Emerging Technologies Information Sessions (ETIS) 2022 - Presentation Schedule

All times listed below are Pacific Standard Time

	November 14, 2022 - Gorge Room
11:00 AM	Start On-site Event Check In
1:00 PM	Opening Remarks
1:20 PM	**Keynote: Mark Saunders (NPAFC): The High-Tech Future of Salmon Resource Management: Marvel or Muddle?**
	Session 1
1:40 PM	Kurt Carpenter (USGS): Hyperspectral Characterization of Periphyton in Rivers Used for Municipal Drinking Water Supply
2:00 PM	Emily Heaston (USGS): Feature Mapping Mobile Data Collection – Tools for Tracking Stream Flow Permanence and Stream-road Crossings in the Pacific Northwest
2:20 PM	Rob Ames (PSMFC): Operational Machine Learning Predicts Illegal Groundfish Fishing off U.S. West Coast
2:40 PM	Break
	Session 2
3:00 PM	Eric Brasseur (PSMFC): The Things I Thought I Knew About Going Paperless: Lessons on Tech for Observer Programs with a Dash of Salt
3:20 PM	Laura Nickelhoff (ESA Sitka): Case Study: Enforcing Data Standards, Improving Data Management, and Advancing Data Visualization with DELVE
3:40 PM	Shawn Sitar (MI DNR): Voice to Data: Fisheries Biodata Collection by Voice Recognition
4:00 PM	Teun Everts (RINF): Using Environmental DNA Analyses to Locate, Quantify and Predict the Occurrence of a Widespread Invasive Amphibian: Implications for a National Management Program in Belgium
4:20 PM	Evening Social - Poster Session & Exhibitor Spotlights
7:00 PM	Adjourn

	November 15, 2022 - Gorge Room	November 15, 2022 - Trillium Room
7:30 AM	Breakfast	
8:30 AM	Opening Remarks	
8:45 AM	**Keynote: Samantha Chisholm-Hatfield (OSU): Traditional Ecological Knowledge (TEK)**	
	Genetics 1	**Remote Sensing 1**
9:20 AM	Kim Parsons (NOAA Fisheries): SADIE: A Semi-autonomous Sampler for In Situ Filtering of Seawater at Depth for Marine eDNA Studies	Jake Kvistad (CFS): Remote Classification of Instream Salmonid Habitat Units
9:40 AM	Leslie Reinhardt (PSMFC): Validation of Scale-Derived Ages in Wild Juvenile and Adult Steelhead Using Parental-Based Tagging	Logan Breshears (OSU): Investigation and Mapping of John Day Steelhead Overshoot
10:00 AM	Matthew Campbell (IDFG): Grandparent Inference from Genetic Data: The Potential for Parentage-Based Tagging Programs to Identify Offspring of Hatchery Strays	Sarah Kidd (LCEP): Multispectral UAV Data for Wetland Plant Community Mapping: Predicting and Evaluating Restoration Impacts
10:20 AM	Break	Break
	Genetics 2 / Electronic Reporting	**Remote Sensing 2**
10:40 AM	David Pilliod (USGS): Assessing the Distribution and Status of Native Freshwater Mussels in the Boise River	Aaron Tamminga (ESSA): Using Satellite-based Depth Mapping and Simple Statistical Models of Riverbed Elevations for Large River Monitoring
11:00 AM	Jim Birch (MBARI): Development of a New Autonomous eDNA Sampler Based on 25 Years of Instrument Development	Shon Zimmerman (PNNL): Unmanned Aerial Vehicle (UAV) Remote Sensing Method Development for Wetland Assessments
11:20 AM	Patrick Cooney (SR): Data, Mapping, and Reporting Made Simple With Innovative Electrofishing Equipment	Narayan Elasmar (CREST): CREST UAS Use in Restoration and Monitoring in the Lower Columbia River
11:40 AM	Beth Sosik (KC): Monitoring Flap Gate Function: Using DIY Technology to Understand How Flap Gates Affect Fish Passage	Daniel Auerbach (WSU): Identifying and Enumerating Salmonid Redds from Drone Imagery on the Wenatchee River, WA
12:00 PM	Lunch	Lunch
	Remote Sensing 3	
1:20 PM	Peter Esselman (USGS): Whole-lake Indexing of Benthic Fish Biomass with an Autonomous Underwater Vehicle in Lake Michigan	
1:40 PM	Matt Barker (OSU): Sampling-Based Approaches to Estimating Two-Dimensional Coarse Woody Debris Area from UAS Imagery	
2:00 PM	Alexander Fremier (WSU): Drone-based Environmental Monitoring: Measuring Velocity, Temperature and Morphology	
2:20 PM	Tyler King R (USGS): Operational Remote Sensing of Water Quality	
2:40 PM	Break	

	November 15, 2022 - Gorge Room	November 15, 2022 - Trillium Room
	Predictive Modeling	**Data Management**
3:00 PM	Jason Dunham (USGS): Watershed Condition on Federal Lands in the Pacific Northwest: Insights from 25 Years of the Northwest Forest Plan	Mari Williams (PSMFC): Coordinating Data to Guide Federal ESA Decisions: NOAA Fisheries and the CAX
3:20 PM	Francine Meija (USGS): Characterizing Stream Flow Permanence in the Colville National Forest	Kasey Bliesner (ODFW): Fishing for Organized Data: Managing Steelhead Harvest Data in the Grande Ronde and Imnaha Basins, OR
3:40 PM	Derrek Faber (ODFW): Using Predictive Models and Web-data Scraping to Forecast Stream Temperature	Melody Feden (ODFW): Creating a sustainable long-term water temperature monitoring strategy: tools and lessons learned
4:00 PM	Kristin Jaeger (USGS): Modeling Frameworks for Mapping Streamflow Permanence and Integrated Datasets to Inform Management Decisions on Stream and Riparian Conditions	Erin Dlabola (PSMFC): Data Exchange Standard for Integrating Stream Habitat Data from Multiple Monitoring Programs
4:20 PM		Dan Brown (OR DEQ): Oregon DEQ's Utilization of the Web-based Data Management System AWQMS
4:40 AM	Adjourn	Adjourn

	November 16, 2022 - Gorge Room
7:30 AM	Breakfast
8:25 AM	Opening Remarks
8:30 AM	**Keynote: Leila Kaneda (SightLine Applications): Machine Learning - Your New Best Friend**
	Artificial Intelligence / Machine Learning
9:00 AM	Kai Ross (CFS): Automated Fish Detection for a Mobile Sampling Platform
9:20 AM	Justin Kay (CIT): Automated Salmonid Counting in SonarData
9:40 AM	Keane Flynn (UNR): Artifishal Intelligence: A Convolutional Neural Network Approach to Migratory Fish Counts
10:00 AM	Break
	Data Visualization
10:20 AM	Ian Edgar (LCEP): Visualizing and Analyzing 10 years of Wetland Habitat Monitoring Data in Tableau
10:40 AM	Mathew Bayly: StreamStats BC Web Application for Watershed Summaries
11:00 AM	Michelle Jeffries (USGS): Translating Science with Interactive Visualizations
11:20 AM	Closing Remarks
11:40 PM	Adjourn