columbia River (LCR) recreational sturgeon fisheries (downstream of Bonneville Dam and the lower Willamette River (LWR) were closed from 2014 through 2016, in response to decreased adult white sturgeon abundances. While catch-and-release angling remained open during these years, annual sturgeon angler trips decreased by about 90% from 2013 levels. Population assessments continued during the closure, and after noting increases in abundance, limited white sturgeon retention fisheries in the LCR and LWR were reimplemented beginning in 2017, and have been implemented annually since.

Based on the projected abundance of legal-sized white sturgeon and a 4% harvest rate, the 2022 harvest allocations were 1,920 white sturgeon for the estuary fishery, 800 for the LCR fishery upstream of the Wauna Power Lines (located at river mile 50) and 480 for the LWR recreational fishery; these were about 35% lower than the 2021 guidelines.

The states held a Joint State hearing on March 30, 2022 and adopted a nine-day fishery open on Wednesdays and Saturdays from Wednesday May 11 to Saturday June 4 as well as Memorial Day (Monday, May 30) from Buoy 10 to the Wauna Powerlines. The limited days-per-week structure was chosen to mitigate the risk of exceeding catch guidelines due to unanticipated changes in effort or catch rates (fisheries

upstream of Wauna were considered later in the year and are not reported on here).

Although effort was similar to expectations, catch rates in the estuary fishery started very low at 0.01 legal fish kept per angler. Rainy, windy weather and high flows affected angler participation and catch rates during the estuary fishery. Effort peaked at 408 private or guide boats, eight charter boats, and 46 bank anglers on Memorial Day, and catch rates improved to 0.10 fish kept per angler. Even with increased effort and higher catch rates, the overall catch remained below expectations with 322 sturgeon kept through May 31 from 6,300 angler trips.

The states held a hearing on Thursday, June 2 and adopted two additional days of sturgeon angling (Wednesday June 8 and Saturday June 11) making a total of four June fishing days. Effort was consistent during these four open days, with an average of 300 private or guide boats, five charters, and 30 bank anglers per day. Catch rates during June improved to 0.18 legal sturgeon kept per angler, but the overall catch remained lower than expected. The final catch for the 2022 estuary white sturgeon season was 1,292 white sturgeon kept from 11,960 angler trips, or 67% of the 1,920 fish guideline. In addition, anglers released 1,683 sublegal white sturgeon, 2,461 over-legal white sturgeon, and eight green sturgeon.

**End of field reports for
December 16, 2022**