

NWFSC Watershed Program Open House

NOAA Western Regional Center

7600 Sand Point Way NE Seattle, WA

November 6, 2019

<https://www.nwfsc.noaa.gov/research/divisions/fe/wpg/index.cfm>

9:00-9:05

Welcome – Kevin Werner, Science and Research Director, Northwest Fisheries Science Center

9:05-9:10

Overview of Watershed Program research – Rich Zabel, Fish Ecology Division Director, Northwest Fisheries Science Center

Session 1 – Puget Sound

Moderated by David Price – NOAA Regional Office

9:10-9:30

Ecosystem response to the Elwha River dam removals - an update – George Pess

9:30-9:50

Puget Sound Partnership's Common Indicators Metrics and NOAA's Salmon Habitat Status and Trends Monitoring Program – Jason Hall (Cramer Fish Sciences)

9:50-10:10

Density-dependent habitat limitations for juvenile Chinook salmon in four large river deltas of Puget Sound – Correigh Greene

10:10-10:30

Bioenergetic approaches to examining habitat-specific growth and productivity for Chinook salmon in estuarine systems – Joshua Chamberlin

BREAK 10:30-10:45

Session 2 – Salmon Response to Habitat Change
Moderated by Eric Beamer – Skagit River System Cooperative

10:45-11:05

Modeling effects of habitat loss, climate change, and habitat restoration on three salmon species in the Chehalis River basin – Tim Beechie

11:05-11:25

Importance of invertebrate drift for stream salmonids in a changing climate – Peter Kiffney

11:25-11:45

An overview of dam removal efforts on the mainstem Klamath River in the context of coho and Chinook Salmon population recovery – Tommy Williams (Southwest Fisheries Science Center, Fisheries Ecology Division)

11:45-12:05

Watershed restoration in the Scott River, tributary to the Klamath River – Michael Pollock

12:05-12:25

Informing salmon conservation in California: fisheries management, flow regulation, and habitat restoration – Stuart Munsch (NOAA Affiliate, Ocean Associates, Inc.)

LUNCH 12:25-1:10

1:10-2:00

Poster session

Session 3 – Tools

Moderated by Jeff Jorgensen – NWFSC, FE Division, Ecosystem Analysis Program

2:00-2:20

Can we achieve the dream of fine-grained habitat estimation at large spatial extents? Combining satellite imagery with streamflow models throughout the Columbia River basin – Morgan Bond (NOAA Affiliate, Ocean Associates, Inc.)

2:20-2:40

Life cycle modeling in the Grande Ronde River: data, knowledge, assumptions and goals – Martin Liermann

2:40-3:00

Combining NAIP-derived high resolution data (change, trees and visible water) for riparian change assessment in Puget Sound – Kenneth Pierce Jr. (Washington Department of Fish and Wildlife)

3:00-3:20

Old-school guys using old-school tools to identify patterns and processes associated with salmon recolonization in the Middle and Upper Elwha River – Todd Bennett

3:20-3:40

Invertebrate eDNA metabarcoding: benefits and limitations for stream monitoring applications – Sarah Morley

3:40-3:45

Closing remarks – George Pess, Watershed Program Manager

3:45-4:30

Poster session

Posters

(Displayed in the room across the foyer from the auditorium)

Theme: **Puget Sound**

- The impacts of jellyfish on Puget Sound's pelagic environment – Correigh Greene
- Examining cumulative anthropogenic impacts upon pinniped-mediated marine mortality of steelhead using an encounter rate model – Brianna Ganzon (Seattle University)
- Methods to quantify aggregations of moon jellies (*Aurelia labiata*) using aerial capture image processing – Tayler Nichols (Oregon State University)
- Urban floodplain reconnection - more than drainage benefits: an overview of project performance results – Katherine Lynch (Seattle Public Utilities)
- Summary of baseline data for Salmon Habitat Status and Trends Monitoring Program – Britta Timpane-Padgham (NOAA Affiliate, A.I.S., Inc.)

Theme: **Salmon Response to Habitat Change**

- Quantifying loss of historical floodplains and implications for salmonids in the Chehalis River basin – Colin Nicol (NOAA Affiliate, Ocean Associates, Inc.)
- Salmonid response to rising stream temperature in the Chehalis River basin – Caleb Fogel (NOAA Affiliate, Ocean Associates, Inc.)
- Restoration potential for salmonids in the Chehalis River basin – Jeff Jorgensen (Northwest Fisheries Science Center, Fish Ecology Division, Ecosystem Analysis Program)
- Factors controlling the variability in invertebrate prey: consequences for stream-rearing salmonids in the Cedar River, WA – Jacob Bowman (College of Idaho, NOAA Hollings Scholar Program)

Theme: **Tools**

- Mapping historical riparian vegetation in the Columbia River basin – Oleksandr Stefankiv (NOAA Affiliate, A.I.S., Inc.)
- Using aquatic environmental DNA (eDNA) to track fish recolonization following dam removal on the Elwha River, Olympic National Park, Washington – Jeff Duda (USGS)
- Utilizing resilience metrics for restoration prioritization and monitoring: a Salish Sea case study – Britta Timpane-Padgham (NOAA Affiliate, A.I.S., Inc.)