



## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

[RTID 0648-XD746]

#### Endangered and Threatened Species; Take of Anadromous Fish

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of receipt of application for 11 permit renewals and 6 new permits.

**SUMMARY:** Notice is hereby given that NMFS has received 17 scientific research permit application requests relating to Pacific salmon, steelhead, green sturgeon, rockfish, and eulachon. The proposed activities in all permits are intended to increase knowledge of species listed under the Endangered Species Act (ESA) and to help guide management and conservation efforts. The applications may be viewed online at: [https://apps.nmfs.noaa.gov/preview/preview\\_open\\_for\\_comment.cfm](https://apps.nmfs.noaa.gov/preview/preview_open_for_comment.cfm).

**DATES:** Comments or requests for a public hearing on the applications must be received at the appropriate address or fax number (see **ADDRESSES**) no later than 5 p.m. Pacific standard time on [*insert date 30 days after date of publication in the **FEDERAL REGISTER***].

**ADDRESSES:** Written comments on the applications should be sent to the Protected Resources Division, NMFS, 1201 NE Lloyd Blvd., Suite 1100, Portland, OR 97232-1274. Comments may also be sent via fax to 503-230-5441 or by email to [nmfs.wcr-apps@noaa.gov](mailto:nmfs.wcr-apps@noaa.gov) (include the permit number in the subject line of the letter, fax, or email).

**FOR FURTHER INFORMATION CONTACT:** Rob Clapp, Portland, OR (phone: (541) 231-2314, e-mail: [Robert.Clapp@noaa.gov](mailto:Robert.Clapp@noaa.gov)). Permit application instructions are available from the address above, or online at <https://apps.nmfs.noaa.gov>.

## **SUPPLEMENTARY INFORMATION:**

### **Species Covered in This Notice**

The following listed species are covered in this notice:

Chinook salmon (*Oncorhynchus tshawytscha*): Threatened Lower Columbia River (LCR); threatened Puget Sound (PS); threatened Snake River (SnkR) spring/summer-run (spr/sum); threatened SnkR fall-run; endangered Upper Columbia River (UCR) spring-run; threatened Upper Willamette River (UWR), threatened Central Valley spring-run (CVS); endangered Sacramento River (SacR) winter-run; threatened California Coastal (CC).

Steelhead (*O. mykiss*): Threatened PS; Threatened LCR; threatened Middle Columbia River (MCR); threatened SnkR; threatened UCR; threatened UWR; threatened Northern California (NC); threatened California Central Valley (CCV).

Chum salmon (*O. keta*): Threatened Hood Canal Summer-run (HCS); threatened Columbia River (CR).

Coho salmon (*O. kisutch*): Threatened LCR; threatened Oregon Coast (OC); threatened Southern Oregon/Northern California Coast (SONCC).

Sockeye salmon (*O. nerka*): Endangered SnkR.

Eulachon (*Thaleichthys pacificus*): Threatened southern Distinct Population Segment (SDPS).

Green sturgeon (*Acipenser medirostris*): Threatened SDPS.

Rockfish (*Sebastes spp.*): Endangered Puget Sound/Georgia Basin (PS/GB) bocaccio (*Sebastes paucispinis*); threatened PS/GB yelloweye rockfish (*S. ruberrimus*).

### **Authority**

Scientific research permits and permits to enhance propagation or survival are issued in accordance with section 10(a)(1)(A) of the ESA (16 U.S.C. 1531 *et seq.*) and regulations governing listed fish and wildlife permits (50 CFR 222-226). NMFS issues

permits based on findings that such permits: (1) are applied for in good faith; (2) if granted and exercised, would not operate to the disadvantage of the listed species that are the subject of the permit; and (3) are consistent with the purposes and policy of section 2 of the ESA. The authority to take listed species is subject to conditions set forth in the permits.

Anyone requesting a hearing on an application listed in this notice should set out the specific reasons why a hearing on that application would be appropriate (see **ADDRESSES**). Such hearings are held at the discretion of the Assistant Administrator for Fisheries, NMFS.

### **Applications Received**

#### *Permit 1127 – 7R*

The Shoshone-Bannock Tribes are seeking to renew a permit that for nearly three decades has allowed them to annually take listed SR steelhead and spr/sum Chinook salmon while conducting research designed to (1) monitor adult and juvenile fish in key upper SnkR subbasin watersheds; (2) assess the utility of hatchery Chinook salmon in increasing natural populations in the Salmon River; and (3) evaluate the genetic and ecological impacts hatchery Chinook salmon may have on natural populations. The fish would primarily benefit from the research in two ways. First, the research would broadly be used to help guide restoration and recovery efforts throughout the SnkR basin. Second, the research would be used to determine how hatchery supplementation can be used as a tool for salmon recovery. The research would also help the Tribes re-establish traditional fishing opportunities and connect with and protect cultural, ecological, and social values and rights.

The researchers would use screw traps, weirs, electrofishing, and hook-and-line angling gear to capture the listed fish. Once captured, the fish would undergo various sampling, tagging, and handling regimes; they would then be allowed to recover and

released. Some tissue samples would be taken from adult fish carcasses, and the researchers would conduct some snorkeling surveys and redd counts. In all cases, trained crews would conduct the operations, no adult salmonids would be electrofished, and all activities would take place in the Salmon River subbasin. The researchers are not proposing to kill any of the fish they capture, but some may die as an unintended result of the research.

*Permit 1410-14R*

The Northwest Fisheries Science Center (NWFSC) is seeking to renew a research permit that currently allows them to take juvenile and adult CC, CVS, LCR, PS, SacR, SnkR fall-run, SnkR spr/sum, UCR, and UWR Chinook salmon; CR chum salmon; LCR, OC, and SONCC coho salmon; SnkR sockeye salmon; and LCR, MCR, SnkR, UCR, and UWR steelhead while conducting a study of the Columbia River plume and the surrounding ocean environment off the coasts of Oregon and Washington. The NWFSC research may also cause them to take SDPS eulachon, a species for which there are currently no ESA take prohibitions. This renewal would also allow the researchers to lethally sample a subset of adult salmon to allow for tissue and otolith collection. The purposes of the research are to (1) determine the abundance, distribution, growth, and condition of juvenile Columbia River salmonids in the river's plume and characterize its physical and biological features as they relate to salmonid survival; (2) determine the impact that predators and food supply have on survival among juvenile Columbia River Chinook and coho salmon as they migrate through the Columbia River estuary and plume; and (3) synthesize the early ocean ecology of juvenile Columbia River salmonids, test mechanisms that control salmonid growth and survival, and produce ecological indices that forecast salmonid survival.

The research would benefit the affected species by (1) providing data to improve understanding of how the ocean and Columbia River plume conditions affect juvenile

salmonids; (2) helping predict how changing ocean conditions would affect salmonid growth and survival; and (3) helping improve salmon management actions in relation to river, plume, and ocean conditions. Information on adults would also help researchers better understand the relationship between older salmon individuals and predators such as Southern Resident Killer Whales (SRKWs). The NWFSC proposes to capture fish using a surface trawl, which can cause lethally crush and descale juvenile salmonids and eulachon. Juvenile salmonids would be identified to species, measured for length, and frozen for further analysis (*i.e.* weight, growth, genetics, diet (stomach contents), parasites, pathogens, and physiological condition). All juvenile salmon are lethally sampled, and a subset of adult salmon will be lethally sampled for tissue analyses including otoliths and stomach contents. The remaining adult salmonids that are not lethally sampled would be held in an aerated livewell, identified to species, measured for length, checked for tags and marks, and released. Eulachon would either be returned to the capture location or retained for further scientific research activities at the NWFSC.

*Permit 1484-8R*

The Washington Department of Natural Resources (WDNR) is seeking to renew for 5 years a permit that currently authorizes them to take juvenile CR chum salmon, LCR Chinook salmon, LCR coho salmon, and LCR and MCR steelhead in WDNR-managed forests in Washington State. The purpose of the study is to survey stream reaches above natural barriers to determine if fish are present. This information is needed to determine appropriate widths of riparian buffers to leave intact during timber harvest. This study would benefit listed species by documenting the need for increased riparian buffers, which better protect aquatic and riparian habitat where fish are present. In addition, data on the distribution of fish gained from this study would be used to inform land management decisions and thereby better protect listed species.

The WDNR proposes to capture juvenile fish using single-pass backpack electrofishing. The researchers would turn off the electricity as soon as a fish is seen. Fish would be identified regardless of whether they are netted; if fish are netted they would be held in the water only long enough to identify them and then released at the site of capture. The WDNR does not intend to kill any of the fish being captured, but a small number may die as an unintended consequence of the proposed activities.

*Permit 14046-5R*

The King County Department of Natural Resources and Parks (KCDNRP) is seeking to renew for 5 years a research permit that currently allows them to take juvenile PS Chinook salmon and PS steelhead. Sampling sites would be in four Puget Sound (Washington) sub-basins—Snoqualmie, Lake Washington, Duwamish, and Puyallup—and intertidal nearshore areas in the Puget Sound (King County, Washington). The purposes of the study are to (1) evaluate the effectiveness of restoration actions through biological monitoring; (2) understand how juvenile salmonids use specific riverine habitats in order to prioritize restoration projects and guide project design; (3) assess salmonid habitat status and trends in small streams with varying degrees of land use while monitoring current stream conditions; and (4) assess contaminant levels in various freshwater fish. The research would benefit the affected species by determining how restoration and recovery actions are contributing to listed species recovery, providing information on the extent of juvenile salmonid rearing in off-channel areas, guiding future restoration projects based upon monitoring results, providing information on habitat use by yearling fall-run Chinook salmon, and contributing to our knowledge of Chinook salmon life histories.

The KCDNRP proposes to capture fish using beach seines, fyke nets, gill nets, hook and line angling, minnow traps, and backpack and boat-operated electrofishing. Most of the captured fish would be anaesthetized, identified to species, allowed to

recover, and released. A subset of the Chinook salmon would also be tagged (acoustic, passive integrated transponder (PIT), and elastomer), dyed (Bismark Brown), gastric lavaged, and have scales collected. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

*Permit 15207-5R*

The Amnis Opes Institute (AOI) is seeking to renew for 5 years a research permit that currently allows them to take juvenile and adult LCR, PS, SnkR fall-run, SnkR spr/sum, UCR, and UWR Chinook salmon; CR and HCS chum salmon; LCR, OC, and SONCC coho salmon; SnkR sockeye salmon; and LCR, MCR, PS, SnkR, UCR, and UWR steelhead throughout Idaho, Oregon, and Washington States. The purpose of the study is to develop baseline data of the physical and chemical habitat for rivers and streams throughout the United States. Research transects would be randomly determined and would take place on alternating sides of the sampled rivers and streams for a distance of 40 times the mean wetted channel width. The researchers would stop every five channel widths to process the fish. This research would benefit the affected species by characterizing the biological condition of rivers and thereby provide data that supports Clean Water Act implementation.

The AOI researchers propose to capture fish using raft-mounted and backpack electrofishing equipment; stunned fish would be placed in a livewell with a soft mesh dip-net. Fish would be identified to species, measured to length, searched for abnormalities, and returned to the water when recovered. ESA-listed species would be processed and released first. If adult salmonids are observed, electrofishing activities would immediately cease and the researchers would move to another location before resuming electrofishing activities. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

*16344-3R*

The Oregon State University is seeking to renew for 5 years a research permit that currently allows them to take juvenile listed hatchery SONCC coho in the Upper Klamath River. The purposes of this research are to (1) determine the effects of infection by the myxozoan parasite *Ceratomyxa shasta* on coho salmon; and (2) estimate disease effects for each study year on the wild coho population. The work would benefit fish by providing information on endemic *C. shasta* levels in the Klamath River and thereby help managers monitor and mitigate the parasite's effects on listed species.

Juvenile coho salmon from Iron Gate, Fall Creek and/or Trinity River hatcheries would be transported to selected locations on the Klamath River and monitored for disease after the exposure to *C. shasta*. Following exposure, all fish would be transported to the Oregon State University J. L. Fryer Aquatic Animal Health Laboratory where time to morbidity, overall morbidity and infection prevalence would be ascertained through microscopic and molecular analysis of intestinal tissues. Because all of the fish will be exposed to the parasite *C. shasta*, they cannot be released after the experiments. In addition, infection prevalence data are needed which requires euthanizing all fish surviving the exposures, since surviving fish may still be infected with the parasite.

*Permit 18260-3R*

The Confederated Tribes of the Warm Springs Reservation (CTWS) is seeking to renew for 5 years a permit that currently authorizes them to take juvenile and adult LCR Chinook salmon, LCR coho salmon, and LCR and MCR steelhead. The purpose of the study is to describe abundance, habitat associations, spawning, distribution, migration patterns, harvest rates, and limiting factors for Pacific lamprey in Fifteen Mile Creek and Hood River and their tributaries (Oregon). The research would provide important basic ecological information about Pacific lamprey, which is not ESA-listed, but which is an important indicator species for characterizing watershed health. Although researchers are targeting juvenile and adult Pacific lamprey (*Entosphenus tridentatus*) for capture, other

species may be taken during sampling activities. The research would benefit listed species by improving understanding of watershed condition and helping managers prioritize habitat restoration projects in the Fifteen Mile Creek and Hood River basins. The work would also help the CTWS people re-connect with, increase, and manage a traditional food source.

The CTWS proposes to collect fish from March through October using backpack electrofishing and hand, dip, fyke, and hoop nets. During electrofishing surveys, the researchers would use “lamprey settings” (*i.e.* very low voltage). The researchers would set hoop (0.8 meter (m) diameter with 1.9 centimeter (cm) mesh) and fyke (2.5 m high by 2.75 m wide with 1.9 cm mesh size) nets facing downstream in low velocity areas. They will modify the fyke net to deter adult steelhead from entering the hoop net by tying twine across the first throat of the net to create an effective mesh size across the opening of 7.5 cm. This modification has effectively deterred steelhead from entering fyke nets set in previous fieldwork. The researchers propose to measure and PIT- or radio-tag adult lamprey before releasing them. The researchers would immediately release any salmonids that are captured or briefly hold them in buckets of water before releasing them if they require time to recover from being captured. If salmonids are observed during electrofishing, the researchers would immediately turn off the electricity and allow fish to swim away. The CTWS does not propose to kill any listed salmonids, but a small number may die as an unintended result of the research activities.

#### *Permit 18331-3R*

The Wild Fish Conservancy (WFC) is seeking to renew for 5 years a research permit that currently allows them to take juvenile PS Chinook salmon and PS steelhead in selected stream channels and floodplain areas throughout the Kitsap and Snoqualmie sub-basins of Washington State. The purpose of the study is to classify existing channels by water type and thereby validate and update county, city, and WDNR stream

classifications and hydrological maps. This research would benefit the affected species by filling data gaps regarding fish passage impediments (tidegates, culverts, *etc.*) and providing fish species composition and distribution—information needed to identify, prioritize, and implement restoration projects.

The WFC proposes to capture fish using backpack electrofishing. Fish would be identified to species, tissue sampled (caudal fin clip—steelhead only), and released. Once fish presence is established, either through visual observation or electrofishing, electrofishing would be discontinued. Surveyors would then proceed upstream until a change in habitat parameters is encountered and electrofishing would recommence. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

*Permit 22003-2R*

The KCDNRP is seeking to renew a 5-year research permit that currently allows them to annually take juvenile and adult PS Chinook salmon, PS steelhead, and PS/GB bocaccio and adult SDPS green sturgeon in the marine waters and shorelines of King County (Washington State). The KCDNRP research may also cause them to take juvenile and adult SDPS eulachon and PS/GB yelloweye rockfish—species for which there are currently no ESA take prohibitions. The purpose of the study is to capture English sole, brown rockfish (*Sebastes auriculatus*), copper rockfish (*Sebastes caurinus*), quillback rockfish (*Sebastes maliger*), and various forage fish to monitor tissue levels of toxic chemical contaminants. This research would benefit the affected species by (1) providing information on the types and concentrations of chemicals in fish; (2) helping managers understand the impact chemical exposures have on marine fish health; (3) filling data gaps to help managers make informed management decisions; and (4) informing a long-term program to evaluate changes in chemical body burdens in fish over time as

environmental improvements are made (stormwater discharges reduced, contaminated sediments remediated, *etc.*).

The KCDNRP proposes to capture fish using bottom trawls, beach seines, cast nets, and hook and line (sabiki rigs). Captured ESA-listed fish would be identified to species and released. Listed rockfish would be released via rapid submergence to their capture depth to reduce adverse effects from barotrauma. Targeted species (and incidental mortalities) would be sacrificed, stored on ice, and analyzed for contaminants. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

*Permit 22319-3R*

Herrera Environmental Consultants (HEC) is seeking to renew a 5-year research permit that currently allows them to annually take juvenile PS Chinook salmon and PS steelhead while conducting a study in streams near Redmond, Washington. The purpose of the research is to conduct a paired watershed study monitoring stream health by collecting benthic macroinvertebrates in urban and nearby relatively pristine streams. Due to the collection methods, there is a possibility of capturing juvenile salmonids. The research would benefit listed fish by determining the effectiveness of stormwater management in urban streams which can lead directly to water quality and habitat improvement.

The HEC proposes to use a D-frame kick net to capture the fish. Any fish captured would be identified to species and released. The researchers do not intend to kill any of the fish being captured, but a small number may die as an unintended consequence of the proposed activities.

*Permit 22865-2R*

The United States Forest Service (USFS) is seeking to renew a permit that currently allows them to annually take juvenile UCR Chinook salmon, UCR steelhead,

and MCR steelhead during research activities taking place at various points in the Yakima, Methow, Entiat, and Wenatchee River drainages in Washington State. The purpose of the research is to determine fish distribution in those subbasins. The research would benefit the fish by giving land managers information they need to design forest management activities (*e.g.*, timber sales, grazing plans, road building) in a manner that would help them have the smallest possible effect on listed species.

Under the renewed permit, the USFS would use using minnow traps, hook-and-line angling, and electrofishing equipment to capture the fish. The fish would then be identified and immediately released whenever possible. The USFS does not intend to kill any of the listed fish being captured, but a small number may die as an unintended result of the research activities.

*Permit 26300*

The Fishery Foundation of California is seeking a new permit that would authorize them to take juvenile CVS Chinook salmon, CCV steelhead, and juvenile SDPS green sturgeon. The purpose of this study is to document the presence of native fish species in Snodgrass Slough, the Cosumnes River and Laguna Creek in Sacramento County, CA prior to a large floodplain restoration project. The study would benefit affected species by providing data on species presence, seasonal water conditions and migratory windows that will inform the restoration project.

Juveniles would be collected via beach seine and fyke net. Juvenile fish would be captured, handled, and released. The researchers are not proposing to kill any of the listed fish being captured, but a small number of fish may be killed as an inadvertent result of these activities.

*Permit 27337*

The Lower Elwha Klallam Tribe (LEKT) is seeking a 5-year permit that would allow them to take juvenile HCS chum and PS Chinook and PS steelhead during the

course of research designed to determine fish and shellfish presence and use in a 28-acre estuarine lagoon at the base of Ediz Hook in Port Angeles, WA. The study would benefit affected species by providing data on species presence, and that information, along with detailed habitat and water quality data, would be used to inform future restoration actions in the area. Those restoration actions, in turn, would help the LEKT people once again conduct traditional fishing and shellfishing activities in the lagoon.

The fish would be captured primarily by beach seining, but some may be captured in fukui and minnow traps. Once captured, the fish would simply be handled and released. The researchers are not proposing to kill any of the listed fish being captured, but a small number of fish may be killed as an inadvertent result of the proposed activities.

*Permit 27619*

The Scott River Water Trust is seeking a new permit that would authorize them to take juvenile and adult SONCC coho salmon in the Scott River, CA. The purpose of this study is to assess fish passage at Youngs Dam to determine how and when juvenile and adult salmon utilize the fish ladder at Youngs Dam. The project seeks to determine an ideal flow target through the fish ladder in an effort to improve fish passage at the dam as well as the fish ladder. The study would benefit SONCC coho by providing data to identify and inform recommendations to improve volitional fish passage through Youngs Dam.

Juveniles would be collected via beach seines and observed during snorkel surveys. Juvenile coho would be captured, handled, and released. A subsample of captured juveniles would be anesthetized, tissue sampled and PIT-tagged prior to release. Adult coho would be observed at weirs, fish ladders, dam and during snorkel surveys. The researchers are not proposing to kill any of the listed fish being captured, but a small number of fish may be killed as an inadvertent result of these activities.

*Permit 27869*

The U.S. Fish and Wildlife Service (USFWS) is seeking a 5-year permit that would allow them to take juvenile HCS chum and PS Chinook and PS steelhead during the course of research designed to determine what effect the hatchery barriers have on the distribution of migratory sculpin (with considerations for how these barriers may also be affecting the distributions of strictly fluvial sculpin species). The research would benefit listed species by producing data on how hatchery weirs affect salmonid migrations in the areas being studied. That data could then be used to modify weir operations for the benefit of the migrating fish.

The fish would be largely be collected by electrofishing, but seining or dipnetting may also be employed. All listed fish would be immediately released without further handling. Sampling would cease and the activity would be moved if adult Chinook, chum, or steelhead (or their redds) are encountered at any time during a survey. The researchers are not proposing to kill any of the listed fish being captured, but a small number of fish may be killed as an inadvertent result of these activities.

*Permit 27874*

The California Department of Fish and Wildlife (CDFW) is seeking a new permit that would authorize them to take juvenile and adult SDPS green sturgeon in the Sacramento and San Joaquin Rivers, CA. The purpose of this study is to develop an indices of white sturgeon abundance for use in species management. Though non-listed white sturgeon are the target species, green sturgeon might be encountered.

Juvenile and adult SDPS green sturgeon would be collected via long line and hook and line sampling and observed via camera and sonar. Juvenile and adult fish would be captured, handled, tagged, and released. The researchers are not proposing to kill any of the listed fish being captured, but a small number of fish may be killed as an inadvertent result of these activities.

*Permit 28047*

The USFWS is seeking a 5-year permit that would allow them to take juvenile LCR, UWR, PS, and CC Chinook; CR and HCS chum; LCR, PS, UWR, and NC steelhead; and LCR, OC, and SONCC coho. The fish would be taken during efforts to determine the uppermost ranges of several species of fish in more than 20 subbasins in Western Oregon and Washington and Northern California. The research would produce a large amount of presence/absence data on listed fish and thus help managers plan and carry out land management actions across a broad portion of three states.

The researchers would use backpack electrofishing units to capture the fish. Once captured, all listed salmonids would simply be identified and immediately released. In all cases, the researchers would be operating near what is already considered to be the upper limit of trout distribution, so they are unlikely to encounter many listed fish in any case. Regardless, the researchers are not proposing to kill any of the listed fish being captured, but a small number of fish may be killed as an inadvertent result of these activities.

This notice is provided pursuant to section 10(c) of the ESA. NMFS will evaluate the applications, associated documents, and comments submitted to determine whether the applications meet the requirements of section 10(a) of the ESA and Federal regulations. The final permit decisions will not be made until after the end of the 30-day comment period. NMFS will publish notice of its final action in the **Federal Register**.

Dated: February 21, 2024.

**Angela Somma,**

*Chief, Endangered Species Division,*

*Office of Protected Resources, National Marine Fisheries Service.*