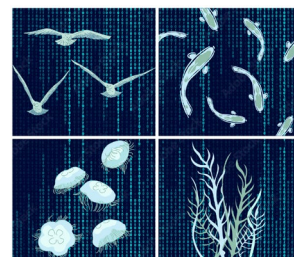


Emerging Technologies Information Sessions

AGENDA



	Day 1 – October 26, 2026	
9:00 AM (PDT)	Training/ Workshop Genetics 101 for Fisheries Professionals	Audrey Harris (PSMFC/ IDFG), Rebekah Horn (CRITFC)
12:00 PM	Check-in Registration	
1:00 PM	Welcome/Orientation	
1:10 PM	Plenary	
	Data QA/QC	
1:40 PM (PDT)	Transparent management inputs – data workflows incorporating GitHub	Erik Suring (ODFW)
2:00 PM	OXBOW: Wrangling Fish and Environmental Data into a Single SQL Database Using Advanced Claude Models	Derrek Faber (ODFW)
2:20 PM	The Data Mindful PDF: How to Make Table-filled Reports More Useful	Brian Maschhoff (Salmonetics)
2:40 PM	Additional Q&A	
2:50 PM	Break	
	Data QA/QC Continued	
3:10 PM (PDT)	Developing a Fish Age Database: Lessons Learned & Future Considerations	Matt Weeber (ODFW)
3:30 PM	Structuring Knowledge, Not Just Data: An Ontology Framework for Comparable, Reproducible Conservation Indicators	Elizabeth Ng , Erika Rubenson, Sam Haffey (Spheros Environmental)

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3:50 PM (PDT)	Using Manual Text Annotation and Machine-learning-assisted Natural Language Processing (NLP) to Extract, Classify, and Compare Conservation Actions and Strategies Across Management Plans	Jacob Usinowicz , Michelle Stantial, Lauren Kemper, Erika Rubenson, Elizabeth Ng (Spheros Environmental)
4:10 PM	Modernizing Spawning Ground Surveys with Mobile Technologies: Joint Insights from Oregon and Idaho on Survey123 Design, Deployment, and Field Application	Kasey Bliesner , Joseph Feldhaus, Melody Feden, Joe Dittmer, Alex Woolen, Erik Suring, Briana Sounhein, Matt Weeber (ODFW) Evan Brown , Megan Merkley, Bryan Boson, Chris Harrington, Brock Lipple (IDFG)
4:30 PM	Break	
5:00 PM	Poster Session and Exhibitor Spotlight Reception in Stevenson Ballroom with appetizers and no-host bar	
7:00 PM	Adjourn	

	Day 2 – October 27, 2026	
7:20 AM	Breakfast	
8:10 AM	Orientation for Day 2	
	<i>Tagging and Trapping Tech</i>	
8:20 AM (PDT)	A Self-Powered Acoustic Transmitter for Long-Term Fish Movement Monitoring	Daniel Deng , Huidong Li, Jun Lu, Hyunjun Jung, Zhaocheng Lu, Bingbin Wu, Stephanie Larson (Pacific Northwest National Laboratory)
8:40 AM	Yakima Basin Flexible PEX Antennas	Zack Mays, Ceiteag Hennis (Yakama Nation Fisheries)

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9:00 AM (PDT)	Tracking Ocean Migration Routes of Steelhead Using Pop Up Satellite Archival Tags (PSATs)	Matthew Thornton , Ryan Solee (The Wilderness Calling Conservation Initiative)
9:20 AM	SMART Dart(TM): Development and Feasibility Testing of a Novel RFID Fish Tagging System for Enhanced Detection and Monitoring	Keith van den Broek , Stine Griep (Hinchinbrook, Inc.)
9:40 AM	Tiny Tags, Big Results: Using FRYID™ RFID Technology to Study Early Life-Stage Salmonids	Stine Griep , Keith van den Broek (Hinchinbrook, Inc.)
10:00 AM	Break	
<i>Predictive Modeling and Best Practices</i>		
10:20 AM (PDT)	Proof of Concept: Stocking YY-males to Eradicate Brook Trout in a Closed Population	Brian Davis , Jen Poirier (US FWS)
10:40 AM	Integrating Ecosystem Models with Long-Term Monitoring to Support Salmon Recovery	Eric Doyle (Confluence Environmental Company), John Arterburn, Ryan Klett (Confederated Tribes of the Colville Reservation)
11:00 AM	Evolving Ecosystem Diagnosis & Treatment: Integrating Monitoring Data to Advance Adaptive Salmon Recovery Planning	Laura McMullen (ICF)
11:20 AM	Investigating precision and bias of commonly used salmonid abundance survey methods	Brian McGreal , William Jaeger, Mark Scheuerell (University of Washington)
11:40 AM	Using GIS to calculate geomorphological change in a river system over time	Katie Messick (WEST Consultants, Inc.)
12:00 PM	Additional Q & A	
12:10 PM	Lunch	

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	<i>Remote Sensing</i>	
1:40 PM (PDT)	Advancing Habitat Monitoring with Bathymetric LiDAR in the Methow Basin	Ryan Klett (Confederated Tribes of the Colville Reservation)
2:00 PM	Wetland Vegetation Modeling with UAV Lidar & Multispectral Data for Habitat Monitoring	Katarina Lunde (Lower Columbia Estuary Partnership)
2:20 PM	Leveraging UAV Lidar Data in Wetland Habitat Monitoring	Derek Marquis (Lower Columbia Estuary Partnership)
2:40 PM	3D Characterization of Streambank Complexity from UAS Surveys	Jen O'Neal , Shawn Higgins (Natural Systems Design)
3:00 PM	Integrating UAV and Ground Surveys to Monitor Redd Superimposition of Tule Fall Chinook in the White Salmon River, WA	Justin Baker , Rikeem Sholes, David Hand (US FWS)
3:20 PM	Break	
	<i>Genetics (eDNA, PBT, etc.)</i>	
3:40 PM (PDT)	Implementation of a mobile DNA sequencing laboratory for real-time assessment of Columbia River basin fisheries	Lanie Galland , Shawn Narum (Columbia River Inter-Tribal Fish Commission)
4:00 PM	Can Metabarcoding of Aquatic eDNA Replace Traditional Biological Assessments in Streams and Rivers?	Daren Carlisle , Karen Beaulieu, Yer Lor, David Pilliod, Stephen Spear, Paul Frandsen, Chuck Hawkins (USGS)
4:20 PM	Environmental DNA as a Tool for Aquatic Pathogen Surveillance: From Detection to Population Health Inference	Corbin J. Schuster , Bailey Morgan, Tamsen Polley, Michael Kent (Oregon State University)
4:40 PM	Mapping Washington's Aquatic Biodiversity Using Environmental DNA	Allison Ying (WDFW)

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5:00 PM (PDT)	Incorporating angler perspectives and ecological evidence to inform management of non-native fish interactions with native Yellowstone Cutthroat Trout in the Teton River Basin, Idaho	Lucas Ellingson-Cosenza , Colden Baxter, Morey Burnham (Idaho State University)
5:20 PM	Adjourn	

7:30 AM	Breakfast	
8:30 AM	Orientation for Day 3	
<i>AI, Machine Learning, and More</i>		
8:50 AM (PDT)	Finding the Bottlenecks: Stage-Specific Survival of Juvenile Chinook Across Eastern Vancouver Island	Sam James , Jamieson Atkinson, Will Duguid, Nicole Hill, Joe Thorley, Katie Innes, Thomas Negrin, Cypress Hunder-Rookes, Isobel Pearsall (Pacific Salmon Foundation)
9:10 AM	Replacing the Clipboard: Computer Vision for Scalable, Continuous Recreational Salmon Catch Monitoring in the Strait of Georgia	Jamieson Atkinson , Sami Ma, Philip Lemp, Sam James, Riya Shaju, Matthew Clarke, Jiangchuan Liu (Pacific Salmon Foundation)
9:30 AM	Why Monitoring Hasn't Changed Outcomes (and What Might Finally Fix It): Linking Ecological Measurement to Risk and Valuation	Raymond K. Timm, Ph.D. (Siskowet Enterprises, LLC)
9:50 AM	Applying Machine Learning to Learn from Fish Returning to the Klamath River After Dam Removal	Michael Hobley , Damon Goodman (CalTech and CalTrout)
10:00 AM	Additional Q & A	

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10:20 AM (PDT)	Break	
	<i>AI, Machine Learning, and More Continued</i>	
10:40 AM (PDT)	Advancing AI-Assisted Fish Counting in the Columbia River Basin Using BlueFish	Elliot Koontz (Spheros Environmental)
11:00 AM (PDT)	Automating salmon counting and identification with computer-vision deep learning	Dr. William I. Atlas; Sami Ma, Charles Xu, Henry Fang, Thor Veen (Wild Salmon Center; Salmon Vision Collaborative)
11:20 AM	Markerless Pose Estimation with DeepLabCut: Quantifying Rheotaxis in Hatchery-Reared Chinook Salmon	Rikeem Sholes (US FWS)
11:40 AM	Automated Field Assessment of Cyanobacterial Harmful Algal Bloom Intensity in the Sacramento–San Joaquin Delta Using Transfer Learning	George Batten (Environmental Science Associates)
12:00 PM	Lunch/Adjourn	
1:30 PM	Field Trip Mobile Genetics Lab - Oxbow Fish Hatchery in Cascade Locks, Oregon	Lanie Galland, Shawn Narum (Columbia River Inter-Tribal Fish Commission)

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