Technical Sessions, Tuesday 5/23/2017, 1:20 – 3:00 PM

	Advances in Applications of Fish Hard Part Microchemistry: Concepts and Techniques	Overcoming the Communication Breakdown Between Scientists and Stakeholders	Reconnecting Non-Anadromous Fish Populations	Review of Fish Passage/Barrier Projects: Research, Application, and Lessons Learned	Environmental DNA 2.0: What is eDNA Doing for Fisheries Today?	Reservoir and Lake Fish Dynamics Under a Climate of Change and Multi-Year Drought
Room	**330**	**331**	**332**	**333**	**336/337**	**Theater**
Moderator	**Sam Bourret**	**Nancy Leonard**		**Dan March**	**Taylor Wilcox**	
1:20 PM	Quantifying Individual Based Migration Strategies to Understand Selection on Juvenile Life-History for a Salmon Population in an Altered Landscape **Jens Hegg***	When Science Speaks: Improving Your Communication with the Press, the Public, and Policy Makers **Nancy Leonard and John Harrison**	Malad River Rainbow Trout Passage: Past Success Informing Future Design **Steve Brink**	A Baseline Swimming Assessment for Arctic Grayling: Characterizing the Volitional Swimming Performance of Arctic Grayling to Inform Passage Studies **Erin Ryan**	Environmental DNA 2.0: What is eDNA Doing for Fisheries Today? **Taylor Wilcox**	Resiliency and Vulnerability of Lentic Ecosystems and Communities to Multiyear Drought: What is Known and What Remains Uncertain **Jereme Gaeta**
1:40 PM	Evaluation of Fin Rays and Scales as Nonlethal Alternatives to Otoliths for Assessing Natal Origins in Salmonids **Jaclyn McGuire***	The Communications Secret the Pros Don't Want You To Know About **Tom Dickson**	An Automated Imaging System to Monitor Rainbow Trout Passage **Steve Brink**	Arctic Grayling and Denil Fishways: A Study to Determine How Water Depth Affects Passage Success of Arctic Grayling Through Denil Fishways **Matt Blank**	Spatio-temporal Distributions of Bull Trout and Rainbow Trout in the Bruneau-Jarbidge Rivers Wilderness **David Pilliod**	Drought Effects on Lake and Reservoir Levels in the American West **Sarah Null**
2:00 PM	Quantifying the Shifting Habitat Mosaic of Pacific Salmon Using Otolith Microchemistry and Dendritic Isoscapes **Sean Brennan**	Drawn to Science: Communicating Visually for Diverse Purposes and Audiences	Whooshh Fish Passage - Non-Anadromous Species Reconnectivity **Todd Deligan**	Steep Grade Ahead – Developing Fishway Design Criteria for Small-bodied Great Plains Fishes **Tyler Swarr***	Phased Approach for Monitoring Recolonization by Anadromous Fish of a Large, Transboundary Watershed **Matthew B. Laramie**	Drought May Compound Effects of Climate Warming on High Elevation Lakes **Kyle Christianson***
2:20 PM	Natal Origins and Migration Behavior of Kokanee Salmon in Lake Roosevelt **Tim Linley**	**Bethann Garramon Merkle**	Transport-to-Adult Return Rates Among Adfluvial Bull Trout Transported as Juveniles Downstream of Hydroelectric Dams in the Lower Clark Fork River **Eric Oldenburg**	Whitewater Parks: Implications for Fish Habitat and Fish Passage **Matt Kondratieff**	Turning Genomic Data into eDNA Assays for Detection of a Cryptic Invasion Front **Travis Seaborn**	Multiyear Drought-Driven Changes in Zooplankton Community Structure with Implications for Fish Conservation in a Large Shallow Lake **Kevin Landom**
2:40 PM	Egg vs. Water: Maternal and Incubation Water Contributions to Otolith 87Sr/86Sr **Jill Janak**		Reconnecting Migratory Westslope Cutthroat Trout Populations in the Lower Clark Fork River Following Years of Blockage **Shana Bernall**	Lolo National Forest: 15 Years of Aquatic Organism Passage **Shane Hendrickson**	Detecting Spawning of Threatened Chum Salmon Over a Large Spatial Extent Using eDNA: Implications for Monitoring Recolonization **Kris Homel**	*Mysis diluviana* Responses to Severe Drought in Three Montane Reservoirs **Brett Johnson**

***Student Presentation**

Technical Sessions, Tuesday 5/23/2017, 3:20 – 5:40 PM

	Advances in Applications of Fish Hard Part Microchemistry: Concepts and Techniques	Overcoming the Communication Breakdown Between Scientists and Stakeholders	Reconnecting Non-Anadromous Fish Populations	Review of Fish Passage/Barrier Projects: Research, Application, and Lessons Learned	Environmental DNA 2.0: What is eDNA Doing for Fisheries Today?	Reservoir and Lake Fish Dynamics Under a Climate of Change and Multi-Year Drought
Room	**330**	**331**	**332**	**333**	**336/337**	**Theater**
Moderator	**Sam Bourret**	**Nancy Leonard**		**Erin Ryan**	**Taylor Wilcox**	
3:20 PM	The Influence of Rainbow Trout Hybridization on Natal Site Fidelity **Samuel L Bourret**	What Reporters Look For **Robert Chaney**	Conservation of Bull Trout in the Lower Clark Fork River: Evaluating the Effects of Passage, Nonnative Trout Suppression, and Habitat Restoration **Douglas Peterson**	Swimming Performance of Sauger in Relation to Fish Passage **Kevin Kappenman**	Monitoring Pacific Lamprey Distribution and Re-introduction in the Wenatchee River: an eDNA Pilot Study **Ann Grote**	The Effect of Multiyear Drought on Habitat Availability and Tributary Connectivity with Implications for Bear Lake Sculpin & Bonneville Cutthroat Trout **Hayley Glassic***
3:40 PM	Quantifying Hypoxia Exposure in Fishes Using Redox-Sensitive Chemical Markers in Otoliths **Benjamin Walther**	How to Talk about Science so that People Want to Listen and Get Involved **Patrick Ortmeyer**	An Evaluation of Variables Influencing Cutthroat Trout Colonization and Abundance in Newly Accessible Habitats Above Previously Blocking Road Culverts **Travis Schill**	Design and Construction Considerations for Remote Fish Barriers **Dan March**	Using Environmental DNA to Evaluate Invasive Species Eradication Efforts **Adam Sepulveda**	The Effect of Lake Level on Forage and Lahonton Cutthroat Trout in Pyramid Lake, Nevada **Gary Thiede**
4:00 PM	The Use of Strontium Isotope Ratios 87Sr:86Sr in Otoliths and Fin Rays to Inform Ecology, Conservation, and Management of Fishes in California **Jim Hobbs**	Four Secrets to Help Non-scientists Understand (or at least appreciate) the Science Behind the Issue **Jennifer Anders**	**Meet and Engage with AFS Leadership - Featuring Doug Austen, Joe Margraf, and Others**	Restoration of a Legacy Fish Passage Barrier in the Upper Salmon River Drainage, Idaho **Chad Wiseman**	No Fish Left Behind: Environmental DNA Sampling to Ensure Successful Fish Eradication **Kellie Carim**	Water Clarity, Drought and Length-Weight Relationships of the Endangered June Sucker and Sport Fishes in a Highly Eutrophic Utah Lake **Ryan Dillingham**
4:20 PM	Estimating Behavioral Diversity of Salmonids in the Upper North Platte River Using Otolith Microchemistry **Lindsy Ciepiela***			Fish Passage at Remote Natural Barriers **Shaun Bevan**	At the Forefront: Evidence of the Applicability of Using Environmental DNA to Quantify the Abundance of Fish Populations in Natural Lentic Waters **Stephen Klobucar***	Do Reservoirs Trophic Niche Spaces Become More Crowded Under a Warmer, Drier Climate? **Phaedra Budy**
4:40 PM	Stable Isotope Analyses on Otoliths of Pacific Salmon **Yongwen Gao**			Harmony Ditch Diversion, It's Not Always Harmony **Erin Leonetti**	The Promise and Pitfalls of Fish Enumeration Using eDNA: Spatiotemporal Dynamics of Salmon DNA in a Spawning Stream **Michael Tillotson***	Finding a Way to Create Robust Fisheries in a Changing Environment **Craig Walker**
5:00 PM				Regulatory Considerations for New Fish Passage Technologies **Alison Colotelo**	The Range-wide, eDNA-Based Inventory of Bull Trout: Early Results and an Ongoing Invitation **Michael Young**	**Round Table Discussion - Organization of a "Fisheries" Perspective Article**
5:20 PM				Perspectives on Restoring Connectivity and Anadromy Upstream of Impassable Dams in the Elwha and Skokomish Systems, Washington **Kathryn Sutton**	The Aquatic eDNAtlas for the American West: All Species, All Streams Through Crowd-sourcing and One Interagency Database **Dan Isaak**	

***Student Presentation**

Technical Sessions, Wednesday, 5/24/2017, 8:00 – 10:00 AM

	Transformation of the Upper Clark Fork River Basin: a Story of Success, Challenges, and the Collaboration that is Making It Happen!	Contributed Presentations: Inland Fisheries Ecology and Management	The Human Element of Aquatic Restoration: Working with Stakeholders to Plan and Implement Restoration	Invasive Species and Fishery Management - an Examination of Current Issues	Fifty Years of Fisheries Genetics: Allozymes to Genomes	The Yellowstone River: A Lot Can Change in 692 Miles
Room	**330**	**331**	**332**	**333**	**336/337**	**Theater**
Moderator	**Vicki Watson**	**Mike Meeuwig**	**Tracy Wendt**	**Bruce Farling**	**Fred Allendorf**	
8:00 AM		2017 State of the Salmonids: Fish in Hot Water **Patrick Samuel**	A Collaborative Approach to Restoration and Flood Recovery on the Big Thompson River **Tracy Wendt**	Invasive Species and Fisheries Management: an Examination of Current Issues **Leah Elwell**	Fifty Years of Fisheries Genetics: Allozymes to Genomes **Fred Allendorf**	An Introduction to the Yellowstone River **Leanne Roulson**
8:20 AM		Temporal Variability in the Distribution and Abundance of a Desert Trout Associated with Stream Drying **Mike Meeuwig**	Collaborating to Develop a Watershed Action Plan **David Ward**	Western Lake Trout Woes - Revisited **Wade Fredenberg**	Some Neat Stuff in Fishery Genetics I Have Stumbled Across Over the Years	Mountain Whitefish Kill and Proliferative Kidney Disease in the Yellowstone River, Montana **Scott Opitz**
8:40 AM	Symposium Introduction **Vicki Watson**	The Salmonid Population Viability Project: Modelling Trout Viability in a Desert Landscape **Doug Leasure**	Culture Clash and Partnership? Challenges of Implementing Watershed Restoration for Threatened and Endangered Species in Culturally-Significant Areas **Rob Lawler**	Evaluation of Suppression Methods Targeting Non-native Lake Trout Embryos in Yellowstone Lake **Nathan Thomas***	**Robin Waples**	Aquatic Ecological Diversity Shifts Along the Yellowstone River Continuum from Trout to Sturgeon **David Stagliano**
9:00 AM	The Upper Clark Fork River: A History of Use, Abuse and Reuse **Matt Vincent**	How Many Fish Live in that River Network? A Scalable Population Estimator that uses Spatial Stream Network Models and Nonrandom Fish Density Datasets **Dan Isaak**	Implementing Process-Based Restoration in Harvey Creek, Washington, USA **Eric Berntsen**	The Northern Pike Minnow, You Should be Very Afraid...Be Very Afraid **Joe Maroney**	Use of Local Westslope Cutthroat Trout Stocks for Genetic Conservation **Matthew C. Boyer**	Yellowstone River Channel Migration Easement Program **Wendy Weaver**
9:20 AM	Remediation/Restoration of the Upper Clark Fork River Basin: Uncertainty, Challenges, and Successes	Describing Interactions Between Bull Trout and Lake Trout in Priest Lake, Idaho **Derek Entz***	Stream Restoration on Medicine Lodge Creek, Wyoming **Laura Burckhardt**	Invasive Northern Pike are Associated with Range Contractions of Three Native Cyprinids **Allison Stringer***	Playing God with Guppies: Testing Whether Genetic Rescue Works Using a Model Experimental System **W. Chris Funk**	Yellowstone River: A Tale of Two Spills **Alicia Stickney**
9:40 AM	**Douglas Martin**	Are Brown Trout Negatively Impacting Yellowstone Cutthroat Trout? **Robert Al-Chokhachy**	O'Dell Springs Creek and Wetland Restoration: 13 Years of Successful Partnerships and Collaboration **John Muhlfeld**	Non-Native Trout as Invasive Species Affecting Native Fish Species **Bradley Shepard**	The Genomics of Adaptation: Lessons from Threespine Stickleback **Paul Hohenlohe**	Competing Interests on the Yellowstone: Pallid Sturgeon and the Intake Diversion Dam **Aaron Hall**

***Student Presentation**

Technical Sessions, Wednesday, 5/24/2017, 10:20 AM – 12:00 PM

	Transformation of the Upper Clark Fork River Basin: a Story of Success, Challenges, and the Collaboration that is Making It Happen!	Contributed Presentations: Inland Fisheries Ecology and Management	The Human Element of Aquatic Restoration: Working with Stakeholders to Plan and Implement Restoration	Invasive Species and Fishery Management - an Examination of Current Issues	Fifty Years of Fisheries Genetics: Allozymes to Genomes	The Yellowstone River: A Lot Can Change in 692 Miles
Room	**330**	**331**	**332**	**333**	**336/337**	**Theater**
Moderator	**Vicki Watson**	**Mike Meeuwig**	**Eric Bernsten**	**Bruce Farling and Bob Wiltshire**	**Fred Allendorf**	
10:20 AM	Fisheries Response to Remediation and Restoration Actions in the Upper Clark Fork Basin **Jason Lindstrom**	Fish Movement Patterns in the Smith River Watershed in Central Montana. **Michael Lance***	Create, Visualize, and Share 3D Models Using UAS Technology for River Restoration **Ryan Richardson**	Forecasting With a Mechanistic Model the Invasion and the Management of Brown Trout in the Logan River, Utah **Christophe Laplanche**	Selection Against Rainbow Trout Admixture Across Populations, Environments, and the Genome **Ryan Kovach**	**Shape of a River** **Video**
10:40 AM	Scale and Permanence: Fish Response to the Removal of Milltown Dam, MT **David Schmetterling**	Results from Acoustic Tracking of Redband Trout Tagged in Lake Roosevelt Tributaries **Bryan Witte***	Reach-Scale Restoration on Nevada Creek: Balancing Habitat Improvments With Traditional Agriculture in the Blackfoot Valley Montana **Ron Pierce**	Illegal Fish Introductions in Montana **Jim Vashro**	Using Genomic Data for Conservation: Range-Wide Demographic and Genetic Structure of Longfin Smelt **Mandi Finger**	
11:00 AM	Monitoring Fisheries Responses to Restoration in the Upper Clark Fork River Basin **Nathan Cook**	Rufus Woods Rainbow Trout Supplementation: A Six Year Overview of Creel Monitoring and Evaluation **Jeff Caisman**	Montana Stream Permitting Guide **Bruce Anderson**	**Moderated Discussion on Invasive Fish Issues** **Bruce Farling**	Patterns of Rainbow Trout/Westslope Cutthroat Trout Hybridization in Montana and Northern Idaho **Kevin McKelvey**	
11:20 AM	Floodplain Remediation and Restoration in the Upper Clark Fork River Basin, Montana **Amy Sacry**	Using Hypolimnetic Oxygenation to Enhance a Mesotrophic Lake Coldwater Fishery **Benjamin Cross**	Stream Restoration to Improve Human Overwintering and Rearing Habitat **Warren Colyer**	What's the Deal with Invasive Crayfish in the West? A Case Study of Rusty Crayfish **Mathis Messager***	Legacy Introductions and Climatic Variation Explain Spatiotemporal Patterns of Invasive Hybridization in a Native Trout **Clint Muhlfeld**	
11:40 AM	Changes in Climate, Flows and Algae Levels in the Clark Fork River **Vicki Watson**	Examining the Drivers of Cold-Water Refuges in a Large Impounded River **Francine Mejia**	The Dolores River Restoration Partnership; Reflecting on Seven Years of Watershed Restoration and Collaboration **Mike Wight**	Introduced American Bullfrog Spread in the Yellowstone River **Adam Sepulveda**	Duplicate Loci and Gene Mapping in Fisheries Genetics: Allozymes to Next-Generation Sequencing **Garrett McKinney**	

***Student Presenter**

Technical Sessions, Wednesday, 5/24/2017, 1:20 – 3:00 PM

	Contributed Presentations: Emerging Technologies	Contributed Presentations: Habitat and Restoration	Invasive Species and Fishery Management - an Examination of Current Issues	Fifty Years of Fisheries Genetics: Allozymes to Genomes	Montana Chapter AFS – 50th Anniversary Symposium
Room	**331**	**332**	**333**	**336/337**	**Theater**
Moderator	**Leo Rosenthal**	**Lora Tennant**	**Bob Wiltshire and Leah Elwell**	**Ryan Kovach**	
1:20 PM	Whooshh Fish Passage - Results from 2016 Studies **Todd Deligan**	Distinctions in Vegetation and Fish Assemblages Among Wetland Types According to Dominant Features in Large, Shallow Lakes **Leo Bodensteiner**	Flowering Rush Facilitation of Northern Pike **Peter Rice**	Saving the Spandrels? Adaptive Genomic Variation in Conservation and Fisheries Management	Introductory Remarks, Session Overview, and Reflections on the Formation of the Chapter **Leslie Nyce, Craig Barfoot, William Gould**
1:40 PM	Evaluation of an Electric Fish Barrier on an Irrigation Canal on the Lower Gunnison River, Colorado **Dan Kowalski**	Recovery of Fish Populations and Physical Channel Characteristics in Streams Impacted by Catastrophic Debris Flows **Jason Walter**	Everything You Wanted to Know About Rock Snot. A Brief History of *Didymosphenia geminata* **Leah Elwell**	**Devon Pearse**	Early Years of the Chapter **Ron Marcoux**
2:00 PM	When Tiny Bubbles Cause Big Problems: A Systematic-Type Review of Gas Bubble Trauma in Freshwater Fishes **Naomi Pleizier***	Fish Out of Water - Regulating and Restoring Floodplain Function **Marjorie Wolfe**	Phosphorus Enrichment as a Management Strategy for Didymo Nuisance Mats in the Kootenai River, Libby, MT **Katie Vivian**	Experimental Test of Genetic Rescue in Isolated Populations of Brook Trout **Zachary Robinson***	Not Easy Being Native: The Fine Line Between Fish Icon and Cut Bait **Wade Fredenberg**
2:20 PM	Sustainable Agro-based Earthen Pond Integrated Carp Fish Farming in Pakistan: Prospects of Transfer of American Fish Feed Technologies **Muhammad Naeem Khan**	Deer Creek Floodplain Enhancement Project: A Modern Approach to Process Based Ecosystem Restoration **Kate Meyer**	Montana's Response to Invasive Mussel Detections **Patrick Saffel**	Parentage Based Tagging of a Natural Coho Salmon Population to Assess Hatchery Influence **Hayley Nuetzel***	MCAFS Advocacy Through the Years **Chris Hunter**
2:40 PM	Development of a Fully-Integrated Field eDNA Sampling and Detection System **Austen Thomas**	Riparian Vegetation, Instream Habitat, and Aquatic Biota Differences within Riparian Grazing Exclosures **Daniel Dauwalter**	Dreissenid Prevention Across the Pacific Northwest **Stephen Phillips**	Two Million Genotyped Fish and Counting: What We've Learned About Genetic Stock Identification in Salmon **Lisa Seeb**	Advocacy on the Ground and in the Water **Pat Clancey**

***Student Presenter**

Technical Sessions, Wednesday, 5/24/2017, 3:20 – 5:20 PM

	Contributed Presentations: Emerging Technologies	Contributed Presentations: Habitat and Restoration	Invasive Species and Fishery Management - an Examination of Current Issues	Fifty Years of Fisheries Genetics: Allozymes to Genomes	Montana Chapter AFS – 50th Anniversary Symposium
Room	**331**	**332**	**333**	**336/337**	**Theater**
Moderator	**Leo Rosenthal**	**Lora Tennant**	**Leah Elwell**	**Ryan Kovach**	
3:20 PM	A Video Based Electroshocking Platform to Identify Lamprey Ammocoete Habitats: Field Validation and New Discoveries in the Columbia River Basin **Evan Arntzen**	Montane Meadow Restoration in the Sierra Nevada: Understanding the Potential Impacts to Native Fish Communities **Lora Tennant**	Ecotechnology in the Age of Invasive Species **Todd Deligan**	Genome Wide Association and FST-Outlier Tests Reveal Candidate Adaptive Loci in a Unique Lacustrine Life History of a Threatened Trout **Helen Neville**	Aquatic Habitat Protection and Stream Access Montana Style, the Role of MCAFS **Larry Peterman and Jerry Wells**
3:40 PM	Estimating Pallid Sturgeon Larval Drift in the Missouri River Downstream of Fort Peck Dam Using a 3D Hydro-Acoustic River Mapper, River Analyzer **Brian Marotz**	Ecological Restoration Along the Kootenai River: Linking Food Web, Wildlife Habitat, and Aquatic Habitat **Thomas Parker**	The Efficacy of Using Electrical Waveforms to Kill the Embryos of Invasive Common Carp at Malheur Lake **Will Simpson**	Genetic Monitoring of Reintroduced Spring Chinook Salmon **Kathleen O'Malley**	Diversity Within the Chapter **Leanne Roulson**
4:00 PM	Wanted: Dead or Alive. Determining Fish Status from Mobile PIT Antenna Detection Data **Ben Stout***	Kootenai River Pool Ladder: Reach-Scale Habitat Restoration for Native Fish and Wildlife Species **Matt Daniels**	Life History Flexibility May Facilitate Colonization of Diverse Habitats by Invasive Brook Stickleback **Paul Spruell**	Demography and Genetics of a Salmonid Metapopulation **Andrew Whiteley**	Professional Networking and Team Building: Fear and Loathing at Montana AFS **Brad Shepard**
4:20 PM	Monitoring Natural-Origin Adult Chinook Salmon Escapement using Dual-frequency Identification Sonar in the Secesh River, Idaho **Clark Watry**	Fisheries Habitat Conservation... Montana Fish, Wildlife & Parks' Aquatic Habitat Protection, Mitigation and Restoration/Enhancement Programs and Legacy **Bruce Rich**		Domestication and Fitness Decline in Hatchery Steelhead: Why Does it Happen So Fast? **Michael Blouin**	Science: It Was Good While It Lasted **David Schmetterling**
4:40 PM	Necessity-Driven Changes to Fisheries Monitoring in a Fragile Ecosystem: From Codends to Cameras **David Ayers**			Isolation, Migration, and Local Recruitment Drive Persistence of Cutthroat Trout in Tributaries near American Falls Reservoir **Daniel Bingham**	**General Reminiscence: Open Mic Session**
5:00 PM				Symposium Endnote: Why Has Genome Science Had Such a Profound Effect on the Conservation of Pacific Salmonids? **Jim Seeb**	

***Student Presenter**

Technical Sessions, Thursday, 5/25/2017, 8:00 – 10:00 AM

	Native Non-Game Fishes: Ecological Insights and Management Approaches	Shifting Distributions of Fish Assemblages in Western Rivers: Patterns, Drivers, and Implications	Forging Stronger Links Between Freshwater Food Web Ecology and Fisheries Management	Climate Vulnerability in Freshwater and Marine Ecosystems of Western North America: Sensitivity, Exposure, and Capacity for Adaptation	Environmental Flow: Using Instream Flow and Water Policy to Benefit Western Fisheries
Room	**330**	**331**	**332/333**	**336/337**	**Theater**
Moderator			**Erik Schoen and Mark Wipfli**		
8:00 AM	Evaluation of Potential Translocation Sites for Hornyhead Chub **Brian Hickerson***	Shifting Fish Distributions in the Yellowstone River with a Focus on Introduced Smallmouth Bass **Adam Sepulveda**	Can Short-Term Nutrient Additions Lead to Long-Term Recovery of Pacific Salmon? **Joseph Benjamin**	Climate Vulnerability and Salmonids in Alaska: Hind- and Forecasting Freshwater Growth and Phenology Across Species and Habitats **Jeff Falke**	Our Future in a Warming, Water-Stressed World **Robert Glennon**
8:20 AM	Taxonomic Revisions for Cutthroat Trout: What Can This Charismatic Sportfish Teach Us to Address Taxonomic Uncertainty in Other Fishes? **Luke Schultz**	Range Boundary Dynamics Reveal Drivers and Limits of Smallmouth Bass Distribution in Pacific Northwest Streams **Erika Rubenson***	Using Food Webs to Guide Conservation Propagation of Pallid Sturgeon **Addie Dutton***	A Remote Sensing and Occupancy Estimation Approach to Quantify Spawning Habitat Use by Fall Chum Salmon Along the Chandalar River, Alaska **Chelsea Clawson***	
8:40 AM	Stonecat Ecology in St. Vrain Creek **Timothy D'Amico***	In Defense of Resident Bull Trout **Chris Clancy**	Foraging Ecology and Production of Rio Grande Cutthroat Trout in the Face of Mounting Ecological Pressures **Brock Huntsman**	Migration Patterns of Adult Chinook Salmon in Two Southeast Alaska Transboundary Rivers **Kristin Neuneker***	An Overview of Water Law for Fisheries Biologists
9:00 AM	Distribution of and Habitat Use by the Salish Sucker, an Endemic Species West of the North Cascades **James Helfield**	Wyoming's Powder River Sturgeon Chub: Here, Gone, and Back Again **Bill Bradshaw**	Linking Spatial and Food Web Complexity: Perspectives from a River-Floodplain and Implications for Restoration and Salmonid Conservation **James Paris***	Drought and Water Availability in Western Riverscapes **Jason Dunham**	
9:20 AM	Olympic Mudminnow, Where Art Thou? **Lauren Kuehne**	Understanding Multiple Impacts of Hydrologic Alteration on Native Fish Communities in the Rio Grande, Texas and Mexico **Brian Laub**	Growth and Foraging Patterns of Juvenile Chinook and Coho Salmon in Three Geomorphically Distinct Sub-Basins of the Kenai River **Benjamin Meyer***	Climate Warming Rates of Salmon and Trout Rivers in the West: Implications for Conservation and Management **Dan Isaak**	**Tom Annear and Laura Ziemer**
9:40 AM	Examining Distribution and Habitat Preferences of Native Fishes in a Coastal Basin of Washington State **Marie Winkowski**	Otolith Microchemistry Reveals Inter-Annual Shifts in the Quality of Juvenile Sockeye Salmon Habitats in a Remote Alaskan Watershed **Timothy Walsworth**	Kootenai River Restoration Opportunities: A Riparian Habitat Suitability Analysis **Selita Ammondt**	Climatic Variation and Linkages to Patterns of Yellowstone Cutthroat Trout Growth, Condition, and Behavior **Robert Al-Chokhachy**	Squeezing Water from Stones: Developing an Instream Flow Program in Utah. **Paul Burnett**

***Student Presenter**

Technical Sessions, Thursday, 5/25/2017, 10:20 AM – 12:00 PM

	Native Non-Game Fishes: Ecological Insights and Management Approaches	Shifting Distributions of Fish Assemblages in Western Rivers: Patterns, Drivers, and Implications	Forging Stronger Links Between Freshwater Food Web Ecology and Fisheries Management	Climate Vulnerability in Freshwater and Marine Ecosystems of Western North America: Sensitivity, Exposure, and Capacity for Adaptation	Environmental Flow: Using Instream Flow and Water Policy to Benefit Western Fisheries
Room	**330**	**331**	**332/333**	**336/337**	**Theater**
Moderator			**Erik Schoen and Mark Wipfli**		
10:20 AM	Do Spawning and Rearing Habitat Contribute to the Recruitment Bottleneck of Imperiled Bluehead Sucker? **Bryan Maloney***	Which Fish Species are Most Vulnerable to Warming Stream Temperatures? **Annika Walters**	Can Amphibians Help Conserve Native Fish? **Niall Clancy***	Accounting for Adaptive Capacity and Uncertainty in Assessments of Species' Climate Change Vulnerability: Applications to Threatened Salmonids **Alisa Wade**	Evaluating the Transferability of Flow-Ecology Relationships Across Space, Time, and Trait Guilds **William Chen***
10:40 AM	Spatial Positioning in a Desert Tributary Network Affect Larval Growth, Recruitment, and Community Associations of an Imperiled Migratory Catostomid **Nate Cathcart**		Ecological Tradeoffs Between Commercial Salmon Fisheries and Foraging Opportunities for Trout **Timothy Cline***	The 2015 Columbia River Salmon Migration-An Omen for the Future in a Warming World? **Jeff Fryer**	Restoring Streamflow in Coastal California **Matt Clifford**
11:00 AM	Riverscape Genomics of Speckled Dace Differ by Basin in Western North America **Steven Mussmann***		Effects of Nonnative Brown Trout on the Foraging Ecology of Rio Grande Cutthroat Trout **Quintin J. Dean***		Restoring Streamflow in Oregon's Deschutes Basin: Tailoring Tools to Context **Kate Fitzpatrick**
11:20 AM			Exploring the Isotopic Niche in Rocky Mountain-Great Plains Fish Communities **Bryan Maitland***		Instream Flow Protection in Washington State: Mitigation Challenges and Opportunities **Kiza Gates**
11:40 AM			Can We Manage Resource Subsidies and Food Webs to Benefit Fishes and Fisheries? **Mark Wipfli**		Colorado's Water Plan: Stream Management Planning and Watershed Health **Chris Sturm**

***Student Presenter**

Technical Sessions, Thursday, 5/25/2017, 1:20 – 4:20 PM

	Contributed Presentations: Environmental Biology	Contributed Presentations: Salmon and Hatcheries	Forging Stronger Links Between Freshwater Food Web Ecology and Fisheries Management	Contributed Presentations: Genetics	Environmental Flow: Using Instream Flow and Water Policy to Benefit Western Fisheries
Room	**330**	**331**	**332/333**	**336/337**	**Theater**
Moderator	**Brian Missildine**	**Paul Kusnierz**	**Erik Schoen and Mark Wipfli**	**Matt Boyer**	
1:20 PM	Sound Passages in Migration of Semipelagic Icefish **Ryszard Traczyk**	Evaluating the Size Selectivity of Mid-Water Trawls for Sampling Kokanee **Zachary Klein***	Future of Alaskan Salmon in the Face of Change: Bringing a Food-Web Perspective to Management and Conservation **Erik Schoen**	Ash Meadows Amargosa Pupfish: Genetic Effectiveness Monitoring **Mary Peacock**	Environmental Flow Restoration: Perspective from the Trenches **Jedediah Whiteley**
1:40 PM	Saving Genetic Material in Growth of the Otolith **Ryszard Traczyk**	A Comparative Analysis of the Bristol Bay, Southeast, and Kenai River Fisheries: Tracking Stakeholder Participation over the Last 15 Years **Meagan Krupa**	Partnering to Preserve Natural Diversity, Ecosystem Health, and Subsistence Fishing Opportunities Across the Yukon River Basin. **Aaron Martin**	Juvenile Sampling of Bull Trout for Genetic and Population Monitoring **Stephen Amish**	Forecast Informed Reservoir Operations: A Tool to Manage Flows for Fisheries, Water Supply, and Flood Control in California's Russian River Watershed **David Manning**
2:00 PM	Changes in Water Chemistry and Biological Communities Associated with Metal Mining in Streams in the North Cascades **Brooke Bannerman***	Spawning Area Residence Related to Freshet Timing in an Ocean-type Chinook Salmon Population **Roger Dunlop**		Responding Rapidly: Use of Real-Time Genetic Analysis and Genetic Monitoring to Conserve Bull Trout in the Lower Columbia River. **Brice Adams**	Environmental Streamflow Restoration in the Eastern Cascades through Large Scale Irrigation Improvements and Improved Water Management **Aaron Penvose**
2:20 PM	Mercury, Selenium and Microbial Dynamics in Water and Sediment During High- and Low-Flow, Bighorn Lake, Bighorn National Recreation Area, MT/WY **Elliott Barnhart**	A Potential Success Story of a Conservation Hatchery **Jennifer Von Bargen**		Genotype-Environment Interactions Increase Summer Growth of Hybrid Rainbow x Cutthroat Trout in Three Wild Populations **Jeffrey Strait***	Multi-Scale Response of Migratory Native Trout to Irrigation-Based Restoration in the Blackfoot Valley, Montana **Ron Pierce**
2:40 PM	Evaluating the Distribution of Estrogenic Effects Below Wastewater Treatment Plants: Estrogen Persistence and Fish Movement **Jordan Anderson***	Columbia River Basin Steelhead Kelt Reconditioning Research **Andrew Pierce**		Introgression between Native Redband Trout and Coastal Origin Hatchery Rainbow Trout in the Northern Great Basin **Patrick DeHaan**	Total Dissovled Gas Levels Below Foster Dam and Implications for Chinook Salmon and Steelhead Populations **Ryan Flaherty**
3:00 PM	**Break**				
3:20 PM		Parentage Based Tagging Reveals Overestimation of the Proportion of Natural-origin Chinook Salmon and Steelhead in the Columbia River Basin **Daniel J. Hasselman**		Adaptation to Residency in Rainbow Trout Above Barriers to Migration: Alternative Molecular Pathways Towards a Predictable Phenotype **Matthew A. Campbell**	Fine Tuning the Relationship Between Shovelnose Sturgeon Spawning and Discharge in a Tributary to the Missouri River, Montana **Anne Tews**
3:40 PM		Evaluating Minijack Rates in Spring Chinook: Comparing Minijack Rates Based on Spring Plasma 11-ketotestosterone Levels with Rates Based on Fall GSI **Lea Medeiros**		Maximum Likelihood Estimation of the Proportion of Hatchery-Origin Fish on Spawning Grounds using Coded-Wire and Parentage-Based Tagging **Richard Hinrichsen**	Restoring Flow and Rehabilitating Diversion Structures in the Lostine River, Oregon: Benefits to Chinook Salmon Spawning Migration **Aaron Maxwell**
4:00 PM		Monitoring and Evaluation Programs at National Fish Hatcheries in the Columbia River Gorge **Kari Dammerman**		Democratization of Population Genomics: Microhaplotypes Allow Difficult Inference in Fish Biology by Lower Throughput Research Groups **John Carlos Garza**	The Yellowstone Concerto and the Hidden History of Film in Environmental Protection Movements **Nick Bergmann**
4:20 PM				eDNA Detection Sensitivity in Lakes and Streams: a Comparison of High and Low Volume Water Samples **Stephen Amish**	

***Student Presenter**