Rule change petition to ban the use of bait and delay the opening of the fishing season until mid-June in all Puget Sound rivers and tributaries

Puget Sound steelhead (Oncorhynchus mykiss) were listed as Threatened under the Endangered Species Act (ESA) in 2007. The 2022 National Marine Fisheries Service (NMFS) report, "Biological Viability Assessment Update for Pacific Salmon and Steelhead Listed Under the Endangered Species Act: Pacific Northwest", upheld the Threatened status. It also stated Puget Sound steelhead have shown some evidence of improving viability since the last update in 2017. However, the report states the risk of extinction remains "moderate." A moderate risk exhibits a trajectory indicating that it is more likely than not to be at a high level of extinction risk within 30–80 years.

Steelhead continue to face climate change, habitat destruction, and predation as difficult challenges to recover from their current depleted population status, each of these representing complex problems that can't be quickly addressed. One simpler and more immediate means to address at least one of the multiple causes for depleted populations of Puget Sound steelhead can occur by reducing the number of fish allowed to be harvested by anglers in our local rivers and tributaries. Washington Department of Fish and Wildlife (WDFW) regulations currently provide sport fishing in the majority of Puget Sound rivers and tributaries that begin on the Saturday of Memorial Day Weekend (late May). Regulations also state that, depending on the body of water, fish must be a minimum of 12" or 14" to be retained, and fishing with bait is allowed (WDFW 2022-23 Sport Fishing Rules).

Numerous studies confirm that the use of bait results in higher hooking mortality for released fish than using artificial lures and flies. A recent WDFW report entitled, "Influence of angling methods and terminal tackle on survival of salmon and steelhead caught and released in the Cowlitz River" (September 2023), compares hooking mortality using various types of angling methods. The study did not include the sampling of juvenile salmonids. However the following two statements are included in the report and are relevant to the use of bait when fishing includes encounters with juvenile salmonids.

On page 7, in the "Hook Location" section (3.1.2) the following is stated:

The median probability of critical hook locations while casting with jigs and lures were 0.02 (95 % HDI 0.01 - 0.03) and 0.05 (95 % HDI 0.03 - 0.08), respectively, while using a bobber with bait resulted in a critical hook probability of 0.19 (95 % HDI 0.12 - 0.28).

Based on our observations over many decades, anglers commonly use a bobber and bait when fishing for juvenile salmonids in Puget Sound rivers and streams.

Page 10 in the "Discussion" section includes the following:

Some researchers have reported relatively high C&R mortality for resident salmonids (Huhn and Arlinghaus, 2011). This may be because resident fish are generally smaller than anadromous fish, and smaller salmonids can be more vulnerable to mortality due to serious injury from handling and hook removal (Meka, 2004; Schisler and Bergersen, 1996). Furthermore, small fish need to recover and continue

actively feeding, whereas adult salmon and steelhead undergo prolonged fasting prior to spawning (Penney and Moffitt, 2014).

WDFW acknowledges this increased mortality when fishing with bait through its own regulations. The following rule is on page 25 of the "WDFW 2022-2023 Sport Fishing Rules":

"When fishing with bait, all trout that are lawful to possess and are equal to or greater than the minimum size are counted as part of the daily limit whether kept or not."

The basis for this rule is the acknowledgment that there is higher mortality for released fish when using bait than when using artificial lures or flies. This rule applies to lakes stocked with hatchery trout with no minimum size restriction. However, since wild steelhead smolts are not large enough to be retained, the rule does not apply to them. As an example of the problem, the Snohomish County Public Utilities District operates a smolt trap near the mouth of the Sultan River (Snohomish system). Trap data shows 88 steelhead smolts have been sampled during the month of May for years 2014-21. Average length is 6.4 inches with a range of 5.4 to 8.1 inches, far less than the minimum size required for retention.

The WDFW document entitled 2010-2011 Sport Fishing Rule Change Proposals Concise Explanatory Statement (wa.gov) addresses the need for greater conservation focus regarding juvenile steelhead in Puget Sound rivers and tributaries. The statement below and other supporting documentation are found in the Stream Strategy for Puget Sound and Straits section on pages 22-25:

WDFW staff recommends more protection of juvenile salmonids (particularly steelhead) by closing fishing on all Puget Sound rivers and tributaries or enacting selective fishery rules.

The document further states: "staff feels that it is important to provide additional protection to these juvenile fish now, rather than waiting for another rule cycle."

A similar document is found on the WDFW site with the same recommendations in 2016.

Many NMFS and WDFW documents contain salmonid conservation statements that conflict with WDFW management practices. For example, the importance of juveniles is addressed in the NMFS 2019 "ESA Recovery Plan for the Puget Sound Steelhead Distinct Population Segment (*Oncorhynchus mykiss*)" (https://media.fisheries.noaa.gov/dam-migration/final_puget_sound_steelhead_recovery_plan.pdf). The following is on pages 96-97:

"Freshwater fisheries directed at trout can also inadvertently affect the viability of steelhead populations. Studies conducted by the Washington Department of Fisheries determined that the opening of trout fisheries before June 1st in the Green River resulted in the incomplete emigration of steelhead smolts (WDG 1941). Fishing pressure can affect the abundance of juvenile steelhead and the resident life-history form of O. mykiss which, under some conditions, can be a valuable genetic and demographic contributor to the anadromous population."

The statement below is on page 14 of the 2008 document: Washington Department of Fish and Wildlife Statewide Steelhead Management Plan: Statewide Policies, Strategies, and Actions. The intent of the gear restriction recommendation was meant to prohibit the use of bait or enact selective gear rules (https://wdfw.wa.gov/sites/default/files/publications/00149/wdfw00149.pdf):

"Actions 1) In fisheries where steelhead are captured incidentally to the harvest of other species, implement regulations/selective fishing techniques that protect the wild stocks. a. Protect juvenile steelhead and resident rainbow trout by closing fisheries during the spring smolt migration period and/or through

the use of minimum fish size, gear restrictions and bag limits, or area closures during periods when the fisheries are open."

Currently, we have an online petition related to our proposed rule change with more than 1,100 supporters (https://www.change.org/search?q=protect%20puget%20sound%20juvenile&offset=0).

Many supporters of the petition are steelhead anglers. As one angler expressed, "this is primarily a catchand-release fishery that allows the use of bait on an ESA-listed species. It makes no sense."

We propose that WDFW change its regulations to:

- Ban the use of bait in all rivers and tributaries in the Puget Sound Basin.
- Delay the opening of the fishing season until mid-June in all Puget Sound rivers and tributaries to allow emigrating steelhead smolts to fully vacate freshwater habitats.

If enacted, these regulations will prevent countless thousands of Puget Sound juvenile steelhead from being killed annually.

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