PROPOSAL 149

5 AAC 47.023. Special provisions for seasons, bag, possession, annual, and size limits, and methods and means for the fresh waters of the Southeast Alaska Area

Prohibit the use of bait and establish a catch-and-release fishery with single barbless hooks in Petersen Creek, as follows:

Year-round catch and release, single-barbless hook, artificial lure regulations for trout on Petersen Creek will help protect genetic diversity necessary to rebuild steelhead stocks in this popular road system fishery.

We considered catch and release regulations for rainbow trout alone, but this adds a layer of regulatory complexity, and requires anglers to be able to quickly differentiate between cutthroat and rainbow trout.

We also considered total catch and release regulations for Petersen Creek, as coho fishing has also been closed by emergency order in recent years, but the dolly varden and pink salmon numbers do not warrant a move to such a move.

What is the issue you would like the board to address and why? The popular Juneau road-system steelhead fishery on Petersen Creek has been closed by Emergency Order each season since 2019. As an ADFG index stream, we have reliable data on run size; recent snorkel surveys have shown that run sizes are depressed below long-term averages. As the April 1, 2024 Emergency Order (No. 1-SH-E-06-24) notes:

"overall production of steelhead in Peterson Creek has declined in recent years. For the last 9 years (2015–2023), snorkel survey index counts conducted each spring have been below the 1997–2014 average of 28 fish (equivalent to 116 fish), when steelhead abundance in the creek appeared to be relatively stable. In 2018, 2019, 2020, 2021, 2022, and 2023 the snorkel survey counts were 6, 3, 11, 24, 18, and 27 fish, respectively. Continued low escapements require this closure to conserve the Peterson Creek steelhead stock."

There are only a handful of opportunities for steelhead anglers on the Juneau Road system, so revitalizing this run is of high importance. Studies across the range of steelhead and rainbow trout have shown contribution of resident rainbows to steelhead population genetics (McPhee et al). State agencies across the Pacific Northwest have begun to reconcile the management strategy of rainbow trout to reflect the importance of resident rainbow trout in steelhead recovery (Marshal, NMFS). Limiting the Peterson Creek fishery to year-round catch and release, single barbless hook and an artificial lure regulations will provide recreational opportunity with minimal impact on the resident rainbow population which could be critical for the continued recovery of its steelhead component. In other words, conservative regulations will ensure that rainbow trout populations remain robust to bolster steelhead production, while also protecting smolt and rearing juvenile steelhead.

References:

NMFS (National Marine Fisheries Service). 2019. ESA Recovery Plan for the Puget Sound Steelhead Distinct Population Segment (Oncorhynchus mykiss). National Marine Fisheries Service. Seattle, WA.

Marshall, A.R., Small, M., Foley, S., 2006. Genetic relationships among anadromous and resident Oncorhynchus mykiss in Cedar River, Washington: Implications for steelhead recovery planning, Washington Department of Fish and Wildlife, Olympia, WA. Final report to Cedar River Anadromous Fish Committee and Seattle Public Utilities.

McPhee, M.V., Utter, F., Stanford, J.A., Kuzishchin, K.V., Savvaitova, K.A., Pavlov, D.S., Allendorf, F.W. 2007. Population structure and partial anadromy in Oncorhynchus mykiss from Kamchatka: relevance for conservation strategies around the Pacific Rim. Ecology of Freshwater Fish 16, 539-547.

Did you develop your proposal in coordination with others, or with your local Fish and Game Advisory Committee? Explain. This proposal was approved and vetted by the Juneau Douglas Advisory Committee at our April 8, 2024 meeting.

PROPOSED BY: Juneau Douglas Advisory Committee (EF-F24-110)

****