

Monday May 5	Klamath Basin: What Next?	Meeting the Aquatic Invasive Species Challenge	Bovines and Waterways	A Western Challenge: Large-scale Disturbances Require Large-scale Restoration Programs	Population Growth, Climate Change, and Fish Habitat in the Columbia River Basin
Room	3 Sisters	Mt Hood	Oregon	Mt. St. Helens	Multnomah
Moderator	Cindy Williams	Scott Smith	Jimmy Eisner	Dave Ward	Erik Merrill/Steve Waste
9:00 AM	An optimistic view of what is next in the Klamath Basin <b>David Diamond</b>	Western Regional Panel: Coordinating ANS issues in the West <b>Eileen Ryce</b>	Livestock grazing management systems for riparian-wetland areas <b>Jimmy Eisner</b>	Protecting, mitigating and enhancing fish and wildlife in the Columbia River Basin <b>Tony Grover</b>	ISAB: Human population growth in the Columbia River Basin: Implications for fish habitat <b>Susan Hanna</b>
9:20 AM	How does the Klamath Basin Restoration Agreement affect Reclamation operations? <b>Pablo Arroyave</b>	Washington State's Top 10 List of Incredibly Important AIS PowerPoint Bullets <b>Allen Pleus</b>	Management tools and techniques for riparian-wetland area grazing management <b>Sandra Wyman</b>	Overview of the Upper Colorado River Endangered Fish Recovery Program <b>Angela Kantola</b>	ISAB: Human population growth in the Columbia River Basin: Implications for fish habitat - Continued <b>Susan Hanna</b>
9:40 AM	What does the Klamath Basin Settlement Agreement mean to the water users? <b>Greg Addington</b>	"The 100 <sup>th</sup> Meridian Initiative: Finding relevance in a post-quagga West <b>Paul Heimowitz</b>	Monitoring streams and riparian vegetation to detect effects of grazing management on fish habitat using multiple indicators <b>Timothy Burton</b>	California's Delta: An estuary in crisis <b>Leo Winternitz</b>	ISAB: Climate change impacts on Columbia River Basin fish and wildlife <b>Bob Bilby</b>
10:00 AM	Restoring the Sprague River, a work in progress <b>Chris Leeseberg</b>	Initial response to quagga mussels in the Lower Colorado River <b>Sandee Dingman</b>	Streambank trampling by cattle: Monitoring methods and impacts on streambank integrity <b>Tracey Brewer</b>	The Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative: Barriers and bridges to coordination and management of fishery research <b>John White</b>	ISAB: Climate change impacts on Columbia River Basin fish and wildlife - Continued <b>Bob Bilby</b>
10:40 AM	Restoring the wetlands at the Williamson River delta: A freshwater delta at the north end of Upper Klamath Lake <b>Matt Barry</b>	Using PCR as a Tool for quagga/zebra mussel early detection and monitoring <b>Kevin Kelly</b>	Channel function and form- Foundation for managing bovines and waterways <b>Darren Brumback</b>	Non-native fish management in the upper Colorado River Basin: A case study <b>Rich Valdez</b>	IEAB: Protecting habitat in an environment of change: New strategies and techniques <b>Daniel Huppert</b>
11:00 AM	Lost River and shortnose sucker recovery: Where are we and where do we need to go? <b>Mark Buettner</b>	Current efforts on detection of quagga and zebra mussels in the West <b>Mark Sytsma</b>	Riparian ecological sites and State-and-Transition models <b>Tamzen Stringham</b>	Asotin Creek Watershed Restoration: Small steps lead to big results <b>Bradley Johnson</b>	IEAB: Protecting habitat in an environment of change: New strategies and techniques - Continued <b>Daniel Huppert</b>
11:20 AM	Conditions affecting the reintroduction of anadromous fish to the upper Klamath Basin <b>Chuck Hunnington</b>	Results of boater surveys at the Lake Mead National Recreation Area following the recent invasion of the quagga mussel <b>Sara Muetting</b>	Macroinvertebrate analysis indicates significant improvement of meadow stream health due to livestock distribution efforts <b>Kenneth Tate</b>	Large-scale restoration program case study: Clear Creek, California <b>Matt Brown</b>	Growth and survival of salmon in response to competition and climate change: Implications for interactions of wild and hatchery salmon <b>Greg Ruggerone</b>
11:40 AM	Can increases in flow released from reservoirs help coho just like a good water year? <b>Steve Cramer</b>	The NAS Database and Alert System <b>Pam Fuller</b>	Evaluation of low-stress herding and supplement placement for managing cattle grazing in riparian and upland areas <b>Bob Welling</b>	Chinook salmon retrospective run reconstruction, Kuskokwim River, Alaska <b>Doug Molyneaux</b>	Potential effects of rising temperatures on salmon migration through the Columbia River: Evidence for recent evolutionary shifts in migration timing <b>Lisa Crozier</b>

Monday May 5	Honoring the Treaties in the 21st Century: Columbia River Tribal Perspectives and Restoration Programs	American Shad in the Columbia and Snake Rivers: New Views	Contributed papers (Fish Ecology)	Contributed papers (Fisheries Management – Resident Fish)	Student Session
Room	Mt. Bachelor	Alaska/Idaho	Broadway	Weidler	Halsey
Moderator	Gary James	Chris Caudill/Mike Parsley	Larry Dominguez	Tucker Jones	Shivonne Nesbit
9:00 AM	Wy-Kan-Ush-Mi Wa-Kish-Wit - History and vision for tribal fisheries management in the Columbia River Basin <b>Donald Sampson</b>	Overview of shad in the Columbia Basin: History and current status <b>Chris Caudill</b>	Global climate change and potential effects on salmonids in freshwater ecosystems of southeast Alaska <b>Mason Bryant</b>	Standard methods for sampling North American freshwater fishes <b>Scott Bonar</b>	Ecological interactions between juvenile hatchery and wild salmonids in Eagle Creek and North Fork Eagle Creek, OR <b>William Brignon</b>
9:20 AM	Using first foods to direct natural resource management <b>Eric Quaempts</b>	Up and down and back again: Adult biology of American shad in the Columbia Basin <b>Chris Caudill</b>	Knowles Creek (Siuslaw River, Oregon) long-term monitoring project: How has the climate affected life-stage specific survival? <b>Ralph Lampman</b>	Factors affecting the distribution, abundance and population dynamics of mountain whitefish in Idaho <b>Steven Elle</b>	The effect of gonadectomy on hatchery summer steelhead ( <i>Oncorhynchus mykiss</i> ) behavior: Implications for hatchery and wild interactions <b>Eva Schemmel</b>
9:40 AM	Legal landscape regarding tribes' treaty reserved rights <b>Laurie Jordan</b>	Migration behavior of introduced American shad in the Columbia and Snake river system in relation to recent growth history <b>Robert Hogg</b>	Abiotic factors structure native fish assemblages in an urban stream <b>Ashley Ficke</b>	Differences in annual growth and annual survival of 'T-bar' anchor and PIT tagged mountain whitefish, rainbow trout, and walleye in the lower Columbia River, Canada <b>Dustin Ford</b>	Total lipid content and fatty acid signatures of common forage fish species off Oregon and Washington under variable oceanographic conditions <b>Marisa Litz</b>
10:00 AM	Columbia River treaty harvest: Past, present, and future <b>Roger Dick, Jr.</b>	The thiaminase content of American shad reduces its quality as a prey item <b>Don Tillit</b>	Annual growth of Lost River suckers in Upper Klamath Lake during the last century <b>Mark Terwilliger</b>	Monitoring entrainment in a Pacific Northwest reservoir and assessing its impact on a resident cutthroat trout population <b>Burke Strobel</b>	Consequences of summertime thermal regimes on reproductive maturation of adult Pacific lamprey, <i>Entosphenus tridentatus</i> : Plasticity or pre-programmed synchronization in maturation timing? <b>Benjamin Clemens</b>
10:40 AM	Columbia River Fishery Management: Why hatcheries are critical to sustaining fisheries in the 21st century <b>Bill Bosch</b>	Emergence of <i>Ichthyophonus hoferi</i> in the Columbia River via American Shad <b>Paul Hershberger</b>	Migration patterns and habitat preferences of spawning brown trout in the Alpine Rhine River <b>Armin Peter</b>	The latest "bull" on bull trout and the Endangered Species Act <b>Edward Koch</b>	Examining the relationship between soil nitrogen availability and riparian tree growth on the Queets River, WA <b>Elizabeth Perkin</b>
11:00 AM	Nez Perce tribal harvest management and monitoring <b>Joe Oatman</b>	A bioenergetics approach to investigating the impact of American shad on Columbia River salmon <b>Sally Sauter</b>	An analysis of the potential impacts of mining activities on fish populations in Thompson Creek, Idaho, using long-term data. <b>Jason Mullen</b>	Status and management of northern pike in Box Canyon Reservoir, Pend Oreille River, Washington <b>Jason Connor</b>	Sources and retention of organic matter in a river network: The function of floodplain vs. confined segments <b>J. Ryan Bellmore</b>
11:20 AM	Snake River fall Chinook salmon integrated harvest mitigation and conservation hatchery production and productivity <b>Jay Hesse</b>	What's that small shad doing here? Evidence of multiyear freshwater residence by juvenile American shad <b>Mike Parsley</b>	The prevalence of wild juvenile Chinook salmon from Lake Creek, Idaho that rear a second year in freshwater <b>Wesley Keller</b>	Efficiency of Ukrainian and North American mechanical control techniques for removing nuisance northern pike from small Arizona lakes <b>Scott Bonar</b>	Use of predictive models to assess the importance of riverscape connectivity on the distribution of an imperiled fish species. <b>Tracey Bowerman</b>
11:40 AM	Lower Deschutes River fall Chinook escapement: A validation study <b>Jennifer Graham</b>	Panel Discussion	Interparity in Columbia River summer steelhead: A multi-year summary of kelt survival and transportation studies <b>Matthew Keefer</b>	Sharing field data with the community: Lake Davis pike removal and eradication <b>Julie Cunningham</b>	

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Moderator	Cindy Williams	Scott Smith	Jimmy Eisner	Dave Ward	Erik Merrill/Steve Waste
1:20 PM	Klamath hydroelectric project (FERC Project No. 2082) Ecosystem Diagnosis and Treatment (EDT) Analysis-Modeled fish passage scenarios and production in the Klamath River for fall Chinook and current fall Chinook production at Iron Gate Hatchery <b>Ian Chane</b>	Predictions for an invaded world: A strategy to predict the distribution of native and nonindigenous species at multiple scales <b>Debbie Reusser</b>	Mining, ranching, and improved riparian habitat <b>Paul Pettit</b>	Implementation challenges for the Columbia River Fish and Wildlife Program <b>Tom Iverson</b>	Linking cold-water refuges into a biologically effective network in the southern Willamette River floodplain: Outlining key locations and knowledge gaps <b>David Hulse</b>
1:40 PM	Trinity River fishery restoration: Adaptive management in progress <b>Rod Wittler</b>	100 <sup>th</sup> Meridian Initiative's boater survey database <b>David Britton</b>	Lahontan cutthroat trout habitat improvement in response to prescription livestock grazing practices <b>Carol Evans</b>	Upper Colorado River Endangered Fish Recovery Program: Implementation issues <b>Tom Pitts</b>	Linking cold-water refuges into a biologically effective network in the southern Willamette River floodplain: Outlining key locations and knowledge gaps – Continued <b>David Hulse</b>
2:00 PM	Trinity river salmon: Work, results, and trends <b>Nina Hemphill</b>	Zebra mussels and calcium: mapping a key limiting factor <b>Thom Whittier</b>	Cost effective and valid remote sensing methods to measure riparian conditions <b>Eric Sant and Gregg Simonds</b>	The CAFED experience: Working with a wicked problem <b>Leo Winternitz</b>	Effect of changing land use on the distribution of coho salmon <b>Lauren Mollot</b>
2:20 PM	Synopsis of Klamath River salmon disease issues <b>Scott Foott</b>	Developing new molecular techniques to detect nonnative species and evaluating why some species become invasive <b>Rusty Rodriguez</b>	On-going monitoring of Lahontan cutthroat trout responses to watershed restoration and barrier removal <b>Helen Neville</b>	Developing and implementing a research and restoration plan for the Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative <b>Christian Zimmerman</b>	Impacts of alternative urban development patterns on ecosystem dynamics <b>Lucy Hutyra</b>
2:40 PM	Controlling disease in Klamath River: Where do we go next? <b>Jerri Bartholomew</b>	Thermal tolerance of zebra and quagga mussel populations in the southwest U.S <b>John Morse</b>	Panel Discussion	Panel Discussion	Flow restoration through water transactions <b>Andrew Purkey</b>
3:00 PM	Migration and survival of yearling coho salmon downstream from Iron Gate Dam: What we have learned after two years of study <b>John Beeman</b>	A potentially adaptive physiological response to thermal habitat alteration by a globally invasive species <b>Rebbekah Watson</b>	Panel Discussion	Panel Discussion	Metro's Natural Areas Program: Protection water quality and fish and wildlife habitat through land acquisitions <b>Jim Desmond</b>
				Contributed Papers (Law Enforcement)	
				Peter McHugh	
3:40 PM	Assessments of juvenile coho salmon movements and habitat use patterns during spring, summer, and early-fall within the middle Klamath River <b>Toz Soto</b>	Invasive species research: Activities of the USGS Columbia River Research Laboratory <b>Tim Counihan</b>	Relationships among implementation monitoring, management, and long-term trends in riparian and stream conditions on public grazing lands in the Interior Columbia River Basin <b>Kip Marzullo</b>	Spencer Creek – The good, the bad, and the ugly <b>Paul Randall</b>	Panel Discussion – The protection predicament: Looking for innovative solutions in an environment of change <b>Pete Bisson</b> <b>Jay Nicholas</b> <b>Jack Williams</b> <b>Bettina von Hagen</b>
4:00 PM	Lower Klamath River coho studies <b>Hans Voight</b>	Controlling New Zealand mudsnails at infested fish hatcheries: Summary of studies and management recommendations <b>Christine Moffitt</b>	Revegetation following channel reconstruction in NE Oregon <b>Sarah Quitsberg</b>	Navigability and public access <b>Mike Hanson</b>	Panel Discussion – Continued
4:20 PM	Salmon recovery in the Klamath River Basin? <b>Irma Lagomarsiano</b>	Biological control of zebra and quagga mussels: Potential use of a novel microbial agent <b>Dan Molloy</b>	Effects of grazing management strategies on burned and unburned riparian areas in central and northern Nevada Great Basin <b>Kristen Schmidt</b>	Central Oregon angling and enforcement <b>David Pond</b>	Panel Discussion – Continued
4:40 PM	Panel Discussion	Spartina eradication efforts in Willapa Bay			Panel Discussion – Continued

		<b>Dave Gonzales</b>			
5:00 PM	Panel Discussion	New technology as it applies to invasive species control <b>Jeff Smith</b>			Panel Discussion – Continued

Monday May 5	Honoring the Treaties in the 21st Century: Columbia River Tribal Perspectives and Restoration Programs	The People-centric Component of Fisheries Management	Contributed papers (Statistics and Modeling)	Contributed papers (Fisheries Management – Anadromous Fish)	Student Session
Room	Mt. Bachelor	Alaska/Idaho	Broadway	Weidler	Halsey
Moderator	Gary James	Rebecca Goggans	Mary Buckman	Erick Van Dyke	Shivonne Nesbit
1:20 PM	Spring Chinook salmon in the Warm Springs River: Evaluating a 35+ year-old data set <b>Jens Lovtang</b>	Habitat for kids and fish <b>Cheri Anderson</b>	Distal, proximal, and genetic influences on spring Chinook salmon migratory timing <b>James Anderson</b>	NMFS and Ecoinformatics: Using technology and databases to help restore endangered and threatened salmon populations <b>Andrew Albaugh</b>	Correlations of depth and substrate variables with Willamette River fish assemblage metrics <b>April Farmer</b>
1:40 PM	An evaluation of supplementing natural production using adult hatchery-origin spring Chinook salmon ( <i>O. tshawytscha</i> ) in Shitike Creek, Oregon <b>Lisa Hewlett</b>	Children and nature; Conservation's future <b>Sean Connolly</b>	Quantitative comparison of the viability models developed for ESA-listed salmonids <b>D. Shalin Busch</b>	Development of regionally protective instream flow recommendations for adult anadromous salmonid upstream passage and spawning during the winter diversion season <b>Paul DeVries</b>	Quantifying use and selection of in-stream cover by coastal cutthroat trout in three watershed studies in western Oregon <b>Heidi Vogel</b>
2:00 PM	Klickitat fisheries: Facility transition and hatchery reform efforts <b>Jason Rau</b>	Taking the LABOR out of collaboration <b>Tony Faast</b>	Life History Trajectories and Limiting Factors Analysis <b>Jesse Schwartz</b>	Can spawning period operations of Priest Rapids Dam, under the Hanford Reach Fall Chinook Protection Program Agreement, be adapted to increase operational flexibility for hydroelectric power production while maintaining adequate protections for this highly valued population? <b>Russel Langshaw</b>	Does competition matter? Testing a multi-species habitat selection theory in a pair of high desert stream fishes <b>Seth White</b>
2:20 PM	Johnson Creek Naco'x (summer Chinook salmon) conservation: Protecting the resource now and into the future <b>Jason Vogel</b>	Fisheries history and mystery <b>Sharon Clark</b>	Travel times of juvenile yearling Chinook and steelhead through the lower Snake River and their associations with environmental variables <b>Steven Haeseker</b>	Measuring the response of spawning chum salmon to elevated flows in the Columbia River <b>Craig Haskell</b>	An estrogenic endocrine disruptor alters reproductive behaviors and fecundity of the red shiner <b>Michelle McGree</b>
2:40 PM	Steelhead recovery in the Okanogan Subbasin <b>Rhonda Dasher</b>	Strategic analysis of issues <b>Norm Hesseldahl</b>	Use of hydrodynamic and habitat models to assess anadromous fish benefits in the Yakima River, WA <b>Joel Hubble</b>	The influence of release strategy and migration history on capture rate of <i>Oncorhynchus mykiss</i> in a rotary screw trap <b>Ian Tattam</b>	Effects of Stress and Injury Associated with Transporting Live Tilapia <b>Tracey Momoda</b>
3:00 PM	Using Full Parental Genotyping to Determine the Efficacy of Steelhead Streamside Incubators in Yankee Fork Salmon River, Idaho. <b>Lytle Denny</b>	Fish and wildlife conservation and economic growth <b>Warren Aney</b>	Species Life-cycle Analysis Modules (SLAM): A Tool for Evaluating Fish Management Scenarios <b>Paul McElhany</b>	Rotary screw trap efficiency trials: Can hatchery produced Chinook salmon be used as surrogates for naturally produced Chinook salmon? <b>Kellie Whitton</b>	
			Contributed Papers (Population Dynamics) Shelly Miller	Contributed Papers (Fisheries Management) Isaac Sanders	
3:40 PM	Wenatchee River coho restoration <b>Keely Murdoch</b>	Connecting people to fish <b>Chris Willard</b>	The rainbow x steelhead interaction: Strengthening population viability <b>Steve Cramer</b>	Use of dual frequency identification sonar (DIDSON) to estimate steelhead escapement in systems with low abundance in central California <b>Kerrie Pipal</b>	Differences in individual condition and environment associated with the development of alternative male life history tactics in a population of rainbow trout ( <i>Oncorhynchus mykiss</i> ) <b>John McMillan</b>
4:00 PM	Back to the future: Reintroduction of coho salmon in the Clearwater River Subbasin <b>Zack Penney</b>	Fish festivals in your future? <b>Corky Broaddus</b>	Density-dependence is a driver of life history variation in Chinook salmon rearing in Marsh Creek, Idaho <b>Kimberly Guilbault</b>	Genetic assignment of fish origin aids in Columbia Basin stray rate estimates <b>Kinsey Frick</b>	Taxonomy and Systematic Relationships of Tui Chubs (Siphateles: Cyprinidae) of Oregon's Great Basin based on early life history characters <b>Stacey Remple</b>
4:20 PM	Spring Chinook reintroduction in the Walla Walla Basin <b>Brian Mahoney</b>	Solving wicked problems <b>Tony Faast</b>	Lewis River Case Study: Salmon population dynamics <b>Anne Mullan</b>	Monitoring the effects of salmon carcass addition on riverine food webs: An experimental field study on the Elwha River <b>Sarah Morley</b>	Diversity of Icelandic "dwarf" charr <b>Bjarni K. Kristjansson</b>

4:40 PM	Habitat management within the ceded lands of The Confederated Tribes of Warm Springs Reservation of Oregon <b>Scott Turo</b>	Barriers/opportunities: People and fish Panel Discussion	The Chilkat River coho salmon stock assessment program (Southeast Alaska) <b>Randolph Ericksen</b>	The Okanagan River Restoration Initiative – Moving ahead by moving back <b>Tara White</b>	
5:00 PM	Habitat restoration and protection projects in the Yakima Basin <b>Scott Nicolai</b>	Panel Discussion		How do we move forward? Making informed decisions in the face of uncertainty, conflicts, and competing interests <b>Jody Lando</b>	The ecological significance of mountain whitefish <i>Prosopium williamsoni</i> in a Central Idaho wilderness stream <b>Michael Lance</b>

Tuesday May 6	Bull Trout and Climate Change: Risks, Uncertainties, and Opportunities for Mapping the Future	Getting Native Lampreys on the Management Radar	Restoration of Salmon in the Cowlitz River Basin: Historical Perspectives, Current Status, and Future Plans	Fish and Habitat Monitoring to Support Large-scale Management Decisions: What Worked and What Hasn't	Honoring the Treaties in the 21st Century: Columbia River Tribal Perspectives and Restoration Programs
Room	Broadway	3 Sisters	Alaska/Idaho	Multnomah	Mt. Bachelor
Moderator	Dan Isaak	Matt Mesa	Theresa Liedtke	Pete Bisson	Gary James
9:00 AM	West Cascades bull trout: An overview and update <b>Shelley Spalding</b>	Morphological diversity among Pacific lamprey ammocoets (Petromyzontidae) <b>Damon Goodman</b>	Maintaining Cowlitz River salmonids with hydropower operations and mitigation <b>Mark LaRiviere</b>	Considerations for large-scale habitat monitoring programs and the illusion of failure <b>Gordon Reeves</b>	Watershed and habitat restoration in the Klickitat Subbasin <b>Will Conley</b>
9:20 AM	Observed and projected climate trends in the Pacific Northwest <b>Nate Mantua</b>	Reintroduction of Pacific lamprey in the upper Umatilla River, Oregon <b>David Close</b>	Upper Cowlitz River salmon and steelhead reintroduction program <b>Mike Kohn</b>	Role of intensively monitored watersheds in assessing salmon response to habitat restoration <b>Bob Bilby</b>	Habitat rehabilitation in the Okanogan Subbasin <b>Chris Fisher</b>
9:40 AM	Bull trout habitat requirements and factors most at risk from climate change <b>Jason Dunham</b>	Response of larval lamprey and other benthic fishes to restoration of small western Washington and Oregon streams <b>Phil Roni</b>	The use of trap and haul to reestablish anadromous fish into historically important habitat in the upper Cowlitz River <b>John Serl</b>	Use of PIBO effectiveness monitoring data to influence management decisions on federal lands in the Upper Columbia Basin <b>Erik Archer</b>	Nez Perce Tribe's Watershed Restoration Program <b>Emmit Taylor</b>
10:00 AM	Restoring connectivity for bull trout in the Klamath Basin: Resource management in a changing climate <b>Craig Bienz</b>	Implementing lamprey improvements at dams in a salmon-centric world <b>David Clugston</b>	Restoration of salmon in the Cowlitz River Basin: Historical perspectives, current status, and future plans <b>Tobias Kock</b>	Monitoring watershed condition under the Northwest Forest Plan: Evolution of a broad-scale monitoring program <b>Kirsten Gallo</b>	Yankee Fork Floodplain Restoration Project: Background and vision <b>Evelyn Galloway</b>
10:40 AM	The eastside experience: Bull trout and climate change within the Interior Columbia Basin <b>Dan Isaak</b>	Passage and behavior of adult Pacific lampreys at Willamette Falls Dam, Oregon <b>Matt Mesa</b>	The use of adult and juvenile salmon abundances to measure reintroduction success in the Tilton River Basin <b>Julie Henning</b>	Monitoring to support salmonid recovery and effective land use policies in King County, Washington <b>Joshua Latterelle</b>	Instream flow restoration in the Umatilla and Walla Walla Basins <b>Gary James</b>
11:00 AM	Modeling the impacts of climate change and habitat restoration on Snohomish River Chinook salmon <b>James Battin</b>	The ecological role played by lampreys in western North America: A question <b>Steward Reid</b>	History of disturbances and the current status of salmonids in the North Fork Toutle River system <b>Shannon Wills</b>	Panel Discussion	Iskuulpa Watershed Restoration <b>Jenny Barnett</b>
11:20 AM	Quantifying climate change impacts on population abundance and viability: Lessons from Snake River spring/summer Chinook <b>Lisa Crozier</b>	Building a conceptual model to describe the effects of stream temperatures on Pacific lamprey <i>Entophosphenus tridentate</i> distribution and population success in western Oregon <b>Stan van de Wetering</b>	Challenges for fish passage and migration in the North Fork Toutle River <b>Cleveland Steward</b>	Development of a comprehensive steelhead monitoring plan for California's Central Valley <b>Chris Eilers</b>	Application of lessons in alluvial riverine processes to stream system restoration <b>James Webster</b>
11:40 AM	Hydrological implications of climate change in the western U.S. <b>Alan Hamlet</b>	Distribution, abundance, and habitat preference of the lake lamprey <i>Lampetra macrostoma</i> , in the Cowichan Lake system, British Columbia <b>Les Harris</b>	Long-term monitoring of fish, stream temperature, and channel characteristics following the 1980 eruption of Mt. St. Helens <b>Brian Fransen</b>	Sources and magnitude of error in detection of Chinook salmon redds via ground and aerial surveys <b>Clair McGrath</b>	End Creek fish habitat and wetland restoration project, Willow Creek watershed of the Grande Ronde Subbasin <b>Allen Childs</b>

Tuesday May 6	Hatchery Research: Hatchery Reform	The Use of PIT Tags in Fisheries Research and Management Applications: Advances, and Aggravations	Relicensing of the Hells Canyon Hydroelectric Complex: Ten Years and Counting	Identifying, Protecting, and Restoring Thermal Refuges for Coldwater Fishes	Student Session
Room	Mt. Hood	Mt. St. Helens	Oregon	Weidler	Halsey
Moderator	Judith Gordon	Dave Marvin	Colleen Fagan	Joe Ebersole	Shivonne Nesbit
9:00 AM	Unintended consequences of hatchery reform <b>Dan Diggs</b>	PIT tagging adult salmon at Bonneville Dam to estimate migration timing, survival, stock composition, and escapement. <b>Jeff Fryer</b>	The Hells Canyon Complex – A look at the past <b>Jim Chandler</b>	Policy and Regulatory Context for Cold Water Refugia <b>Druscilla Keenan</b>	Movements and habitat associations of native and introduced catostomids in a tributary system of the Colorado River: Implications for restoration of the natives <b>Diana Sweet</b>
9:20 AM	What is hatchery reform? <b>Don Campton</b>	The implementation of remote PIT tag detection stations to improve precision of annual survival rates of endangered suckers in the Upper Klamath Basin, Oregon. <b>Justin Koller</b>	The effects of the Hells Canyon Complex on downstream fish habitat substrates in the Snake River <b>Margaret Beilharz</b>	Identifying thermal refuges for coldwater fishes in the Willamette River: Implications for conservation and restoration <b>Stan Gregory</b>	Population estimates of native and introduced catostomid species and their hybrids in an isolated headwater tributary to the Green River in Wyoming <b>David Banks</b>
9:40 AM	Hatcheries, habitat, and the conservation of Pacific salmon in Canada <b>Don MacKinlay</b>	Examining population fragmentation among native Colorado River Basin fishes with the aid of PIT tag technology <b>Bobby Compton</b>	Water quality in the Hells Canyon Complex and the water quality certification process <b>Ralph Myers</b>	Combining spatial and temporal stream temperature measurements to investigate surface/groundwater exchange across a semi-arid alluvial Floodplain <b>Scott O’Daniel</b>	Trophic interactions among lake trout, kokanee, and <i>Mysis relicta</i> : Does lake morphometry mediate impacts on kokanee? <b>Erik Schoen</b>
10:00 AM	Does spawning distribution of outplanted adult hatchery spring Chinook salmon influence reproductive success in a natural stream <b>David Hand</b>	Population dynamics of <i>Oncorhynchus mykiss</i> in a small coastal basin in Big Sur California <b>Thomas Williams</b>	Evaluating the benefits of a temperature control structure for the Hells Canyon Complex <b>Dale McCullough</b>	Influence of hyporheic flow and geomorphology on temperature of a large, gravel-bed river, Clackamas River, Oregon. <b>Barbra Burkholder</b>	The eastern banded killifish, a “non-native transplant” in the Willamette River <b>Ed Hughes</b>
10:40 AM	21 <sup>st</sup> Century salmon and steelhead project: A new All-H Salmonid Management Framework <b>Barbra Cairns</b>	Short- and long-term impacts of PIT tags on survival of hatchery Chinook salmon <b>Curtis Knudsen</b>	Snake River fall Chinook Salmon: An Overview Of research pre and post- relicensing <b>Phil Groves</b>	Assessing thermal suitability of stream for establishment of native trout conservation populations in high- elevation streams <b>Mark Coleman</b>	An analysis of individual transferable quotas for both the commercial and recreational fishing sector <b>Ming Ng</b>
11:00 AM	The practical application of hatchery reform in Washington state <b>Andrew Appleby</b>	Using PIT technology to assess movement and residence time of juvenile Chinook salmon in an intertidal salt marsh of the Salmon River Estuary, Oregon. <b>David Hering</b>	Hells Canyon Complex operations for fall Chinook Salmon <b>Ritchie Graves</b>	A thermal profile method for long river reaches to identify potential areas of ground-water discharge and preferred salmonid habitat and to document the longitudinal temperature regime <b>John Vaccaro</b>	A Comparison of Escapement Estimate Methods Plus Escapement- Recruitment Relationships for Coho Salmon and Chinook Salmon in a Coastal Stream <b>Stephen Gough</b>
11:20 AM	Hatchery reform as a catalyst for increased coordination with harvest plans and habitat restoration <b>Heather Bartlett</b>	Finding a needle in a haystack — using PIT tags to monitor changes in the natural rearing behavior of fish <b>Erick Van Dyke</b>	Idaho Power’s monitoring and management of juvenile fall Chinook entrapment in the Hells Canyon reach of the Snake River <b>Steve Brink</b>	Remote sensing techniques for mapping aquatic habitat: River channel morphology and thermal heterogeneity <b>Russ Faux</b>	Spectral reflectance patterns in northeastern Pacific tidepools <b>Christina Murphy</b>
11:40 AM	Conservation hatchery steelhead trout contribution to wild smolt yield at the Keogh River <b>Don McCubbin</b>	Use of half-duplex PIT systems to monitor passage of adult lamprey at and between dams in the Columbia Basin <b>Chris Peery</b>	Water management through the mid and lower Snake River: Implications for operation of the Hells Canyon Hydroelectric Project <b>Bob Heinith</b>	Valley segment-scale determinants of thermal heterogeneity and cutthroat trout response in high desert streams <b>George Boxall</b>	

Tuesday May 6	Bull Trout and Climate Change: Risks, Uncertainties, and Opportunities for Mapping the Future	Getting Native Lampreys on the Management Radar	Contributed Papers (Marine)	Fish and Habitat Monitoring to Support Large-scale Management Decisions: What Worked and What Hasn't	Contributed Papers (Habitat and Water Quality)
Room	Broadway	3 Sisters	Alaska/Idaho	Multnomah	Mt. Bachelor
Moderator	Dan Isaak	Matt Mesa	Chris Toole	Pete Bisson	Bill Knox
1:20 PM	Geological framework for interpreting streamflow and temperature regimes under climate warming <b>Gordon Grant</b>	AFLP assessment of genetic diversity of Pacific lampreys <b>Kenneth Currens</b>	Forage fish spawning in an urbanized Puget Sound embayment <b>Collin Smith</b>	Evaluation of methods to estimate salmon escapements in the Lower Columbia River ESU <b>Dan Rawding</b>	Climate change on Columbia Basin treaty-tribal lands: Past-present-future <b>Kyle Dittmer</b>
1:40 PM	Stream temperature modeling within the context of a warming climate and bull trout recovery planning <b>Dan Isaak</b>	Timing of adults and juvenile Pacific lamprey movements in the upper Eel River, Mendocino County, CA <b>Demian Ebert</b>	Development and implementation of a monitoring program for estimating impacts of mark-selective Chinook salmon fisheries in Puget Sound, Washington <b>Laurie Peterson</b>	Twelve years of monitoring the effects of flow regimes on salmonids in the Bridge River, British Columbia: What have we learned? <b>Mike Bradford</b>	Developing regional environmental flow standards for Washington State <b>Julian Olden</b>
2:00 PM	How will climate change affect fluvial geomorphology and associated salmonid habitat in mountain basins? <b>John Buffington</b>	Metamorphosis in Pacific lamprey <b>Christina Luzier</b>	Estuarine residency and habitat association patterns of outmigrating coho salmon smolts in Humboldt Bay, California <b>Peter Nelson</b>	Life history diversity in <i>Oncorhynchus mykiss</i> : Monitoring population productivity of ESA listed steelhead in the interior Columbia River basin <b>Chris Jordan</b>	Monitoring status and trend of aquatic habitat in coastal watersheds of Oregon <b>Kara Anlauf</b>
2:20 PM	An integrated view of climate change and bull trout: The Boise River Basin over the last 50 years as a case history <b>Charlie Luce</b>	Characterization of putative migratory and sex pheromones released by Pacific lamprey <b>Andrew Wildbill</b>	Rockfish sex ratios - What are they telling us? <b>David Sampson</b>	Panel Discussion	Tidal circulation, nutrient capture and oxygen: rearing stress in Oregon south coast estuaries <b>Cindy Myers</b>
2:40 PM	There and Back Again: Lessons in Global Freshwater Climate Adaptation <b>John Matthews</b>	Traditional ecological knowledge insights into Pacific lamprey populations of the lower Klamath Basin <b>Robin Lewis</b>	Stable isotope analyses of otoliths in identification of hatchery origin of Atlantic salmon ( <i>Salmo salar</i> ) in Maine <b>Yongwen Gao</b>	Human dimensions: The role of coordination, planning, meetings and personalities in the design and implementation of large-scale monitoring programs <b>Chris Jordan</b>	Juvenile salmonid use of slough habitat in the lower Columbia River: The influence of tidegates <b>Jeff Johnson</b>
3:00 PM	Panel Discussion	Summary of symposium highlights – discussion of future research needs and limitations, current conservation and management issues, and threats to native lampreys <b>Bianca Streif</b>		Integrated monitoring – the holy grail of Columbia Basin monitoring and evaluation: Challenges, examples and lessons learned from the Collaborative Systemwide Monitoring and Evaluation Project <b>Dave Marmorek</b>	
	Contributed Papers (Fish Conservation – Resident Fish)	Contributed Papers (Fish Conservation – Anadromous Fish)	Contributed Papers	Contributed Papers (Genetics)	Contributed Papers (habitat and Water Quality – Continued)
	Robert Al-Chokhachy	Jason Kent	Mike Gray	Mary Hanson	
3:40 PM	The Western Native Trout Initiative- Is there really a truckload of money on the horizon? <b>Robin Knox</b>	Salmonid Rivers Observatory Network: Understanding salmon productivity, management, and climate change <b>Samantha Chilcote</b>	Age at ocean entry of Snake River Basin fall Chinook salmon and its effects on adult returns <b>William Muir</b>	Influences of wildfire, habitat size, and connectivity on trout in headwater streams revealed by patterns of genetic diversity <b>Helen Neville</b>	Rearing and overwintering habitat capacities for juvenile coho over time – tracking the impact of land use modifications from the 1930s <b>Mindi Sheer</b>
4:00 PM	Migratory patterns of adult bull trout in selected basins in northeast Oregon <b>Steve Starcevic</b>	Estimating salmon and steelhead response to watershed restoration: How much restoration is enough? <b>Phil Roni</b>	Dreissenid detection in the West <b>Steven Wells</b>	Population of origin of Arctic cisco ( <i>Coregonus autumnalis</i> ) collected in the Colville River subsistence fishery <b>Andrew Ramey</b>	Yankee Fork floodplain restoration project <b>Steve Clayton</b>
4:20 PM	Genetic variation, ancestry	Food Web Effects of	Results of a range-wide	Bull trout population	Upper Grande Ronde

	and population structure in native Arctic grayling in the upper Missouri River: conservation implications and the “ghost” of impacts past <b>Douglas Peterson</b>	Marine Reserves as Indicated by Stable Isotopes <b>Jessee Schwartz</b>	status assessment of sockeye salmon <b>Peter Rand</b>	genetics in the Metolius River <b>Peter Lickwar</b>	stream restoration effectiveness monitoring <b>Michael Mulvey</b>
4:40 PM	Amphibian use of intermittent agricultural channels and ponds in the lowlands of the Calapooia Basin, Oregon: Importance of conservation in grass seed producing areas <b>Randall Colvin</b>	The Asotin Creek assessment project: A steelhead reference stream in the Columbia Basin <b>Kent Mayer</b>	Glacial Lake 2000-2005 sockeye restoration: Good science or serendipity? <b>Dave Parker</b>	Impacts of supplementation: Genetic diversity in supplemented and unsupplemented populations of summer chum salmon in Puget Sound <b>Maureen Small</b>	Lower Wenatchee River off-channel habitat creation project <b>Steve Clayton</b>
5:00 PM				Strong genetic divergence between riverine and lake-type sockeye salmon from the Kwethluk River, western Alaska <b>Megan McPhee</b>	

Tuesday May 6	Hatchery Research: Hatchery Reform	The Use of PIT Tags in Fisheries Research and Management Applications: Advances, and Aggravations	Relicensing of the Hells Canyon Hydroelectric Complex: Ten Years and Counting	Identifying, Protecting, and Restoring Thermal Refuges for Coldwater Fishes	Student Session
Room	Mt. Hood	Mt. St. Helens	Oregon	Weidler	Halsey
Moderator	Judith Gordon	Dave Marvin	Colleen Fagan	Joe Ebersole	Shivonne Nesbit
1:20 PM	Use of the Ford Model in managing integrated hatchery programs: Strengths and limitations <b>Craig Busack</b>	Monitoring fish passage through culverts in western Oregon <b>Bruce Hansen</b>	White Sturgeon Conservation Plan – The Hells Canyon reach of the Snake River <b>Ken Lepla</b>	Behavioral thermo regulation by adult Chinook salmon in the Columbia River <b>Chirs Peery</b>	The Physiological Effects of Whirling Disease in Resistant and Susceptible Crosses of Rainbow Trout <b>Eric Fetherman</b>
1:40 PM	Changing paradigms for hatchery programs <b>Chuck Peven</b>	Use of PIT tags to examine migration patterns of resident rainbow trout and hatchery steelhead crosses in the Grande Ronde River Basin, northeast Oregon <b>Mike Flesher</b>	Prospects and problems for bull trout restoration in Hells Canyon <b>Jim Esch</b>	Assessing thermal rearing restrictions of juvenile coho salmon using thermal infrared imaging and in-stream monitoring <b>Mary Ann Madej</b>	Investigating competition among lineages of Tubifex tubifex and the potential for biological control of whirling disease <b>Christine Clapp</b>
2:00 PM	Natural reproductive success and demographic effects of hatchery-origin steelhead in Abernathy Creek, Washington <b>Kenneth Ostrand</b>	Whose redd is this? Using PIT tags to identify where individual spring Chinook salmon spawn <b>Carrie Crump</b>	Status and life history strategies of bull trout in the Hells Canyon reach of the Snake River <b>Rick Wilkison</b>	Klamath River thermal refugia: Physical and biological characterization <b>Ron Sutton</b>	Long-term fishery selection on age and size at maturity of Bristol Bay, Alaska sockeye salmon <b>Neala Kendall</b>
2:20 PM	Returns from hatchery and wild steelhead <b>Bruce Ward</b>	Investigating sources of mortality of spring Chinook salmon smolts in the Grande Ronde River valley with emphasis on predation by great blue herons <b>Fred Monzyk</b>	Sport fisheries of the Hells Canyon Complex <b>Dale Allen</b>	Coldwater fishes and thermal refuges in hot water: Synthesis and future directions <b>Christian Torgersen</b>	Barriers to upstream migration of prickly sculpin <i>Cottus asper</i> and coastrange sculpin <i>Cottus aleuticus</i> <b>Michael LeMoine</b>
2:40 PM	Hatchery impacts on reproductive fitness of steelhead <b>Michael Blouin</b>	Use of flat plates and hand scanners in decoding of PIT tags on piscivorous bird colonies. <b>Scott Sebring</b>	An overview of the Idaho Power Hatchery Mitigation Program <b>Paul Abbot</b>	Panel Discussion	Effects of a marine reserve on coral reef fishes <b>Robert Lamb</b>
3:00 PM	Trade-offs associated with alternative egg collection strategies for salmon and steelhead conservation hatcheries <b>Barry Berejikian</b>	The deployment and operation of automated PIT tag detection systems at remote large-scale fish passage facilities <b>Dave Marvin</b>	Hells Canyon relicensing, a Nez Perce tribal perspective <b>Greg Haller</b>	Panel Discussion	Can bull trout predation regulate juvenile salmonid populations? <b>Erin Lowery</b>
				Contributed Papers (Human Dimensions and Policy)	Yukon River Fisheries: Perspectives from Another Large River
				Linda Prendergast	Dani Evenson
3:40 PM	Unexpected effects and unintended consequences: Altering emergence timing results in Chinook salmon life history <b>Brian Beckman</b>	Effects of 8.5 mm Passive Integrated Transponder tags on juvenile Chinook salmon survival and growth <b>Craig Rabe</b>	Why the Hells Canyon not – Fish passage into Oregon tributaries <b>Colleen Fagan</b>	Community constraints in urban ecosystem rehabilitation <b>David Gorman</b>	Overview of management tools used in Yukon River fisheries <b>Steve Hayes</b>
4:00 PM	Evaluating the impacts of salmon and steelhead releases on wild, ESA listed fish populations in a tributary to the lower Clackamas River, Oregon <b>Maureen Kavanagh</b>	The use of 8.5 mm PIT tags for tagging juvenile Hanford Reach fall Chinook salmon in 2007 <b>Scott McCutcheon</b>	Back to the future: Freezing the Hells Canyon Complex of dams in the 1950s— Forever <b>Ed Chaney</b>	Water supply planning and meeting Endangered Species Act and Clean Water Act obligations: How do you deal with water demand forecasting, fish needs, and climate change predictions? <b>Steve Kucas</b>	Estimating salmonid passage in a large, silt-laden river – Sonar on the Yukon <b>Bruce McIntosh</b>
4:20 PM	Evaluating natural productivity and genetic interaction between a segregated hatchery stock and a wild population of steelhead trout <i>Oncorhynchus mkiss</i> in Eagle Creek, Oregon <b>Andrew Matala</b>	Four inches to ten feet: Detection of a PIT-tag at the end of a 750-foot trawl <b>April Cameron</b>	The Hells Canyon Complex – A look to the future <b>Jim Chandler</b>	Human nature, human influences: Are the last frontier's aquatic resources really that different? <b>David Cannon</b>	Stock structure and mixed-stock analysis of Yukon River chum salmon <b>Blair Flannery</b>
4:40 PM	Conservation of genetic resources for the Russian River Coho Salmon Captive Broodstock Program <b>J. Louise Conrad</b>	More than a coil of wire – Development of a PIT-Tag detection array for the John Day River <b>Steve Anglea</b>	Second chances in relicensing - Oregon's perspective <b>Sue Knapp</b>	Fish and wildlife conservation and economic growth: A western perspective <b>Warren Aney</b>	Potential causes of size trends in Yukon River Chinook salmon populations <b>Dani Evenson</b>

5:00 PM	Closing remarks	A do-it-yourself guide to full and half-duplex RFid; lessons learned tracking bull trout in the upper Willamette <b>Vince Tranquilli</b>	Panel Discussion	Fish Welfare: Implications for management, research, and industry <b>Michael Holliman</b>	Yukon River Chinook Salmon Age Consistency Study <b>Larry DuBois</b>
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Wednesday May 7	Biological Assessment of Boatable Water	Native Freshwater Mussels of the West: Silence of the Clams or Enlightened Protection through New Knowledge	Overview of the U.S. Army Corps of Engineers' Columbia River Mitigation Program	Freshwater Fish in Arid and Semi-Arid Regions	Large-scale Aquatic Habitat Assessments	New Tools For Evaluating River and Stream Restoration
Room	Washington	Broadway	3 Sisters	Alaska/Idaho	Multnomah	Mt. Bachelor
Moderator	Alan Herlihy	Al Smith	Mike Langeslay	Amy Unthank	Steve Lanigan	Martin Lierman
9:00 AM	Non-wadeable streams in the West: More and less than you expect <b>Thom Whittier</b>	A review of the first five years of the CTUIR freshwater mussel project <b>Jayne Brim Box</b>	Columbia River Fish Mitigation Program introduction <b>John Kranda</b>	The Desert Fish Habitat Partnership: Striving for no more extinction <b>Kathryn Boyer</b>	Understanding and using large scale stream habitat data <b>Brett Roper</b>	Treating stream restoration as a research opportunity to understand drivers of fish production <b>Jordan Rosenfeld</b>
9:20 AM	Using stressor gradients to determine reference expectations for assessment of great river fish assemblages <b>Ted Angradi</b>	Functional role of freshwater mussels in the benthic environment <b>Jeanette Howard</b>	Strategies for improving salmon an steelhead passage at dams: Surface flow outlets; spillway survival improvements; turbine survival program; adult fish passage improvements <b>Mike Langeslay</b>	Optimizing control methods for an invasive crayfish <b>David Rogowski</b>	Physical habitat in the National Wadeable Streams Assessment <b>Phil Kaufman</b>	Using stable isotopes to inform river restoration science <b>Mark Scheuerell</b>
9:40 AM	Ecological conditions in the Missouri, Mississippi and Ohio Rivers: From microbes to fish <b>Brian Hill</b>	Multiple-scale genetic subdivision in western freshwater mussels <b>Karen Mock</b>	Performance of a surface passage structure (corner collector) at the Bonneville second powerhouse. <b>Noah Adams</b>	Recovering Apache trout in the face of stochastic challenges <b>Julie Meka</b>	Predicting the natural flow regime: Models for assessing hydrological alteration in streams <b>Daren Carlisle</b>	An overview of otolith microchemistry: Its application and potential for addressing regional issues in fish restoration and management <b>Brian Kennedy</b>
10:00 AM	Spatial & temporal changes in the Rio das Velhas, Brazil: an anthropogenically altered and recovering river <b>Paulo dos Santos Pompeu</b>	Conservation of native freshwater mussels in the Pacific Northwest: Where do we start? <b>Brian Adair</b>	Development of a guidance curtain to increase juvenile Chinook salmon use of a surface flow outlet. <b>Dennis Schwartz</b>	Status of Warner sucker in the Warner Basin, Oregon <b>Paul Scheerer</b>	Designing a regional-scale freshwater classification for use in conservation planning <b>Leslie Bach</b>	Study design and statistical tools for monitoring restoration effectiveness <b>Martin Liermann</b>
10:40 AM	Gear sampling effectiveness, fish species composition, and association with wood in the Willamette River, Oregon <b>Randy Wildman</b>	Assessing the conservation status of freshwater mussels <b>Leah Ramsay</b>	Improving survival for fish passing through The Dalles Dam spillway. <b>Bob Wertheimer</b>	Floodpulse trophic dynamics in a restored arid-land river floodplain <b>Hugo Magana</b>	Assessing fish conservation areas in the Oregon North Coast <b>Tom Miewald</b>	Monitoring habitat changes resulting from habitat restoration: New approaches for an old too <b>Roger Peters</b>
11:00 AM	A review of setting appropriate reach length for biological assessment of boatable rivers <b>Joseph Flotemersch</b>	Analysis of biochronologies from western pearlshell mussels <i>Margaritifera falcata</i> in the Pacific Northwest <b>Jason Dunham</b>	Improving survival for fish passing through turbines by developing new turbine designs and modifying operations for existing turbines. <b>Martin Ahmann</b>	Captive breeding of headwater chub, an imperiled southwestern cyprinid <b>Erica Sontz</b>	Conservation Success Index: A tool to synthesize broad-scale assessment data and management needs <b>Jack Williams</b>	Seeing the stream for the fishes with river-centered remote sensing <b>Christen Torgersen</b>
11:20 AM	Biological monitoring of large German rivers: Sampling effort, data interpretation, and condition assessment <b>Christian Wolter</b>	Freshwater mussels of the Owyhee River Basin, Oregon—a prehistoric perspective <b>Cynthia Tait</b>	Adult fish passage at dams: How we got here and where We are going <b>Dave Clugston</b>	Risk to native fishes: influence of anthropogenic stressors <b>Kristen Pitts</b>	Evaluating US Forest Service contribution to sustainability of aquatic and riparian species <b>Yuki Reiss</b>	Genetic methods for studying non-equilibrium populations: Promises and limitations <b>Robin Waples</b>
11:40 AM	Longitudinal variability in Pacific Northwest rivers: Implications for survey design <b>Bob Hughes</b>		Strategies for increasing survival of salmon and steelhead that are transported through the hydrosystem <b>Marvin Shutters</b>	Managing water supplies and conservation of fish and wildlife in the Salt and Verde rivers, Arizona <b>Charles Paradzick</b>	Use and utility of large-scale watershed assessments for salmonid improvement projects in California <b>Scott Downie</b>	Panel Discussion

Wednesday May 7	Hatchery Research: Hatchery Reform	The Use of PIT Tags in Fisheries Research and Management Applications: Advances, and Aggravations	Advances in Modeling Populations and Habitat	Marine Mammal Predation on Fish in Pacific Coast Bays and Rivers	Sockeye on the Brink: Restoration of Declining Sockeye Salmon Populations in the Pacific Northwest and Southern British Columbia
Room	Mt. Hood	Mt. St. Helens	Oregon	Weidler	Halsey
Moderator	Judith Gordon	Dave Marvin	Kelly Burnett	Barry McPherson	Jeff Fryer
9:00 AM	The Oregon Hatchery Research Center <b>David Noakes</b>	Evaluating the impact of avian predators on juvenile salmonids from the Columbia River through the recovery and analysis of PIT tags <b>Allen Evans</b>	Terrestrial drivers of coho population dynamics <b>Daniel Miller</b>	Population status of California sea lions and key marine mammals of concern to fish managers <b>Robin Brown</b>	Life history attributes, trends in population size, and challenges to recovery of federally-listed Lake Ozette sockeye salmon <b>Pat Crain</b>
9:20 AM	The Imnaha River Chinook salmon Supplementation Program after 25 years: A model program in need of reform? <b>Tim Hoffnagle</b>	Habitat actions: The gift that keeps on giving? <b>Charles Paulsen</b>	Developing a riparian vegetation and aquatic habitat dynamics model to inform management decisions in the Interior Columbia River Basin <b>Steven Wondzell</b>	Predation of marine mammals on fish in central and south-coast Oregon rivers <b>Bryan Wright</b>	Baker sockeye recovery: When opportunity met effort <b>Cary Feldman</b>
9:40 AM	Assessment of steelhead supplementation success in the Umatilla River Basin <b>Rich Carmichael</b>	Comparing efficiency of a PIT-tag interrogation system to an adult fish trap and a rotary screw trap <b>Pat Connolly</b>	Multiple spatial scales in an analysis of two life history stages of coho salmon ( <i>Oncorhynchus kisutch</i> ): A hierarchical Bayesian approach <b>Rebecca Flitcroft</b>	Predation of marine mammals on salmonids and sturgeon in the lower Columbia River <b>Robert Stansell</b>	Lake Washington sockeye, changing rivers, changing landscape <b>Gary Sprague</b>
10:00 AM	Results from an integrated spring Chinook hatchery in the Yakima Subbasin <b>David Fast</b>	PTAGIS: More than juvenile survival and travel time <b>Dan Rawding</b>	Assessing patterns of fish demographics and habitat in stream networks. <b>Joe Ebersole</b>	Non-lethal options for reducing seal and sea lion predation on salmonids <b>Steve Jefferies</b>	Designation, protection, and recovery planning for endangered sockeye in Sakinaw Lake, British Columbia <b>Chris Wood</b>
10:40 AM	Hatchery reform: Implications for salmon homing and straying <b>Andy Dittman</b>	PTAGIS: More than just survival and travel time estimates <b>Charles Cochran</b>	Estimation or Prediction in stream network: The role of spatial autocorrelation <b>Lisa Ganio</b>	Innovative technology: Experimental electric fields to deter pinniped predation in the Columbia River Basin <b>Carl Burger</b>	Past and present impact of dam passage (or lack thereof) on Columbia Basin sockeye salmon <b>Jeffery Fryer</b>
11:00 AM	Precocious male maturation in salmonid hatchery programs <b>Donald Larsen</b>	Aggravations in the analysis of PIT-tag detection data <b>Ben Sandford</b>	Does our scale of observation affect our perception of which habitat types are important for Pacific salmon? <b>Blake Feist</b>	Tests of electrified gill Nets and other electrical equipment to deter harbor seal predation on salmon in Canadian rivers <b>Keith Forrest</b>	Examining 80 year old scales to determine if Columbia River kokanee are reservoirs of extinct "sockeye salmon" genetic diversity <b>Eric Iwamoto</b>
11:20 AM	Panel Discussion	Using PIT-tags to analyze the migratory life-history of Pacific salmonids: The ROSTER Model <b>Rebecca Buchanan</b>	Estimating habitat conditions and salmonid population responses in the Lewis River watershed <b>Aimee Fullerton</b>	Status of application by state fish and wildlife agencies for permission to lethally remove California sea lions below Bonneville Dam <b>Charlie Corrarino</b>	Spawning distribution of adult hatchery sockeye released as juveniles from net pens in Lake Wenatchee <b>Andrew Murdoch</b>
11:40 AM	Panel Discussion	Potential biases in salmonid survival rates from capture- recapture models where multiple life-history forms coexist within a population <b>Robert Al-Chokhachy</b>	The good data paradox: Lessons in landscape modeling for coho salmon in western Oregon <b>Julie Firman</b>	Status, diet, and needs of "salmon-eater" Orcas in Puget Sound, WA <b>Ken Balcomb</b>	Survival and production of hatchery and wild sockeye smolts in Lake Wenatchee, Washington <b>Todd Miller</b>

Wednesday May 7	Discoveries and Diversity in the State of Jefferson	Native Freshwater Mussels of the West: Silence of the Clams or Enlightened Protection through New Knowledge	Overview of the U.S. Army Corps of Engineers' Columbia River Mitigation Program	Freshwater Fish in Arid and Semi-Arid Regions	Strategies for Broad-scale Monitoring of Salmonid Populations	New Tools For Evaluating River and Stream Restoration
Room	Washington	Broadway	3 Sisters	Alaska/Idaho	Multnomah	Mt. Bachelor
Moderator	Robert Coffan	Al Smith	Mike Langeslay	Hugo Magana	Kara Anlauf	Martin Lierman
1:20 PM	Effects of livestock grazing on springsnail presence and water quality in Cascade-Siskiyou National Monument spring habitats <b>Brian Barr</b>	A caged mussel relocation experiment to investigate <i>Margaritifera falcata</i> mortality in a Puget lowland stream <b>Arden Thomas</b>	Use of barge transport on a seasonal basis: Winners and losers <b>Bill Muir</b>	A comprehensive study of the native fish fauna of the Goose Lake Basin <b>Michael Heck</b>	Efficient spatially-balanced designs for monitoring status and trends of salmonid populations <b>Don Stevens</b>	Underwater imaging tools and techniques to monitor fish <b>Jamie Glasgow</b>
1:40 PM	Defining trophic relationships on the Shasta River: Variability in space and time. <b>Rob Lusardi</b>	A caged mussel relocation experiment to investigate <i>Margaritifera falcata</i> mortality in a Puget lowland stream - Continued <b>Arden Thomas</b>	Latent mortality of transported fish – Where are we now? <b>Derek Fryer</b>	Spatial patterns in the distribution and conservation of imperiled fishes in the Lower Colorado River Basin <b>Joanna Whittier</b>	General sample surveys: A design for multiple objectives and scales in the Lower Columbia salmon recovery region <b>David Larsen</b>	Fish tagging techniques used as tools for evaluating river and stream restoration <b>George Pess</b>
2:00 PM	Population characteristics of Jenny Creek suckers ( <i>Catostomus rimiculus</i> ): Age-Size relationships, age distribution, apparent densities, and management implications <b>Jeannine Rossa</b>	Ecological investigations of a freshwater mussel assemblage on a Central Oregon preserve: Current and future threats and needs <b>Michelle Steg Geltner</b>	Quantifying the magnitude of smolt mortality from avian predators in the Columbia Basin: It's not one of the 4-H's; What's the Big Deal? <b>Dan Roby</b>	Setbacks and progress in the recovery and status of the Devils Hole pupfish <b>Paul Barret</b>	Implementing the Oregon Plan for Salmon and Watersheds Monitoring Program - Ten years and still counting <b>Kelly Moore</b>	Data handling, databases, and restoration monitoring <b>Brian Burke</b>
2:20 PM	Discovery of aquatic gilled mushrooms: <i>Psathyrella</i> fruiting in the Rogue River in southern Oregon <b>Robert Coffan</b>	Effects of suction dredge mining on the short-term survival of freshwater mussels in the Similkameen River, Washington <b>Kirk Krueger</b>	Caspian tern nesting habitat management by the Corps of Engineers <b>Geoff Dorsey</b>	Utilization of similar stream and floodplain restoration techniques in forested arid and temperate rainforest environments <b>Sean Ferrell</b>	Development of an integrated monitoring program to detect the status and trends of salmonid populations and habitat in Sakhalin <b>Vladimir Samarskiy</b>	Reflection on and future directions for stream restoration <b>Gordan Reeves</b>
2:40 PM	Spring and groundwater resources of the Mt. Shasta region <b>Curtis Knight</b>	Transfer of a western pearlshell mussel ( <i>Margaritifera falcata</i> ) population to the Willapa National Wildlife Refuge, Washington <b>Marie Fernandez</b>	Sea lion predation on adult salmonids in Bonneville Dam tailrace <b>Sean Tackley</b>		Applying multiple imputation with geostatistical models to account for item non-response in environmental data <b>Virginia Lesser</b>	Panel Discussion
3:00 PM	The status of McCloud River redband trout <b>Andrew Braugh</b>	Panel Discussion	Habitat restoration and research in the Columbia River Estuary <b>Blaine Ebberts</b>		Broad-scale population monitoring design and analysis with an emphasis on improving precision of survival estimates through remote PIT tag antennas <b>Patrick Barry</b>	Panel Discussion
		Contributed Papers (Fish Conservation – Anadromous Fish)		Contributed Papers (Habitat)		Contributed Papers (Fish Culture and Health)
		Jeff Yanke		Jack Williamson		Kent Mayer
3:40 PM	Peculiar catfishes in the Modoc Triangle <b>Stewart Reid</b>	The potential of maintsem surface passage <b>Russ Kiefer</b>	Cumulative ecosystem response to restoration projects: An approach in the Columbia River Estuary <b>Ron Thom</b>	Evaluating landscape and watershed-level conditions: techniques for integrating tools and datasets to assess riparian and aquatic health <b>Jeremiah Osborne-Gowey</b>	Assessing distribution and relative reproductive success of hatchery origin adults in target and non-target interior Columbia River Basin stream-type Chinook salmon populations <b>Jay Hesse</b>	Variations in annual adult timing and smolt production in a hatchery-influenced coho salmon <i>Oncorhynchus kisutch</i> population: Associations with hatchery stocks, brood-cycles, and early fall flow fluctuations <b>Tim Dalton</b>

4:00 PM	Larval sucker response to wetlands restoration at the Williamson River Delta, Oregon. <b>Heather Hendrixson</b>	Early marine survival and behavior of steelhead (Oncorhynchus mykiss) smolts through Hood Canal and the Strait of Juan de Fuca <b>Megan Petrie</b>	Salmon life-histories, habitat, and food webs in the Columbia River Estuary <b>Curtis Roegner</b>	Determining environmental effects using a rapid risk assessment: environmental performance measures for forest roads <b>Gerald Middel</b>	A tool for evaluating alternative monitoring designs to assess the status of Snake River spring/summer Chinook salmon <b>Darcy Pickard</b>	Comparison of natural- and hatchery-origin female broodstock from a long-term Chinook salmon supplementation program: Age matters <b>Debra Eddy</b>
4:20 PM	The removal of Brownsville Dam: Significant for fish and human communities <b>Tara Putney</b>	Impacts of parasites on coho salmon from coastal Oregon watersheds <b>Michael Kent</b>	Survival and behavior of juvenile salmonids in the Lower Columbia River <b>Geoff McMichael</b>		A data management approach to support aquatic resources monitoring <b>Steve Rentmeester</b>	Exploring methods to improve fertilization success with cryopreserved Chinook salmon sperm <b>Mary Edwards</b>
4:40 PM	Unique physical conditions and resulting novel life-histories of Shasta River salmonids. <b>Carson Jeffres</b>	From Russia with salmon <b>Paul Burns</b>			Statistical methods for coastal California salmonid monitoring <b>Lyman McDonald</b>	The real poop on aquaculture waste <b>Matthew Bleich</b>
5:00 PM	Integration of ecological functions into greenway development along Yreka and Greenhorn Creeks, California <b>Tom Hesseldenz</b>				Grand Canyon salmonid monitoring: A case study in sampling design <b>Scott Rogers</b>	Comparison of two macrolide antibiotics and drug injection site to reduce prespawn mortality due to bacterial kidney disease in maturing Chinook salmon <b>Sally Gee</b>

Wednesday May 7	Recent Success Stories in Western Aquatic Invasive Species Management	Contributed Papers (Native Fish)	Flow and Temperature Effects on Salmonid Production	Achieving Tangible Fisheries Benefits through Public Involvement: Volunteerism, Education, and Outreach	Sockeye on the Brink: Restoration of Declining Sockeye Salmon Populations in the Pacific Northwest and Southern British Columbia
Room	Mt. Hood	Mt. St. Helens	Oregon	Weidler	Halsey
Moderator	Ian Reid	Craig Bienz	Ian Courter	Tom Friesen	Jeff Fryer
1:20 PM	Successful management of non-native fishes in a Modoc sucker stream: The personal approach <b>Stewart Reid</b>	Conserving and restoring native trout in the face of climate change, invasive species, and development. <b>Robert Gresswell</b>	Modeling temperature and flow dynamics of the Klamath River below Iron Gate Dam <b>Leon Basdekas</b>	Community action for a healthy watershed: MFWWC Watershed and Stewardship Program <b>Eve Montanaro</b>	Creating a mitigative solution in a transboundary context <b>Rick Klinge</b>
1:40 PM	Restoring bull trout through successful management of invasive brook trout in Crater Lake National Park, Oregon <b>Mark Buktenica</b>	Optimizing the reintroduction potential for Lahontan cutthroat trout in a California lake <b>Robert Al-Chokhachy</b>	Simulation of temperature and flow effects on coho salmon in the Klamath River Basin <b>Ian Courter</b>	Students and volunteers help achieve the fish management goals of the Coos-Coquille-Tenmile Fish District <b>Michael Gray</b>	The Okanagan fish-water management (OKFWM) tool: Balancing water objectives to promote sockeye salmon production gains <b>Kim Hyatt</b>
2:00 PM	Restoration through collaboration: Fossil Creek, Arizona <b>Pam Sponholtz</b>	Influence of habitat size and time since isolation on persistence of westslope cutthroat trout in isolated stream networks <b>Douglas Peterson</b>	Development of a quantitative life-cycle model to estimate hydropower related impacts to lower Clackamas Basin salmonids <b>Kathryn Arendt</b>	Connecting Water, Wildlife, and People through Creeks and Kids <b>Lin Howell</b>	Implications of climate change for Okanagan Basin water availability and salmonid restoration <b>Clint Alexander</b>
2:20 PM	Restoring a native fish community: Mechanical removal efforts in Bright Angel Creek, Grand Canyon National Park <b>Pam Sponholtz</b>	Landscape Genetics and Conservation of Oregon chub ( <i>Oregonichthys crameri</i> ) <b>William Arden</b>	Salmonids and altered thermal patterns below artificial reservoirs on three northwest rivers <b>Charles Huntington</b>	Public involvement: How information and education professionals can help (A case study from the Fish Food Crisis of 2007) <b>Richard Hargrave</b>	Okanagan Nation management approach to sockeye recovery in the Okanagan Basin <b>Howie Wright/Ryan Benson</b>
2:40 PM	Mechanical removal of non-native fishes from the Colorado River within Grand Canyon <b>Lew Coggins</b>	Distribution and abundance of Umpqua chub and smallmouth bass in the Umpqua River Basin, Oregon: Are bass eliminating chub? <b>David Simon</b>	Observations of temperature and early salmonid life history in a regulated California river <b>Joe Merz</b>	Volunteer project highlights of ODFW's North Coast Salmon-Trout Enhancement Program <b>Tracy Crews</b>	Working together to assist Snake River sockeye salmon: Utilizing partnerships between hatcheries and research to gain ground towards recovery <b>Michael Peterson</b>
3:00 PM	Mechanical removal effectiveness of northern pike in the upper Yampa River, Colorado <b>Sam Finney</b>	Evidence of density- and size-dependent mortality in hatchery-reared juvenile white sturgeon ( <i>Acipenser transmontanus</i> ) in the Kootenai River <b>Casey Justice</b>	Minute temperature decrease triggers hormone mediated downstream movement in Pacific salmon <b>Arimune Munakata</b>		Utilizing naturally spawning adults within a captive broodstock program as a re-introduction strategy to assist in the recovery of an endangered Snake River sockeye salmon population <b>Carlin McAuley</b>
		Contributed Papers (PIT-tags)			
		Dave Marvin			
3:40 PM	Fisheries management approaches for control of an invasive pathogen: <i>Myxobolus cerebralis</i> – Resistant rainbow trout and their role in Colorado sport fish management <b>Jerri Bartholomew</b>	Assessment of juvenile salmonid passage through a barrier culvert using PIT-tags <b>Steve Anglea</b>	Effects of low flows upon residency, size, and survival of Chinook salmon: A tale of two tributaries. <b>Correigh Greene</b>	Eastern Oregon Salmon-Trout Enhancement Program: Volunteers STEP up <b>Jennifer Luke</b>	A safety net artificial propagation project for ESA listed Snake River sockeye salmon <b>Desmond Maynard</b>
4:00 PM	Diamond Lake, Oregon: 2006 Restoration, 2007 recovery, and latest fishing report <b>Holly Truemper</b>	PIT tagging of northern pikeminnow in the lower Columbia and Snake rivers <b>Howard Takata</b>	Migration survival of sockeye salmon, Chinook salmon, and steelhead from the Salmon River headwaters <b>James Morrow</b>	Oregon conservation strategy: Citizen science opportunities for fish and wildlife <b>Audrey Hatch</b>	Growth and survival of endangered Snake River sockeye salmon <i>Oncorhynchus nerka</i> reared in three Sawtooth Valley, ID lakes <b>Robert Griswold</b>
4:20 PM	Piscicide alternatives: Mechanical removal yields success in managing	Using mark-recovery data generated by PIT tags to inform stock assessments of	Water Velocity and turbulence affect the migration rate of	Full circle: Cashing in on A lifetime of experience <b>Richard Heap</b>	S Snake River sockeye salmon <i>Oncorhynchus nerka</i> : Evidence of natural

	invasive cyprinids in a southern Oregon trout lake <b>Ian Reid</b>	black rockfish in Stock Synthesis II <b>Troy Buell</b>	subyearling fall Chinook salmon in the free-flowing and impounded Snake River <b>Kenneth Tiffan</b>		production in Redfish, Pettit, and Alturas lakes <b>Andre Kohler</b>
4:40 PM	Perils of pike in California: Lessons learned at Lake Davis <b>Julie Cunningham</b>	PIT-tagged fish: A wealth of information but not cost free <b>John Williams</b>	Instantaneous mortality rates of juvenile yearling Chinook and steelhead through the lower Snake River and their associations with environmental variables <b>Steven Haeseker</b>	Panel Discussion	Panel Discussion: Featuring short presentations on restoration of sockeye salmon in the Deschutes, Yakima, and Grand Ronde Rivers
5:00 PM	Panel Discussion		How water temperature and flow affect disease processes: the case of <i>Ceratomyxa shasta</i> in the Klamath River <b>Jerri Bartholomew</b>		Panel Discussion