

Columbia River Estuary Science-Policy Exchange Speaker Profiles

John Ferguson – NOAA Fisheries NFSC – Dr. Ferguson is the Director of the Fish Ecology Division and oversees research conducted in the five programs within the Division. Dr. Ferguson's primary expertise lies in evaluating means to improve the condition and survival of fish passing through spillways, bypass systems, and turbines at dams in regulated rivers. His recent interests include 1) modeling the effects of passing dams on fish populations, 2) the behavior of juvenile Atlantic salmon and sea trout during downstream migrations, 3) the role habitat complexity has on salmonid life history diversity expression, 4) the potential impact of wave energy development on coastal ecosystems and marine resources, and 5) the potential impact of climate variability on freshwater and marine ecosystems and salmonid productivity in the Pacific Northwest.

David Jay – Portland State University – Dr. Jay is Professor of Civil and Environmental Engineering at Portland State University. He conducts research on a variety of estuarine, coastal and tidal related topics including estuarine circulation and salinity intrusion, buoyant plume processes and human alteration of coastal environments. He is researching the effects of man and nature have on salmon habitat in the Columbia River basin. He is working to establish the Center for Columbia Basin Research at Portland State.

Mark Sytsma – Portland State University – Dr. Sytsma is an Associate Professor of Environmental Sciences director of the Center for Lakes and Reservoirs, and co-director of the Aquatic Bioinvasion Research and Policy Institute. He co-authored the Oregon Aquatic Invasive Species Management Plan and is responsible for implementation of the Plan in collaboration with other state agencies. He is a founding member of the Oregon Invasive Species Council, the Columbia River Basin Team of the 100th Meridian Initiative, and the Western Regional Panel on Aquatic Nuisance Species.

Amy Borde – Pacific Northwest National Laboratory – Ms. Borde specializes in wetland ecology and restoration. She has conducted an assessment of eelgrass meadows in Puget Sound and Northwest coastal estuaries, the development of innovative methods of propagating and transplanting seagrass and an assessment of areas proposed for mitigation. Ms. Borde has recently been involved in national studies on innovative coastal habitat restoration, the ecological functions and societal values of isolated wetlands, and issues related to wetland mitigation banks.

Geoff McMichael – Pacific Northwest National Laboratory - Mr. McMichael received his bachelor's and master's degrees in Fish and Wildlife Management at Montana State University in Bozeman and has spent the past 20 years studying Pacific salmon in the northwest. He is a Senior Research Scientist in the Ecology Group at the Pacific Northwest National Laboratory in Richland, Washington. He has managed several acoustic telemetry projects using the newly-developed Juvenile Salmon Acoustic

Telemetry System (JSATS) over the past six years. His recent research has focused on juvenile salmonid behavior and survival through the lower Columbia River and estuary as well as extended rearing juvenile fall Chinook salmon in the Snake River. He is the JSATS Coordinator for PNNL.

Jennifer Morace – US Geological Survey - Jennifer Morace is a hydrologist with the U.S. Geological Survey (USGS), Oregon Water Science Center. She is a graduate of Oregon Health Sciences University (M.S., 1996, Environmental Science and Engineering). She has been with USGS since 1991 and has worked on many water-quality studies in the Columbia, Willamette, Yakima, and Klamath basins. Her current work and interests focus on evaluating water-quality conditions in the Columbia River Basin, particularly "toxics"--pesticides, legacy compounds, pharmaceuticals, wastewater compounds, PBDEs, and emerging contaminants.

Lyndal Johnson – NOAA Fisheries NFSC – Ms. Johnson is a zoologist in the Ecotoxicology and Environmental Fish Health Program of the Environmental Conservation Division. She joined the Division in 1984 as part of the fish pathology team, and studied chemical contaminants and fish disease as part of NOAA's National Benthic Surveillance Program. As the leader of the Ecological Assessment Team in the Ecotoxicology and Environmental Fish Health Program, Lyndal is currently working with the Lower Columbia River Estuary Partnership, USGS, and other agencies to study effects of chemical contaminants on juvenile salmon in the Lower Columbia River, and with Washington State Department of Fish and Wildlife and the Puget Sound Ambient Monitoring Program to survey Puget Sound bottomfish and salmon for exposure to environmental estrogens. Lyndal has also been involved in recent evaluations of water and sediment quality standards for their utility in protecting listed salmon and other fish species, and provides technical guidance to resource managers on how to protect marine animals from harmful impacts of toxicants.

Elena Nilsen – US Geological Survey – Dr. Nilsen joined the USGS in 2004 from the University of California, Santa Cruz, where she worked on issues of carbon cycling, nutrient dynamics, and anthropogenic impacts on estuarine ecosystems. She was a Mendenhall Post-doctoral Fellow with the USGS Coastal and Marine Geology Program in Menlo Park, CA, studying impacts of contamination on estuarine ecology and geochemistry. She continues as a research chemist at the Oregon Water Science Center in Portland where she works on issues related to emerging contaminants in the Columbia River Basin.

Nichole Sather – Pacific Northwest National Laboratory - Ms. Nichole Sather is a fisheries ecologist with the Coastal Assessment and Restoration technical group at the Pacific Northwest National Laboratory. Ms. Sather's project work includes wetland and coastal habitat assessments, research development in fishery ecology, as well as NEPA reviews and preparation of environmental impact statements as an aquatic ecology subject matter expert. Ms. Sather has extensive field experience working in estuarine, nearshore, and freshwater environments. Her research at the Pacific Northwest National

Laboratory has primarily focused on the ecological relationship between juvenile salmon and estuarine and nearshore habitats.

Ed Casillas – NOAA Fisheries NFSC – Dr. Casillas has worked for NOAA Fisheries for more than 20 years. He has evaluated the effect of human use of toxic compounds in coastal environments on marine fishes, invertebrates and salmon, and the role of natural climate change on growth and survival of juvenile salmon in the estuarine and coastal marine environments of the Pacific Northwest. As Program Manager of the Estuary and Ocean Ecology Program, Ed's responsibilities are to supervise the program's research activities, which fall into three principal areas: defining the role of estuaries for salmon and how they function to benefit completion of the salmon life cycle, defining the role of the Columbia River plume as an important early ocean habitat for juvenile salmon and participating in the Northeast Pacific Global Ocean Ecosystems (GLOBEC) projects. GLOBEC brings together NOAA and academic scientists to assess the relationship between physical and biological processes (including salmon) in the coastal region of Northern California and Southern Oregon.

Mary Ramirez – University of Washington – Mary Ramirez is a research analyst with the Wetland Ecosystem Team at the University of Washington. She received an M.S. from the School of Aquatic and Fishery Sciences, University of Washington.

Tracey Yerxa – Bonneville Power Administration – Tracy is a Contract Officer Technical Representative with Bonneville focusing on the Columbia River estuary. Prior to joining BPA she worked for the US Bureau of Reclamation in the Yakima basin for the Yakima River Basin Water Enhancement Project.

Phil Trask – PC Trask and Associates – Before forming his own consulting firm, Phil worked for Washington's Lower Columbia Fish Recovery Board to create the Lower Columbia and Estuary Subbasin Plans and the LCFRB's Salmon Recovery Plan for the Washington side of Lower Columbia tributaries and estuary. He helped develop the Columbia River Estuary ESA Recovery Plan Module for NOAA. His firm specializes in developing habitat restoration projects and ecosystem planning. He formerly served as a Board Member for the Lower Columbia River Estuary Partnership.

Cathy Tortorici – NOAA Fisheries - Cathy Tortorici is the Branch Chief for the Oregon Coast/Lower Columbia River Branch of NOAA Fisheries in Portland, Oregon. She has B.S. and M.S. degrees in Biology. She received a M.S. in Entomology from the University of Kansas in 1985. Cathy's responsibilities include restoration, regulation, research, and monitoring activities at local and regional scales of coastal systems, including the Columbia River estuary.

Catherine Corbett – Lower Columbia River Estuary Partnership – Catherine Corbett serves as Technical Program Manager for the Lower Columbia River Estuary Partnership. Prior to joining LCREP in 2008, Catherine was Senior Scientist for the Charlotte Harbor National Estuary Program located in Ft. Meyers, Florida.

Ian Sinks – Columbia Land Trust - Ian Sinks is the Stewardship Manager for the Columbia Land Trust in Vancouver, Washington. The Columbia Land Trust is a private, non-profit organization dedicated to working with willing landowners to conserve important habitats and landscapes within the lower Columbia River region. Ian is responsible for both land acquisition and stewardship of conserved lands. One of his current focus areas is working with partners and community members to protect and restore intertidal habitats within the lower Columbia River and estuary.

Blaine Ebberts – US Army Corps of Engineers – For the last eighteen years Blaine Ebberts worked for the US Army Corps of Engineers, Portland District in fish passage at large hydroelectric facilities and ecosystem restoration in the lower Columbia River and estuary. Prior to coming to the Corps Blaine worked as a research fisheries biologist for NMFS in Alaska and a biologist at the National Marine Mammal Laboratory in Seattle Washington. Prior to becoming a “real” biologist Blaine worked for Greenpeace saving whales. Blaine has a BS from Oregon State University in Biology with an emphasis in Marine Biology.

Micah Russell – Columbia River Estuary Study Taskforce – Micah is the Director of the Columbia River Estuary Study Taskforce. He administers and directs the activities of CREST on behalf of member cities, counties and ports in the region: environmental planning and management, habitat restoration and assessment, and estuarine research and monitoring. Micah works closely with partner agencies, universities and non-profits in striving to further CREST's mission and offer valuable services to the community. With expertise in coastal/estuarine ecology and fisheries, he is uniquely suited to oversee and implement CREST's research and monitoring programs, in addition to his directorial duties.

Ron Thom - – Pacific Northwest National Laboratory – Dr. Thom leads the Coastal Assessment and Restoration technical group at the Marine Sciences laboratory in Sequim, WA. He has conducted research in coastal and estuarine ecosystems since 1971. His research includes habitat construction and restoration; adaptive management of restored systems; effects of pollution; benthic primary production; climate change; and ecology of fisheries resources.

Colin Levings – Independent Scientific Advisory Board – Dr. Levings is an Adjunct Professor at the Institute for Resources, Environment and Sustainability and an Honourary Research Associate in the Department of Zoology at UBC. He has published over 200 scientific papers, conference proceedings papers, technical reports, and books including the co-editorship of a definitive volume on fjord oceanography. Although he has specialized in salmon and estuarine ecosystems, he has also worked on benthic ecology in fjords, discovered chinook wintering rearing habitat in the upper Fraser River, researched off channel habitat use by juvenile chinook and coho in Fraser River tributaries, initiated the first studies on Canada’s Pacific coast on ballast water as a pathway for exotic species, and published papers on marine protected areas and coastal biodiversity, critical habitat, habitat mapping and GIS methodology, climate change and

other topics. Colin has conducted applied studies on estuary and river habitat disruption, marine riparian ecology, estuarine habitat restoration, pollution from pulp mills, sewage, oil spills, ocean dumping and dredging, wood waste and log booms, acid mine drainage, and fish farms.