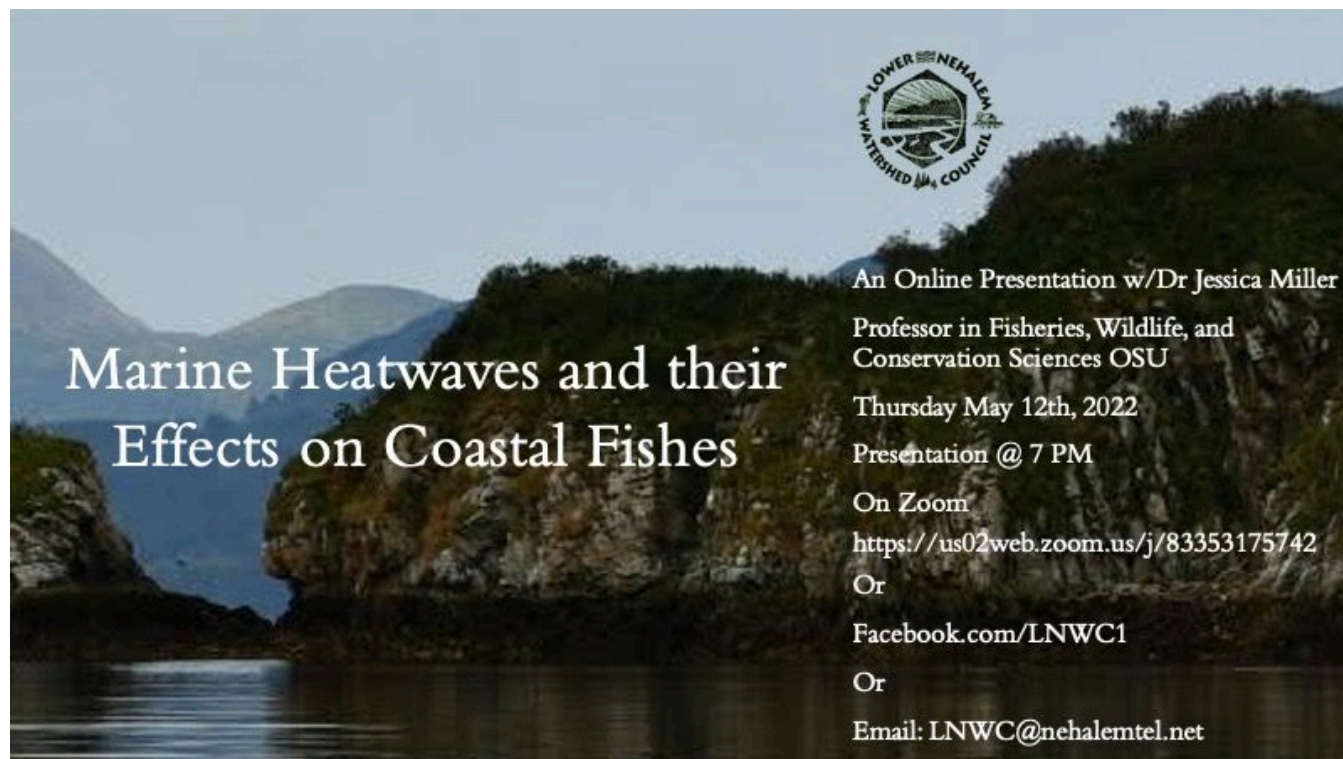


Presentation on marine heatwaves, coastal fishes

May 8, 2022



Marine Heatwaves and their Effects on Coastal Fishes



An Online Presentation w/Dr Jessica Miller
Professor in Fisheries, Wildlife, and Conservation Sciences OSU
Thursday May 12th, 2022
Presentation @ 7 PM
On Zoom
<https://us02web.zoom.us/j/83353175742>
Or
[Facebook.com/LNWC1](https://www.facebook.com/LNWC1)
Or
Email: LNWC@nehalemtnet.net

On May 12, Jessica Miller, OSU professor of fisheries, wildlife, and conservation sciences, will talk about a very pertinent issue, marine heatwaves. Marine heatwaves are increasing in frequency and intensity around the world.

From 2014 to 2016, anomalous atmospheric conditions resulted in the largest known marine heatwave in the northeast Pacific Ocean, and another heatwave occurred in 2019. These extreme ocean warming events impacted all levels of the food web, resulting in reduced condition of many marine species. The abundance of Pacific Cod in the Gulf of Alaska declined by more than 75%, leading to the closure of the fishery and a disaster declaration.

Jessica Miller and her colleagues are documenting how this heatwave affected the growth and condition of Columbia River Spring Chinook salmon and the growth and phenology – or timing of life history events – of Pacific Cod in the Gulf of Alaska. They combine field studies with laboratory analysis of fish ear stones, which are balance and orientation structures that lay down daily growth rings, to age fish, determine their hatch date, and reconstruct their growth and migratory history. Miller will provide an overview of what we

are learning about how these ecologically and economically important species responded to these extreme ocean temperatures, which are predicted to occur regularly under future climate change scenarios.

Jessica Miller is a professor in fisheries, wildlife, and conservation sciences at Oregon State University. She is also a member of the Coastal Oregon Marine Experiment Station and leads the Marine and Anadromous Fisheries Ecology Lab in Newport. Her research focuses on ecology of marine and anadromous fishes, with an emphasis on how environmental and climate variation affect their growth and survival. She received a BA in Zoology from the University of Montana, a MS in Fisheries from University of Washington, and a PhD in Biology from the University of Oregon.

The talk will be at 7 p.m. May 12, hosted on Zoom, and is free to the public. The zoom link is <https://us02web.zoom.us/j/83353175742> or on the Facebook event at www.facebook.com/lnwc1. You can also contact the watershed council at info@nehalemwatershed.org.

A recording of this presentation will also be posted on the LNWC's YouTube channel with our other recorded presentations. Just search for "Lower Nehalem Watershed Council" on YouTube.

Stay posted for the Lower Nehalem Watershed's Speaker Series other great talks coming up:

- November: Kellie Carim (USDA), eDNA Tracking Lamprey in the Pacific Northwest