

Presentation Title:

Southern DPS Eulachon: Current Population Status and Recovery Plan Implementation Efforts

Presenter Info:

Laura Heironimus (primary presenter)
Columbia River Sturgeon, Smelt, Lamprey Unit Lead
Washington Department of Fish and Wildlife
5525 S. 11th Street, Ridgefield, WA 98642
Phone: 360-906-6716
Email: laura.heironimus@dfw.wa.gov

Olaf Langness
Fish and Wildlife Biologist
Washington Department of Fish and Wildlife
5525 S. 11th Street, Ridgefield, WA 98642
Phone: 360-906-6741
Email: olaf.langness@dfw.wa.gov

Abstract (300 words maximum):

The southern distinct population segment (DPS) of Eulachon, *Thaleichthys pacificus*, migrates into freshwater to spawn along the Pacific coast from northern California to southwest Alaska and has significant cultural and ecological roles throughout its range. Over the past century, commercial and recreational dip-netting for Eulachon in the Columbia basin connected local communities to a resource with little to no detectable impact to the population. In the early 1990s commercial landings declined precipitously and led to a shift in management of the species, which included limiting fishery harvest and evaluating fishery-independent measures of run-size. Pilot studies evaluated run-size in coastal rivers using spawning stock biomass, which estimates the number of spawning adults through variation in larval outflow densities. In 2000, a standardized transect on the Columbia River was established to evaluate annual run-size and assess species recovery. In 2010, southern DPS Eulachon were listed as a threatened species under the ESA and a qualitative threats ranking for the Columbia basin identified climate change impacts on ocean and freshwater conditions, bycatch in commercial fisheries, dams and water diversions, and water quality as the primary drivers in declining smelt abundance. The recovery plan for Southern DPS Eulachon, finalized in 2017, highlighted the need for expanding funding and research partnerships. As a result, tribal, state, and federal partners are coordinating efforts to implement recovery actions, including: seeking consistent funding for baseline monitoring and research to fill information gaps on variation in year-class strength, run-timing and distribution, habitat use, and estuarine survival. Additionally, recovery partners are working to improve outreach and education efforts to engage regional organizations in achieving recovery priorities. Future funding for vital eulachon research and baseline monitoring is uncertain and may limit resource management and conservation options.