The Washington Climate Change Impacts Assessment Conference

PRESENTER/MODERATOR BIOS

***ABOUT THE CLIMATE IMPACTS GROUP (CIG) -** The CIG is an interdisciplinary research group studying the impacts of natural climate variability and global climate change on the U.S. Pacific Northwest. Through these analyses and interaction with the regional stakeholder community, the CIG works to increase the resilience of the Pacific Northwest to fluctuations in climate. Current research focuses on four key sectors: water resources, aquatic and marine ecosystems, forests, and coasts. The CIG is funded by the National Oceanic and Atmospheric Administration's Climate Program Office with additional financial and technical support provided by the University of Washington. The CIG is located in Seattle at the University of Washington with affiliates in Boise, Idaho.*

PETE BISSON - Pete Bisson leads an aquatic research team at the Forest Service's Pacific Northwest Research Station in Olympia, Washington. He worked as an aquatic biologist for the Weyerhaeuser Company for 21 years prior to joining the Forest Service in 1995. His research has included stream habitats and food webs, riparian zone management, and a variety of conservation issues related to aquatic ecosystems. He holds affiliate faculty appointments at the University of Washington, Oregon State University, and the University of Idaho, and has served on two National Academy of Sciences committees: one on Pacific salmon and the other on watershed management. Pete is currently vice-chair of the Independent Scientific Review Panel for the Northwest Power and Conservation Council, which provides guidance to fish and wildlife recovery in the Columbia River Basin.

DEREK BOOTH - Derek Booth is a geologist in the fields of landscape processes, geologic hazards, and watershed management. He has worked primarily in the Puget Sound region for the past 29 years, first as a geologist for the USGS and then for King County's Basin Planning Program, which successfully completed stormwater and watershed management plans for much of the County's unincorporated area. He then returned to the University of Washington as a professor, with joint appointments in the departments of Civil & Environmental Engineering and Earth & Space Sciences. He was director of UW's Center for Water and Watershed Studies and is co-author of the recent National Research Council report, "Urban Stormwater Management in the United States." Although still an Affiliate Professor at UW, Derek joined the private sector two years ago and now works with Stillwater Sciences, an environmental consulting firm in California, Oregon, and Washington.

RALPH CAVALIERI - Dr. Ralph Cavalieri is the Associate Dean for Research, College of Agricultural, Human, and Natural Resource Sciences at Washington State University. He also serves as the Director of the Agricultural Research Center, which is the State of Washington's agricultural experiment station system that consists of nearly two hundred scientists at six locations across the state. Dr. Cavalieri is a Professor of Biological Systems Engineering, with research focuses on chemical and enzymatic kinetics in food and other biomass conversion processes, particularly biosensors for enzyme activity & process control, and also on postharvest system engineering for fruits and vegetables. Dr. Cavalieri received the B.S. in Chemical Engineering from the University of Idaho, and Ph. D. in Chemical Engineering from Washington State University. He joined the faculty of Washington State University in 1985.

ALAN HAMLET - Dr. Alan F. Hamlet is an Assistant Professor in the Department of Civil and Environmental Engineering at the University of Washington, with joint affiliation with the inter-disciplinary CSES (Center for Science in the Earth System) Climate Impacts Group. His research over the last 10 years has focused on the impacts of climate variability and change on rivers and water resources systems in the western U.S., with a particular emphasis on the Columbia River basin in the Pacific Northwest.

DAVID HARTLEY - David M. Hartley is Principal Hydrologist at Northwest Hydraulic Consultants in Seattle, Washington. Dr. Hartley has over 25 years of experience in modeling and analysis of watershed processes. He joined the staff of Northwest Hydraulic Consultants in 2002 and was name a principal in 2004. Dr. Hartley manages and conducts projects related to stormwater management, water supply, hydro-ecology, and floodplain analysis for both public and private sector clients. Dr. Hartley holds civil engineering degrees from the University of Michigan and Colorado State University. He began his hydrology and erosion modeling career in Colorado as a Research Hydraulic Engineer with the USDA-ARS Hydro-Ecosystems Research Group. Subsequently, he re-located to Seattle and led the hydrology program of the King County Surface Water Management and Water and Land Resources Divisions. Dr. Hartley has served as an international consultant to UN-FAO for watershed modeling and has authored numerous journal and conference papers on the subjects of hydrologic processes, watershed modeling, and human impacts on stream health.

DAN HUPPERT - Dr. Huppert is a Full Professor at the School of Marine Affairs, University of Washington in Seattle. After earning a PhD in economics from the UW in 1975, he worked for the National Marine Fisheries Service in San Diego for 15 years, exploring economic aspects of tuna policy and leading efforts to develop management plans for anchovy, mackerel, and squid fisheries. He participated on management plan teams and the Scientific and Statistical Committee (SSC) for the Pacific Fishery Management Council. Since moving to Seattle in 1989, he has been teaching courses in marine resources management and economics at the School of Marine Affairs. He joined the North Pacific Fishery Management Council's SSC for five years ending in 1994. He has performed research for the National Marine Fisheries Service, including developing a report on the economics of salmon recovery, and participated on National Research Council Committees dealing with Alaska's Community Quota Development Program and the Louisiana Coastal Area Study. For the State of Washington, he lead the Columbia River Initiative Economic Advisory Committee (2003-2004), and served on the Northwest Straits Commission Review Committee in 2004. Since 1997 he has served as a member of the Northwest Power and Conservation Council's Independent Economic Analysis Board. His research interests include ocean fisheries management, marine aquaculture, watershed planning and management, and coastal management. Current research projects include coastal impacts of climate change in Washington State and economics of razor clam beach closures due to hazardous algal blooms.

J. ELIZABETH JACKSON - J. Elizabeth Jackson is a graduate student in the Department of Sociology at the University of Washington. She has conducted research in the areas of health services and rural health for eight years. Her other research interests include organizational behavior, risk and technology. She is currently completing a doctoral degree.

CATHERINE KARR - Catherine Karr is an academic pediatrician, environmental health researcher, and director of the CDC/EPA sponsored Northwest Pediatric Environmental Health Specialty Unit (PEHSU) at the University of Washington. Her educational background includes a MS in environmental health/toxicology, PhD in epidemiology, and MD from the University of Washington School of Public Health/School of Medicine. She is currently assistant professor in the Department of Pediatrics with an adjunct appointment in the Department of Environmental and Occupational Health Sciences. Her research interests include the effects of air pollution and pesticides on child respiratory and neurodevelopmental health.

CHAD KRUGER - Chad Kruger is the BIOAg Educator and the Interim Director for the Washington State University Center for Sustaining Agriculture & Natural Resources (CSANR). For the past five years he has coordinated CSANR's Climate Friendly Farming™ Project, which is researching agricultural practices and technologies that reduce agricultural energy use and greenhouse gas emissions, sequester carbon in soils, and provide renewable, biomass-based substitutes for fossil fuel-based products. He received a B.A. in Philosophy and History (1997) and an Academic Certificate in Ecointensive Agriculture Technologies (1998) from Northwest College in Kirkland, Washington, and he completed an M.S. (2003) in Land Resources from the Gaylord Nelson Institute for Environmental Studies at the University of Wisconsin–Madison. He was an Au Sable Graduate Fellow at the University of Wisconsin–Madison. His professional experience includes more than 10 years of experience in teaching, extension and research on the adoption of sustainable agriculture systems and technologies and administration of a research policy network. He is a member of the Washington State Climate Action Team, and co-chairs the Agriculture Sector Carbon Market Workgroup.

DENNIS LETTENMAIER - Dennis Lettenmaier received his B.S. in Mechanical Engineering (summa cum laude) at the University of Washington in 1971, his M.S. in Civil, Mechanical, and Environmental Engineering at the George Washington University in 1973, and his Ph.D. at the University of Washington in 1975. He joined the University of

Washington faculty in 1976. In addition to his service at the University of Washington, he spent a year as visiting scientist at the U.S. Geological Survey in Reston, VA (1985-86) and was the Program Manager of NASA's Land Surface Hydrology Program at NASA Headquarters in 1997-98. He is a member of the American Geophysical Union, the American Water Resources Association, the European Geosciences Union, the American Meteorological Society, and the American Society of Civil Engineers, and the American Association for the Advancement of Science. He was a recipient of ASCE's Huber Research Prize in 1990, and the American Geophysical Union's Hydrology Section Award in 2000. He is a Fellow of the American Geophysical Union, the American Meteorological Society, and the American Association for the Advancement of Science, and is a member of the International Water Academy. He is an author or co-author of over 200 journal articles. He was the first Chief Editor of the American Meteorological Society Journal of Hydrometeorology, and is currently an Associate Editor of Water Resources Research. He is the President-elect of the Hydrology Section of the American Geophysical Union. His areas of research interest are large scale hydrology, hydrologic aspects of remote sensing, and hydrology-climate interactions.

JESSICA LEVIN - Jessica Levin is a law clerk to the Honorable Marlin Appelwick of Division I of the Washington State Court of Appeals. Last May, she graduated from Seattle University School of Law, where she served as Editor in Chief of the Seattle Journal for Social Justice and focused her studies on environmental and natural resources law. She plans to pursue a career in public interest environmental law after her clerkship.

JEREMY LITTELL - Jeremy Littell is a Research Scientist at the Climate Impacts Group, part of the University of Washington's Joint Institute for the Study of the Atmosphere and Ocean. He received his Ph.D. from the University of Washington's College of Forest Resources. His research focuses on how climate change and natural climate variability affect forest and mountain ecosystems in the western U.S. He uses paleoecological and modern archives of tree growth, tree establishment, and forest fire to understand the ecological and ecohydrological responses to climate. He also collaborates with forest managers and with ecosystem and hydrologic modelers to understand the implications of future climate change for forest ecosystems. Much of his current work is on adaptation to climate change in forest ecosystems of the West.

NATHAN MANTUA - Nathan Mantua is a Research Associate Professor in the School of Aquatic and Fishery Sciences, adjunct faculty in Atmospheric Sciences and Marine Affairs, the Associate Director of the Center for Science in the Earth System at the University of Washington, and a research scientists with the PNW Station of the US Forest Service. He has been a member of the UW's Climate Impacts Group since 1995. His research focuses on climate impacts on the water cycle, forests and aquatic ecosystems, and how climate information is or isn't being used in resource management decisions. Nate received a B.S. from the University of California at Davis in 1988, and a PhD from the UW's Department of Atmospheric Science in 1994. He spent one year as a postdoctoral Fellow at Scripps Institute of Oceanography working on a pilot project for the International Research Institute for Climate Prediction. In April 2000 he received a Presidential Early Career Award for Scientists and Engineers for his climate impacts research and public outreach activities.

JAY J. MANNING - Jay Manning was appointed as director of the Washington State Department of Ecology (Ecology) in February 2005. The Department of Ecology is the state's primary environmental agency, with programs addressing water quality and quantity, air quality, solid, hazardous and nuclear waste, oil spill prevention and response and shoreline and wetland protection. Before coming to Ecology, Manning spent six years in private law practice, most recently as the managing partner of Brown, Reavis and Manning PLLC. From 2000-04, Jay was president of the Board of Directors for Washington Environmental Council. Before that, he spent 15 years working as an assistant attorney general, including nearly six years as head of the Ecology Division.

MARKETA MCGUIRE ELSNER - Marketa McGuire Elsner, P.E. is a research scientist with the Climate Impacts Group at the University of Washington. She received her bachelor's degree in civil engineering from the University of Colorado and a master's degree from the Department of Civil and Environmental Engineering at the University of Washington. She specializes in hydrology and water resource management and the related impacts of climate change. Marketa is co-managing the Washington climate change impacts assessment, which evaluates the impacts of climate change on Washington State natural and human resources. She is also involved in a study to provide a publicly accessible web accessed database of hydrologic scenarios for the Columbia River Basin. Marketa is a registered professional engineering in Washington and has worked for environmental consulting firms in both Colorado and Washington.

DON MCKENZIE - Don McKenzie is a research ecologist at the Pacific Wildland Fire Sciences Lab, US Forest Service. He studies the effects of climate change on mountain ecosystems, focusing on wildfire, its interactions with other disturbances, and how it affects spatial patterns on landscapes. He uses historical observations, statistical analysis, and computer simulations to understand how changing fire regimes will affect species composition, hydrology, carbon dynamics, and wilderness preservation across western North America.

EDWARD L. MILES - Edward L. Miles is the Virginia and Prentice Bloedel Professor of Marine Studies and Public Affairs at the University of Washington. He holds joint appointments in the School of Maine Affairs of the College of Ocean and Fisheries Sciences and the Evans School of Public Affairs. He is also a Senior Fellow in JISAO where he serves as the Co-Director of the Center for Science in the Earth System and leader of the Climate Impacts Group. Miles has been a participant in the work of the Intergovernmental Panel on Climate Change (IPCC) since February 1994.On April 29, 2003 he was elected to membership in the U.S. National Academy of Sciences and on October 14, 2005 he was elected to the rank of Fellow of AAAS. Miles' fields of specialization are international science and technology policy, marine policy and ocean management, and the impacts of climate variability and change at global and regional scales

AMBER MOORE - Amber Moore is a second-year graduate student at the University of Washington's School of Marine Affairs. She obtained her bachelor's degree in biology at the University of Mary Washington in Fredericksburg, Virginia. For the past year and a half Amber has been working with the coastal sector of the Climate Impacts Group assessing the effects of sea level rise on Washington's coasts. Her master's thesis project is entitled "The Impact of Climate Change Stressors on Shellfish Ecosystems in the Washington State Coastal Zone." Amber will be graduating in June and hopes to continue her work on climate change adaptation issues, with a focus on the marine environment.

PHILIP MOTE - Philip Mote is a Research Scientist with the Climate Impacts Group at the University of Washington and an Affiliate Professor in the Atmospheric Sciences Department. His research interests include observed variability and change in Northwest climate and mountain snowpack, influences of climate on water resources and wildfire, and dynamics of the tropical tropopause and lower stratosphere. He has a Ph.D. (Atmospheric Sciences) from UW and a B.A. (Physics) from Harvard. As of March 2009 he will be the director of the Oregon Climate Change Research Institute and professor in the College of Oceanic and Atmospheric Sciences at Oregon State University.

ELAINE ONEIL – Elaine Oneil is a Research Scientist at the University of Washington's College of Forest Resources. Elaine received her PhD from the University of Washington in 2006, during which she examined the links between site, stand, and climate variables and Mountain Pine Beetle (MPB) outbreaks in lodgepole pine forests of eastern Washington. Elaine's current is focused on life cycle analysis, carbon accounting, MPB related climate change impacts in forests, and the efficacy of various treatment regimes in addressing current forest health crises. Elaine is specifically interested in the integration of current and emerging product markets with the co-benefits that can accrue for climate mitigation and adaptation strategies applied to managed forest landscapes.

DAVE PETERSON - Dave Peterson is a Research Biologist with the US Forest Service Pacific Wildland Fire Sciences Laboratory in Seattle and is Professor in the College of Forest Resources, University of Washington. He directs the Fire and Environmental Research Applications team which conducts research on fire science, fuels, and climate change. He has conducted research on fire ecology and climate change in mountain ecosystems throughout the western United States, and has published over 180 scientific articles and three books. He is a principal investigator for the Western Mountain Initiative and as a contributing author for the Intergovernmental Panel on Climate Change was a co-recipient of the Nobel Peace Prize in 2007. He is currently working on hazardous fuel treatment issues in the West and on adaptation options for managing natural resources in a warmer climate.

W. SPENCER REEDER – Spencer Reeder holds the position of Lead Policy Strategist for Climate Change at the Washington State Department of Ecology. Mr. Reeder is a former Bosch and McCloy Fellow, and holds degrees in Chemical Engineering from the University of Washington and in Aerospace Engineering Sciences from the University of Colorado, Boulder. He has worked extensively in the private sector in the fields of Aerospace and Telecommunications and is former Executive Director of the SRCW, a NOAA-funded scientific non-profit organization. Prior to that, he worked as a senior staff member for UNAVCO, a National Science Foundation-funded earth sciences institution in Boulder, Colorado that focused on global geophysical research, including work on sea level rise. Spencer also currently chairs the climate change committee of the Western Governor's Agreement on Ocean Health.

ERIC ROSENBERG - Eric Rosenberg is a PhD student in UW's Department of Civil and Environmental Engineering, specializing in hydrology and water resources. He has 8 years of consulting experience and is a licensed engineer in the State of New York. He holds bachelors and masters degrees from Northwestern and Columbia Universities, both in civil engineering.

ROGER ROSENBLATT - Roger Rosenblatt MD, MPH, MFR is a family physician, public health researcher, and forester who has been at the University of Washington since 1971. He is currently Professor and Vice Chair of the Department of Family Medicine. His primary interest is in improving access to high quality health care for vulnerable and under-served human populations, and helping to preserve the ecological integrity of the earth for the benefit of all species.

CLAUDIO STÖCKLE - Claudio Stöckle is currently a Professor and Chair (2001-present) of the Department of Biological Systems Engineering at Washington State University. Previously, he was Director of the State of Washington Water Research Center (1999-2001). He completed an undergraduate professional degree (5 years plus thesis) in Agricultural Engineering at the University of Chile (1972), MS in Soil Physics (1983), MS in Engineering (1986), and PhD in Soil Physics (1985), all graduate degrees at Washington State University (WSU). He joined WSU in 1989, becoming professor in 1998. Previously, he was an assistant professor with the Texas Agriculture Experiment Station, Temple, Texas (1986-1989), a faculty member at the University of Chile and a part-time consultant in irrigation and drainage (1973-1981).

INGRID TOHVER - Ingrid Tohver completed a B.S. in Botany from the University of Michigan, and later joined the Environmental Research Institute in the Brazilian Amazon (IPAM). As a researcher for IPAM, Ingrid conducted fieldwork for a project investigating the effects of El Niño in a tropical forest. After four years of ecological research in Brazil, Ingrid returned to the United States to complete her Master's degree in Forest Science at the University of Florida. Afterwards, she moved to Seattle and started working for the Climate Impacts Group (CIG) at the University of Washington. Ingrid currently works for the CIG as a Research Scientist evaluating the potential effects of climate change on salmon ecology and habitat.

JULIE VANO - Julie A. Vano is a PhD student in the Department of Civil and Environmental Engineering at the University of Washington. She is working with the interdisciplinary CSES (Center for Science in the Earth System) Climate Impacts Group to assess climate change impacts on water resources in the Puget Sound and Yakima River Basins. Before coming to the University of Washington, she received her MS at the University of Wisconsin's Center for Sustainability and the Global Environment and was a Science and Policy Fellow at the National Academy of Sciences in Washington, DC.

LARA WHITELY BINDER - Lara Whitely Binder is an outreach specialist at the University of Washington's Climate Impacts Group (CIG). Lara assists the CIG with its efforts to disseminate information to decision makers on the impacts of climate variability and climate change on the Pacific Northwest, and to support decision makers in the use of this information. Lara earned her Master's Degree in Public Affairs at the University of Washington's Evans School of Public Affairs in 2002. Prior to attending graduate school, Lara served as the Groundwater Protection Coordinator for a consortium of public and private groundwater suppliers in the greater Cincinnati, Ohio metropolitan area. As the Coordinator, Lara developed and administered a multi-jurisdictional groundwater protection program.