

<b>Wednesday, April 28 10:45-11:45am</b>
<b>Climate Change</b>
Climate Impacts Group update
Crystal Raymond, Climate Impact Group
How Will Climate Change Affect the Distribution of Temperate Stream Vertebrates
Jennifer Elliott, Independent Scientist, Lakewood, WA, Chad A Larson, Washington Dept of Ecology, Lacey, WA and Glenn Merritt, Stacy Polkowske, Katrina L. Pound, Sophia I. Passy
SnoSCAT, the Snoqualmie Science Coordination and Advisory Team: A Diverse Collaborative Roundtable
Matt Baerwalde, Snoqualmie Indian Tribe, Snoqualmie, WA
<b>Ed &amp; Outreach 1</b>
Fostering Meaningful Engagement Through Community Science
Jess Newley, Friends of the San Juans, Friday Harbor, WA
New Tools to Communicate Multiple-benefits of Salmon Recovery: Department of Natural Resources' SalmonLink
Stephanie Celt, Washington State Department of Natural Resources, Seattle, WA
Supporting Collaboration and Learning for Integrated Floodplain Management and Salmon Recovery
Dan Calvert, Puget Sound Partnership, Tacoma, WA
Teaching People to Become Stewards of the Environment: The Northwest Stream Center
Tom Murdoch, Adopt A Stream Foundation, Everett, WA
<b>Fish Passage</b>
Icicle Creek Boulder Field Passage - Wildfish to Wilderness
Aaron Penvose, Trout Unlimited, Wenatchee, WA
Salmon Mortality at the Hood Canal Bridge and Proposed Modifications to Improve Migration Success
Megan Moore, NOAA, Port Orchard, WA and Barry Berejikian, Iris Kemp, Hans Daubenberger, Emily Bishop, Lucas Hall
The Right Tool for the Lob: Evaluating and Enhancing Fish Passage Prioritization Schemes with Geospatial Cost Models
Braeden Van Deynze, University of Washington - School of Marine and Environmental Affairs, Seattle, WA and Robby Fonnner, Blake Feist, Sunny Jardine, Dan Holland
<b>Floodplains</b>
Floodplain Restoration and Trust Water in the Walla Walla Basin: Data Gaps in Quantifying Generated In-stream Flow
Sarah Dymecki, Washington Water Trust, Seattle, WA
Heart of the Hoh-Floodplain Resiliency Planning
Tami S Pokorny, Jefferson County Public Health, Port Townsend, WA, Luke Kelly, Trout Unlimited, Olympia, WA and Jill Silver
Juvenile Pacific Salmon Habitat Use Along an Eco-engineered Seawall: An Acoustic Perspective
Kerry Accola, University of Washington, Seattle, WA and John Horne, Jeffery Cordell, Jason Toft
The Fate and Future of a Floodplain Foundational Species—Black Cottonwood Forests in a Regulated Yakima River Basin
Bridger Cohan, Yakama Nation Wildlife, Range, & Vegetation Resources Management Program, Toppenish, WA and Katrina Strathmann, Thomas Elliot, Kevin Fetherston

<b>Monitoring 1</b>
Advances in Monitoring Floodplain Restoration: What Has Changed in Recent Years and How Should Future Projects be Monitored
Phil Roni, University of Washington, Seattle, WA, Jason E Hall, Cramer Fish Sciences, Issaquah, WA and Derek Arterburn, Cramer Fish Sciences
Developing a Low-tech, Process-based Restoration Method to Restore Riverscapes and Mitigate Climate Change
Stephen Bennett, Utah State University, Logan, UT and Nicolaas Bouwes, Eco Logical Research, Inc., Providence, UT
Developing Sustainable Geospatial Monitoring Programs to Support Puget Sound Salmon and Ecosystem Recovery
Jason E Hall, Cramer Fish Sciences, Issaquah, WA and Shelby Burgess, Alex Stefankiv, Britta Timpane-Padgham, Timothy J. Beechie, George R. Pess, Jen Burke
Empowering Management and Monitoring of Restoration Projects on the Quillayute River with Reality-Based Mapping.
Brian Footen, EarthViews, SEATTLE, WA

<b>Wednesday, April 28 1230-1:30 pm</b>
<b>Food Web</b>
Effect of Multiple Pressures on Early Marine Survival of Juvenile Salmon in Puget Sound
Hem Nalini Morzaria-Luna, Long Live the Kings, Seattle, WA and Isaac C. Kaplan, Chris J. Harvey, Michael Schmidt, Elizabeth A. Fulton, Raphael Girardin, and Parker MacCready
Historical Variation of Herring Predation in Puget Sound
Hem Nalini Morzaria-Luna, Long Live the Kings, Seattle, WA and Tessa Francis, Ole Shelton , Isaac C. Kaplan
Juvenile Salmon Diets, Invertebrate Prey Resources, and Restoration on Puyallup's Clear Creek
Angela M Dillon, Puyallup Tribe of Indians, Puyallup, WA and Kristin Williamson, Isa Woo
<b>Ed &amp; Outreach 2</b>
Community Recruitment and Engagement: the Regional Fisheries Enhancement Group Story
Rachel Vasak, Nooksack Salmon Enhancement Association, Bellingham, WA and Shauna Hanisch-Kirkbride, Lower Columbia Fish Enhancement Group, Vancouver, WA
Empowering the Next Generation of Salmon Recovery Advocates!
Sheila Wilson, Nisqually River Foundation, Nisqually, WA
Recovery for Soldiers and Salmon: the Successful Partnership of the Veterans Conservation Corps and NOAA Fisheries
Kolten R Ollom, NOAA Fisheries, Seattle, WA and Anna Kagley, Kinsey Frick, Kim Pham
Salmon at the Crossroads: Communicating Salmon Recovery and Ways to Help Salmon in Your Backyard
Chantell Krider and Jennifer Johnson, RCO
<b>Large Scale Project Planning</b>
A Collaborative Approach to Restoring an Entire Basin
Carson Moscoso, Snohomish Conservation District, Lake Stevens, WA
Collaboration is Key: How People are Working Together to Restore River Habitat in the Chehalis Basin
Celina Abercrombie, Washington Department of Fish and Wildlife, Olympia, WA

Ramping Up Rapidly to Protect and Restore the Chehalis Basin
Emelie McKain, Washington Department of Fish & Wildlife, Olympia, WA
Restoration for People and Nature: Salmon Recovery Projects with Multiple Benefits
Tina Whitman MS, Friends of the San Juans, Friday Harbor, WA and Jim Johannessen, Coastal Geologic Services Bellingham WA
<b>Monitoring 2</b>
20 years of Large River Habitat Characterization in Snohomish County: What We Have Learned and What's Next
Luke Hanna, Snohomish County Public Works - Surface Water Management, Everett, WA, WA and Frank Leonetti, Mike Rustay, Brett Gaddis
Assessing Vegetation, Aquatic Invertebrates, and Water Quality in Restored Pocket Estuaries in Western Washington
David Johnson, Western Washington University, POULSBO, WA and Jenise M Bauman, Western Washington University, Bellingham, WA
Evaluating O. mykiss Life History Expression in the Yakima River Basin
Gabriel M Temple, Washington Department of Fish and Wildlife, Ellensburg, WA and Chris Frederiksen, Zack Mays, Tim Webster, Ryan Fifield, Todd Seamons
Snohomish County's State of Our Waters Program: An improved approach to monitoring salmon habitat in Snohomish County Streams
Steve R Britsch <sup>1</sup> , Luke Hanna <sup>1</sup> and Frank Leonetti, (1)Snohomish County Surface Water Management, Everett, WA
<b>Policy &amp; Regulations</b>
Our Fish Are More Precious than Gold: The Long Road to Pass Bipartisan Suction Dredge Mining Reform Legislation in Washington
Crystal M Elliot, Trout Unlimited, Twisp, WA and Pat Hesselgesser, Kim McDonald, Matt Baerwalde, Tom Uniack
The Columbia River Basin Restoration Act: Officially Designating the National Importance of Columbia River Basin restoration
Mary Lou Soscia, US EPA, Portland, OR and Michelle Wilcox, US EPA, Lacey, WA
The Endangered Species Act and the National Flood Insurance Program: Protecting Endangered Species in Pacific Northwest Floodplains
Erin S Cooper and Bryr Harris, FEMA Region 10, Bothell, WA
The Skagit Tidegate and Fish Initiative: An Innovative Regulatory Incentive Program for Supporting Salmon Recovery
Tom Slocum, Washington Conservation Districts NW Engineering Program, Mount Vernon, WA

<b>Wednesday, April 28 1:45-2:45pm</b>
<b>Hood Canal Case Study</b>
Building a Movement Case Study: Recovery of Hood Canal and Eastern Strait of Juan de Fuca Summer Chum Salmon
Scott Brewer and Alicia Olivas, Hood Canal Coordinating Council, Poulsbo, WA

**Thursday, April 29 10:45-11:45am****Emerging Science 1**

A Ubiquitous Tire Rubber-Derived Chemical Induces Acute Mortality in Coho Salmon

Zhenyu Tian, UWT Center for Urban Waters, Tacoma, WA, Haoqi (Nina) Zhao, University of Washington, Seattle, WA and Katherine T. Peter, Melissa Gonzalez, Jill Wetzel, Michael C. Dodd, Andre Simpson, Jenifer K. McIntyre, Edward P. Kolodziej

Bioaccumulation of Metals in Whatcom County Estuaries by Native Plants

Margaret D Critchlow and Jenise M Bauman, Western Washington University, Bellingham, WA

Occurrence and Temporal Trend of the Coho Salmon Toxicant in Urban Creeks

Zhenyu Tian, UWT Center for Urban Waters, Tacoma, WA and Craig Rideout, Melissa Gonzalez, Haoqi Zhao, Ximin Hu, Edward P. Kolodziej

Stage 0 Restoration and Ecosystem Recovery at the Valley Scale: Why Enhancing Channel Habitat Is Not Enough

Brian Cluer, NOAA Fisheries - West Coast Region, Santa Rosa, CA

**Invasive Species**

How the Northern Pike Invasion in the Upper Columbia Created Partnerships for Collaborative Solutions for the Columbia Basin

Laura Robertson, Upper Columbia United Tribes, Spokane, WA

Invasive Species and Salmon Recovery: Middle School Curriculum Workshops

Alexis Haifley, Washington State Recreation & Conservation Office, Olympia, WA, Justin D Bush, State of Washington Recreation & Conservation Office, Olympia, WA and Justin Bush

Working Together to Address the European Green Crab Threat to Salish Sea Shoreline Ecosystems

Jeffrey W Adams, Washington Sea Grant, Vashon, WA and Emily W Grason, WSG; P Sean McDonald, UW; Kate Litle, WSG; Amy Linhart, WSG; Alex Stote, WSG

**Mitigation**

A New Tool Facilitating Habitat Conservation: The Puget Sound Nearshore "Conservation Calculator"

Stephanie I Ehinger, National Marine Fisheries Service, Lacey, WA and David Price, National Oceanic and Atmospheric Administration, Lacey, WA

A Salmon Recovery Resilience Bond: How Private Capital and Collaboration Can Accelerate the Pace and Scale of Restoration

Kim Quesnel, Blue Forest Conservation, Sacramento, CA

Conservation Credits for Endangered Species Act Consultations in the Puget Sound Near-Shore

Ahren Stroming<sup>1</sup>, Larry Epstein<sup>1</sup> and Susan O'Neil, (1)Puget Sound Partnership, Tacoma, WA

Innovative Solutions Facilitating Habitat Conservation and Endangered Species Act Consultations in Puget Sound's Near-Shore

Jennifer Quan, NMFS, Lacey, WA

**Monitoring 3**

Cooperative Approaches for Completing Bull Trout Redd Surveys

John Crandall, Methow Salmon Recovery Foundation, WINTHROP, WA

eDNA as a Tool to Support Multiple Fish Habitat Goals in Snohomish County

Stuart Baker, Snohomish County Public Works - Surface Water Management, Everett, WA and Luke Hanna, Frank Leonetti, Steve Britsch, Robert Plotnikoff

Population-specific Distribution and Individual Growth and Residency of Juvenile Chinook Salmon in the Snohomish Estuary

Todd Zackey, Tulalip Tribes, Tulalip, WA and Josh Chamberlin, Adrian Spidle, Michael Crewson
Using Acoustic Telemetry to Improve Understanding of Endangered Chinook Salmon Migrations in the Nooksack River
Devin Flawd, Lummi Nation, Bellingham, WA
<b>Orca</b>
A Roadmap for Recovery of Endangered Southern Resident Killer Whales
Lynn Barre, NOAA Fisheries
Pinniped Conservation and Management in Washington State
Nate Pamplin, Director of Budget and Government Affairs with the Washington Department of Fish and Wildlife
Reducing Pollution to Benefit Salmon, Orcas, and People
Mindy Roberts, Washington Environmental Council
Task force recommendations
Erik Neatherlin, Executive Coordinator of Governor's Salmon Recovery Office

<b>Thursday, April 29 1:00-2:00pm</b>
<b>Emerging Science 2</b>
Hot River, Cool Projects
Marcella Appel, Benton Conservation District, West Richland, WA and Rebecca Wassell, Mid-Columbia Fisheries Enhancement Group, White Salmon, WA
Scaling-Up Beaver-Powered Restoration in the Upper Columbia: A Decision Support Systems approach
Crystal M Elliot, Trout Unlimited, Twisp, WA, Kurt Fesenmyer, Trout Unlimited, Boise, ID and Matt Mayfield, Kodi Jo Jaspers
Variables Affecting Marine Survival of Salmon
Neala W Kendall, Washington Department of Fish and Wildlife, Olympia, WA and Mike Haggerty, Mike Crewson, Dave Beauchamp, Diego Holmgren, Benjamin Nelson, Sandra O'Neill, and Casey Ruff
<b>Hatchery + Harvest</b>
hatchery production for orca
WDFW
Modified Commercial Fish Trap to Help Reduce Salmonid Bycatch Mortality
Adrian M Tuohy, Wild Fish Conservancy, Duvall, WA
Phases of Recovery as a Tool for Adaptive Management and H-Integration
Kenneth Currens, NW Indian Fisheries Commission, Olympia, WA, Alex Sweetser, Triangle Associates, Seattle, WA and Mike Crewson
Trends in Chinook Abundance and Southern Resident Killer Whale Demographic Rates
Dr. Derek Dapp, Chinook Modeler, WDFW
<b>Human Dimensions in Salmon Recovery</b>
Building a Movement for Local Conservation Corps Jobs in Restoration
Jill Silver and Raena Anderson, 10,000 Years Institute, Forks, WA
Salmon and People Living Together—Cities Working to Build Diversity, Equity, and Inclusion in Salmon Recovery

Lauren S Urgenson, Lake Washington/Cedar/Sammamish Watershed (WRIA 8), Seattle, WA and Carla D Nelson, WRIs 8, 9 and the Snoqualmie Watershed, Seattle, WA
Water-Sustainable Food: How We Can Eat Our Way to Healthier Streams, Equitable Agriculture, and Climate-Resilient Communities
Emily J Dick1, Jason Hatch1 and Nicole Gutierrez, (1)Washington Water Trust, Seattle, WA
<b>IMW</b>
Coho Salmon Response to Restoration in the Hood Canal Intensively Monitored Watershed
Joe Anderson, Washington Department of Fish and Wildlife, Olympia, WA and Clayton Kinsel, Kirk Krueger, William Ehinger, Timothy Quinn, Robert Bilby
Fish Response to Habitat Treatments in the Lower Columbia Intensively Monitored Watershed
Marisa N Litz, Washington Department of Fish and Wildlife, Olympia, WA and Jamie Lamperth, Washington Department of Fish and Wildlife, Kelso, WA
Lessons Learned from Washington's Intensively Monitored Watersheds
Keith Dublanica, Governor's Salmon Recovery Office - RCO, Olympia, WA and Joseph Anderson, Eric Beamer, Steve Bennett, Bill Ehinger, Correigh Greene, Kirk Krueger, Mike McHenry, George Pess
<b>Short Films 1</b>
Rainbow Bend: a 20-year Floodplain Restoration Journey
Judy Blanco and Dan Eastman, King County Water and Land Resources Division, Seattle, WA
Rising From the Ashes
North Fork Studios

<b>Friday, April 30 9:00-10:00am</b>
<b>Blocked Area Case Study</b>
A Vision of Salmon in the Cultural Territories of the Coeur d'Alene Tribe
Thomas Biladeau, Coeur d'Alene Tribe, Plummer, ID
Cultural and Educational Salmon Releases Above Chief Joseph and Grand Coulee Dams
Casey Baldwin, Colville Confederated Tribes, East Wenatchee, WA
Estimates of Chinook Salmon Spawning Habitat in a Blocked Reach of the Columbia River Above Grand Coulee Dam
Brian Bellgraph, Pacific Northwest National Laboratory, Seattle, WA
Fishing for the Past: Progress Restoring Salmon to the Upper Columbia
Conor Giorgi, Spokane Tribe of Indians, Spokane, WA

<b>Friday, April 30 10:45-11:45am</b>
<b>Emerging Science 3</b>
Basin Events to Coastal Impacts: An Ocean Intelligence System for Fish and People
Mark Saunders, International Year of the Salmon, Director
Factors Limiting Survival of Juvenile Chinook, Coho, and Steelhead in the Salish Sea: Salish Sea Marine Survival Project
Michael Schmidt, Long Live the Kings, Seattle, WA
The Likely Suspects Framework: Building Decision Support Tools for Rapidly Changing Environmental Conditions

Caroline Graham, North Pacific Anadromous Fish Commission, Vancouver, BC, Canada and Matt Siegle, Brian Wells, Catherine Michielsens, Colin Bull, Scott Akenhead, Richard Erhardt, Sue Grant, Michael Schmidt, Janson Wong, Marc Porter, Mark Saunders
<b>Project Planning</b>
Economic Considerations of Whole Watershed Restoration
Reid J Camp, Cramer Fish Sciences, Moscow, ID
Mapping tidal barriers to support identification and evaluation of restoration opportunities
Shelby A Burgess, Cramer Fish Sciences, Issaquah, WA and Jason Hall, Tim Beechie, Oleksandr Stefankiv, Mary Ramirez, Doris Small, Ryan Gatchell, Jen Burke, Nathalie Hamel
Restoring or Creating Barrier Embayments and Coastal Inlets for Juvenile Salmon
Jessica Côté, Blue Coast Engineering, Lake Forest Park, WA and Traci Sanderson
Tools of the Trade: Building a Movement using Prioritization Tools in the Upper Columbia
Greer Maier, Upper Columbia Salmon Recovery Board, Wenatchee, WA and Tracy Hillman, Upper Columbia Regional Technical Team, BioAnalysts
<b>Short Films 2</b>
Lifeblood: Connected by Water, United by Hope
Lindsey Desmul, WA Dept of Fish and Wildlife, Mill Creek, WA and Jennifer Moslemi, Marita Davison
Phase 1 Report: Fish Passage and Reintroduction Above Chief Joseph and Grand Coulee Dams
Casey Baldwin, Colville Confederated Tribes, East Wenatchee, WA, Mary Davisson, Colville Confederated Tribes, Omak, WA and Conor Giorgi, Tom Biladeau, John Sirois
<b>Water Quality &amp; Quantity</b>
Characterizing the Chemical Profile of Stormwater-Impacted Waters
Katherine Peter, National Institute of Standards and Technology, Charleston, SC, Jessica I Lundin, NOAA Fisheries, Northwest Fisheries Science Center, Seattle, WA and Christopher Wu, Blake E. Feist, Zhenyu Tian, James R. Cameron, Edward P. Kolodziej, Nathaniel L. Scholz
How Floating Treatment Wetlands Can Clean Up Urban Stormwater Runoff
Lizbeth A Seebacher, University of Washington, Seattle, WA
How Much Are Conservation-based In-stream Flows Worth? Valuation and benefits of Trust Water Projects in Washington
Greg McLaughlin, Washington Water Trust, Seattle, WA
Unconventional and emerging water quality obstacles to salmon recovery
Nathaniel L Scholz, NOAA Fisheries, Northwest Fisheries Science Center, Seattle, WA
<b>Large Scale Projects</b>
A Tiered Approach to Wood: Targeted Engineering Paired with Large-scale Replenishment in the North Fork Teanaway River
Rebecca Wassell, Mid-Columbia Fisheries Enhancement Group, White Salmon, WA and Ryan DeKnikker, Yakama Nation, Ellensburg, WA
Building the South Prairie Creek Preserve Restoration Project: 18 Years in the Making
Kristin Williamson, South Puget Sound Salmon Enhancement Group, Olympia, WA and Jayme Gordon
Fish Use and Site Characteristics of Recently Breached Smith Island, Snohomish Estuary
Frank Leonetti, Snohomish County, Everett, WA and Michael Rustay, Scott Moore, Brett Gaddis, Luke Hanna, Gi-Choul Ahn

Wetland Reconnection and Habitat Restoration on South Bachelor Island: Working in Dredge Material on the Lower Columbia River

Alex H Uber, WDFW, Ridgefield, WA