

June 24-25 Interagency Workshop on Climate Change Impacts on Natural Resource Management in the Columbia Basin

Centre on the Grove, Summit Auditorium, Boise, Idaho

Date & Location: June 24-25, 2008 in Boise, Idaho, Centre on the Grove, Summit Auditorium

Registration and Hotel Rooms: No registration fees, but registration is required. Website registration information and hotel information is at <http://www.fws.gov/pacific/Climatechange/boise.html>

Purpose of Workshop: To provide resources and information to natural resource scientists and managers who work to conserve Columbia River Basin ecosystems. To engage scientists and managers in developing conservation strategies that anticipate and respond to a changing climate.

Target Audience: Resource managers, planners, program leads, scientists, information & data specialists from Federal, State and Tribal agencies, and conservation groups.

Monday, June 23, 5:30 p.m. Informal Social:

Travelers arriving on the 23rd can meet others for an informal social starting at 5:30pm, at the Grove Hotel (piano area by the registration desk).

AGENDA

Tuesday, June 24

8:00 a.m. Opening, Anne Kinsinger, USGS Western Regional Director

Foundational Discussion

8:15a.m. **Climate Change and Implications to Conservation**
Jeff Burgett, Ph.D., Recovery Biologist, FWS

9:00a.m. **Climate Drivers and Climate Change in the Columbia Basin**
Philip Mote, Ph.D., Research Scientist, University of Washington, Climate Impacts Group; Washington's State Climatologist

9:45 a.m. Break

10:00 a.m. **Species and Biodiversity Responses to Climate Change**
Jean Brennan, Ph.D., Senior Climate Change Scientist, Defenders of Wildlife

10:45 a.m. **Species Climate Sensitivity Analyses**
Elizabeth Gray, Ph.D., Director of Science, The Nature Conservancy, Washington

11:15 a.m. **Panel on Prioritizing Conservation Management Decisions in Light of Climate Change-- Challenges and Solutions**

Q&A and Discussion

--Jean Brennan, Elizabeth Gray, Jeff Burgett (listed above)

Joined by:

--Steve Miller, Ph.D., Science Advisor, FWS Pacific Islands Fish and Wildlife Office

Noon Lunch

Columbia Basin Ecosystems Module 1: Forests and Rangeland

- 1:15 p.m. **Climate Change Effects to Columbia Basin Forest Ecosystems**
Dave Peterson, Ph.D., Research Biologist, USFS Pacific Northwest Research Station,
Professor, College of Forest Resources, University of Washington
- 2:00 p.m. **Forest Adaptation Strategies and Actions**
Kathy O'Halloran, Natural Resources Staff Officer, USFS Olympic National Forest
- 2:45 p.m. Break
- 3:00 p.m. **Climate Change Effects to Columbia Basin Rangeland Ecosystems**
Nicole DeCrappeo, Soil Ecologist, USGS Forest and Rangeland Ecosystem Science
Center
- 4:00 p.m. **Forest and Rangeland Panel**
Q&A and Discussion
--Dave Peterson, Kathy O'Halloran, Nicole DeCrappeo (listed above)
Joined by:
--Jeff Foss, Project Leader, FWS Snake River Fish and Wildlife Office
--Kate Kitchell, Deputy Center Director, USGS Forest and Rangeland Ecosystem
Science Center
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- 5:00-6:30 p.m. **Tools for Managers-- Poster Session & Product Demonstrations**
Evening Social with w/ Cash Bar and Light Snacks:
Location: The "Peregrines" Room (across from the Summit Auditorium)

DAY 2

Columbia Basin Ecosystems Module 2: Aquatic Ecosystems and Hydrology

- 8:00 a.m. **Hydrologic Implications of Climate Change for the Columbia Basin & the VIC Hydrologic Model**
Alan Hamlet, Ph.D., Research Scientist, Water Resources Engineer, University of
Washington, Climate Impacts Group
- 9:00 a.m. **Impacts to Groundwater Resources and Surface Water Recharge**
John Vaccaro, Hydrologist, USGS, Washington Water Science Center
- 9:45 a.m. Break
- 10:00 a.m. **Changes in Historical Patterns of Streamflow from Unregulated Watersheds**
Greg Clark, USGS, Idaho Water Science Center, Idaho
- 10:30 a.m. **Climate Change and Native Species Responses in Riverine Ecosystems of the Pacific Northwest**
Jason Dunham, Ph.D., Research Aquatic Ecologist, USGS Forest and Rangeland
Ecosystem Science Center

- 11:30 a.m. Lunch
- 12:30 a.m. **Predicting effects of climate change on aquatic biota: developing a decision support system for the Yakima River Basin**
Alec Maule, USGS, Western Fisheries Research Center, Washington
- 1:00 p.m. **Freshwater Species Ecosystems at Risk and Adaptation Strategies to Mitigate Climate Change Impacts**
Allison Aldous, Ph.D., Director of Research and Monitoring, The Nature Conservancy, Oregon
- 2:00 p.m. **Aquatic Ecosystems and Hydrology Panel**
Q&A and Discussion
-- Alan Hamlet, John Vaccaro, Greg Clark, Allison Aldous, Alec Maule (listed above)
- 2:45 p.m. Break

General Session

- 3:00 p.m. **State and Federal Efforts to Reduce and Mitigate Carbon Emissions, and Congressional Efforts to Provide States, Federal Agencies and Tribes Funding to Adapt to Climate Change**
Michael Powelson, Director of Agency Relations, Western U.S., The Nature Conservancy
- 3:45 p.m. **Executives Panel**
Climate Change— Implications for Resource Managers in the Columbia Basin
Steve Morey, Ph.D., FWS (Moderator)
- Liz Agpaoa, Deputy Regional Forester, U.S. Forest Service, Region 6
- Ren Lohofener, Ph.D., Regional Director, Fish and Wildlife Service
- Virgil Moore, Deputy Director, Idaho Department of Fish and Game
- Tim Personius, Deputy Regional Director, Bureau of Reclamation
- Frank Shipley, Acting NW Area Executive, U.S. Geological Survey
- 4:45 p.m. **Close**

Sponsors:

- U.S. Fish and Wildlife Service
- U.S. Geological Survey
- University of Washington Climate Impacts Group
- U.S. Forest Service (R6)
- U.S. Forest Service Pacific Northwest Research Station

Contacts:

- David Patte, David_Patte@fws.gov, 503-231-2264, USFWS
- Lief Horwitz, Lief_Horwitz@usgs.gov, 206-220-4616, USGS

Biographies and Contact Information

In Alphabetical Order

Liz Agpaoa, Deputy Regional Forester, U.S. Forest Service, Region 6: lagpaoa@fs.fed.us (503) 808-2213

Liz Agpaoa has been the Deputy Regional Forester since 2006. She began her career with the US Forest Service in the Oregon Cascades in 1979, as a staff wildlife biologist on the Oakridge Ranger District, Willamette National Forest. She moved to the Blue River Ranger District as the district wildlife biologist, before becoming the planning biologist for the Willamette Forest Plan in 1985. In 1988, Liz was promoted into the Pacific Northwest Regional Office, as a NEPA specialist. In 1991, she became the District Ranger on the Galice Ranger District on the Siskiyou National Forest, managing the diverse resources on the District. She also took on the Planning Staff officer responsibilities in 1996. In 1998, she became the Forest Supervisor on the Cibola National Forest in Albuquerque, New Mexico. There, she worked with many diverse communities in the implementation of forest restoration and the use of biomass products. In 2004, Liz became the Chief of Staff in the Washington Office, where she worked for the Chief and Associate Chief of the Forest Service until 2006.

Allison Aldous, Director of Research and Monitoring, The Nature Conservancy in Oregon: aaldous@tnc.org (503) 802-8142

Allison has worked for the Conservancy since 2000. In her current position, she is the lead on climate change science and coordinates monitoring and research work state-wide. Between 2000 and 2003, she coordinated the Wetland Management Network, where she ran training workshops and provided technical expertise to field staff managing wetland projects in the United States, Mexico, and Peru. From 2002-3, she worked for the Klamath Basin program in south central Oregon on wetland restoration science. Allison is a wetland ecologist with a Ph.D. (2000) from Cornell University in Natural Resources. She also has a M.Sc. (1994) from McGill University in Plant Sciences and a B.Sc. (1989) from McGill University in Biochemistry. She lives in Portland, Oregon.

Jean Brennan, Ph.D., Senior Climate Change Scientist, Defenders of Wildlife: jbreannan@defenders.org (202) 682-9400 ext 162

Dr. Jean Brennan is the Senior Climate Change Scientist for Defenders of Wildlife and is based in Washington DC. She is an experienced population biologist and has conducted research on primates and small carnivores in Kenya and Madagascar, Asian elephants and other endangered large mammals on Peninsula Malaysia, and orangutans and proboscis monkeys on Borneo, Indonesia. Her work with Defenders now focuses on the challenges facing native north american wildlife and natural ecosystems adapt to climate changes caused by global warming.

Prior to joining Defenders science staff, Jean worked as a Senior Conservation Science Advisor for the U.S. Agency for International Development. Her work involved helping to design environmental programs to help conserve the biodiversity and natural resource management in many developing countries. She has also worked as a Science Officer for the U.S. Department of State, Office of Global Change. As a member of the Foreign Diplomatic Corps, Jean served as a member of the U.S. Delegation at international negotiations under the U.N. Framework Convention on Climate Change and to the Intergovernmental Panel on Climate Change (IPCC). She worked on the 2000 IPCC Special Report on Land Use, Land-use Change and Forestry and the Third Assessment Report.

Jean received her doctorate from the University of Tennessee in population biology and ecology. She also holds a Masters of Forest Science from Yale University and a Masters of Science in Anthropology from the University of Pennsylvania. Jean has taught Air Resource Management at the University of California at Davis and Conservation Biology at the University of Michigan School of Natural Resources and Environmental Studies.

Jeff Burgett, Ph.D., Recovery Biologist, US Fish and Wildlife Service: Jeff_burgett@fws.gov (808) 792-9400

Jeff Burgett is currently a recovery biologist in the Pacific Islands Fish and Wildlife Office in Honolulu. He is the leader of the Recovery Team for the 'Alalā (Hawaiian crow), but works on a range of projects including climate change, invasive species and diseases, and coral reef restoration. He has worked for the Service in Hawai'i since 1995 as a recovery biologist for Ecological Services, and as a Supervisory Wildlife Biologist with Refuges.

Jeff holds a B.A. from the University of Hawai'i, an M.Sc. from the University of Auckland, and a Ph.D. from the University of Hawai'i, all in Zoology.

Greg Clark, Hydrologist, USGS Idaho Water Science Center: gmclark@usgs.gov (208) 387-1324

Greg received a BS in Environmental Science from Southern Illinois University in 1984 and a MS in Hydrology from Colorado State University in 1987. He has worked for the USGS in Colorado and Idaho for the past 23 years primarily on projects related to the study of water-quality conditions in surface and ground water. Currently he is the Assistant Director for the Idaho Water Science Center in Boise overseeing the Hydrologic Data Section.

Nicole DeCrappeo, Ecologist, USGS Forest and Rangeland Ecosystem Science Center: NDeCrappeo@usgs.gov (541) 758-7792

Nicole DeCrappeo is a soil ecologist with the U.S. Geological Survey Forest and Rangeland Ecosystem Science Center in Corvallis, OR and a doctoral candidate in the Department of Crop and Soil Science at Oregon State University. She received her Master of Science degree in Ecology from Colorado State University and a Bachelor of Arts in Environmental Studies from American University in Washington, DC. Her research focuses on the effects of environmental changes on soil organisms and communities. She has worked in Antarctica examining the effects of climate change on simple soil communities and in Kansas searching for links between above- and belowground biodiversity and ecosystem functioning. Nicole has served as a coordinator for the Global Litter Invertebrate Decomposition Experiment (GLIDE), an international experiment testing the significance of arthropod diversity on litter loss, and a program officer for the Scientific Committee on Problems of the Environment (SCOPE) Committee on Soil and Sediment Biodiversity and Ecosystem Functioning.

Currently, her research focuses on how exotic invasive plants affect soil communities and nitrogen cycling in the northern Great Basin. She surveys biological soil crusts, fungi, bacteria, and nematodes using a variety of techniques in order to assess differences in soil community structure under sagebrush, bunchgrass, cheatgrass, and interspace areas. She is in the process of elucidating the consequences of these community differences for ecosystem processes. She works to highlight the importance of using soil physical, chemical, and biological properties as indicators of sites that may benefit from native plant restoration efforts.

Jason Dunham, Ph.D., Research Aquatic Ecologist, USGS Forest and Rangeland Ecosystem Science Center: jdunham@usgs.gov (541) 750-7397

Jason Dunham is a Research Aquatic Ecologist in the U.S. Geological Survey's Forest and Rangeland Ecosystem Science Center (FRESC) located in Corvallis, Oregon. He also holds a courtesy graduate faculty appointment in the Department of Fisheries and Wildlife at Oregon State University. Dr. Dunham is currently working on a variety of projects in the Pacific Northwest region, including the following: 1) distribution of bull trout, nonnative brook trout, and lampreys in the Elwha River prior to dam decommissioning; 2) growth chronologies of long-lived freshwater pearlshell mussels; 3) evaluation of contemporary forest practices on fishes and headwater streams in the Oregon Coast Range; 4) life history diversity of steelhead and rainbow trout in the mid-Columbia basin; 5) invasion of brook trout in western North America; 6) effects of wildfire on fish in central Idaho; and 7) protocols for reintroduction of bull trout.

Jason holds a Ph.D. in Ecology, Evolution, and Conservation Biology; an M.S. in Zoology; and a B.S. in Zoology. Prior to his appointment with USGS-FRESC, Jason served as a Research Fishery Biologist with the U.S. Forest Service Rocky Mountain Rocky Station, in Boise, Idaho.

Jeff Foss, Project Leader, FWS Snake River Fish and Wildlife Office:

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Jeff has worked in the field of natural resource management since 1980 for both the US Forest Service and US Fish and Wildlife Service. He earned his Bachelor of Science degree in rangeland resource management from the University of Idaho in 1980. He advanced his education through a program sponsored by the US Forest Service and graduated with a Masters of Science from the forestry college at Michigan State University in 1985.

Jeff served in a variety of positions in the Forest Service including range conservationist, land management planner on the Sawtooth and Boise National Forests, National Environmental Policy Act Coordinator for the Alaska Region, and Regional Natural Resource Specialist in Ogden, Utah. In 2002 Jeff accepted a position with the US Fish and Wildlife Service in Boise and since 2003 has served as the Field Supervisor for the Snake River Fish and Wildlife Office responsible for conservation of plants, wildlife, and resident fish listed under ESA for all of Idaho except the 5 northern most counties. In 2008 the University of Idaho awarded Jeff the "Celebrating Natural Resources Award" for exemplifying integrated natural resource management.

Elizabeth Gray, Ph.D., Director of Science, The Nature Conservancy, Washington:

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Elizabeth Gray is the Director of Conservation Science for The Nature Conservancy (TNC) in Washington. In this role, she is responsible for providing scientific leadership for all of the Conservancy's activities throughout the state.

Elizabeth has spent the last 20 years involved in biological research and conservation, which includes a Ph.D. in zoology from the University of Washington and an A.B. with high honors from Harvard University. Her work has focused on the conservation of temperate, tropical and island biodiversity, including research projects in Costa Rica, Argentina, Peru, Indonesia, and Hawaii. Prior to joining the Conservancy in 2000, Elizabeth held a joint position with the University of Hawaii and USGS-BRD, where she investigated factors limiting the size and distribution of endangered Hawaiian forest birds. She also served as faculty at the University of Nevada Reno and San Francisco State University.

Elizabeth has published widely in journals such as Conservation Biology, Frontiers in Ecology and Evolution, Animal Behavior, and Behavioral Ecology and Sociobiology. She is a member of several statewide scientific advisory panels, including WDNR's Natural Heritage Advisory Council, WDFW's Comprehensive Wildlife Conservation Strategy Group, the Collins Northwest Conservation Fund (co-chair), and the Washington Biodiversity Council's Science Working Group. Elizabeth's

current projects focus on incorporating climate change impacts into TNC's planning and management work, developing cost-effective methods of landscape scale restoration, and setting priorities for conservation action.

Alan Hamlet, Ph.D., Research Scientist, Water Resources Engineer, University of Washington, Climate Impacts Group: hamleaf@u.washington.edu (206) 616-9361

Alan received a BA in Mathematics, University of Rochester, 1981; BS in Mechanical Engineering, University of Washington, 1992; MSE in Civil and Environmental Engineering, University of Washington, 1996; Ph. D. candidate, Civil and Environmental Engineering, University of Washington (completion of degree program expected 2004-2005 academic year). He has held positions as a Research Scientist at JISAO/SMA Climate Impacts Group, University of Washington, 1996-present; Water Resources Engineering Consultant, Malcolm Pirnie (1996, 1997); NW Florida Water Management District (1996-2000); Northwest Hydraulic Consultants (1999).

Anne Kinsinger, USGS Western Regional Director: akinsinger@usgs.gov (206) 220-4578

Information forthcoming

Kate Kitchell, Deputy Center Director (currently acting Center Director), Forest & Rangeland Ecosystem Science Center (FRESC): kate_kitchell@usgs.gov (541) 750-1033

Kate joined FRESC in August 2005, where her duties include Center-wide management support, as well as serving as Research Manager for the Snake River Field Station (SRFS) in Boise. During this time, Kate has been active in the Great Basin Integrated Landscape Monitoring project, sagebrush biome research and monitoring, fire and restoration research, raptor research and monitoring, building interagency collaborations, and streamlining internal work processes such as science management, budget, and Basis+ recordation. While most of Kte's professional work has been in federal land management, her long standing interest in integrating science into public resource management motivated her move to work for USGS. Kate believes that strong collaborations and communications are essential ingredients to success. Kate's previous work experience has included, sixteen years in the Bureau of Land Management: Deputy State Director for Resources in Utah; Boise District Manager; Moab District Manager; Area Manager in Southeast Utah and Kremmling, Colorado; and Planning/NEPA Coordinator in Montrose, Colorado. The first 10 years of Kate's career were with the National Park Service as a biological technician and resource management specialist in several southern Utah parks. Education: B.S. Botany & Environmental Conservation from University of New Hampshire; M.S. Recreation Resources Management & Natural Resources Policy from Utah State University.

Ren Lohofener, Ph.D., Regional Director, Fish and Wildlife Service: Ren_Lohofener @fws.gov (503) 231-6118

Ren R. Lohofener became the Regional Director of the U. S. Fish and Wildlife Service's Pacific Region in September 2006. Prior to becoming Regional Director, he served as the Service's Assistant Director for the Endangered Species Program in Washington, D.C. Ren believes that cooperation and collaboration are essential to all conservation efforts.

Ren joined the Fish and Wildlife Service in 1989 after working for six years as an ecologist for the National Marine Fisheries Service. Before that, he was a Research Associate and Adjunct Professor at Mississippi State University. Since joining the Fish and Wildlife Service, Ren has been a field biologist, the agency's Texas State Administrator, and Assistant Regional Director of the Southwest

Region. While in the Southwest, he worked with 11 National Wildlife Refuges, four National Fish Hatcheries, two fisheries management offices, and the Ecological Services Program.

A native of Kansas, Ren received his Bachelor of Science and Master of Science degrees from Fort Hays State University in Kansas and his Doctorate degree from Mississippi State University. He is a veteran of the U.S. Army.

Alec G. Maule, Ph.D. Supervisory Research Physiologist and Leader of the Ecology & Environmental Physiology Section, USGS WFRC Columbia River Research Laboratory:
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Alec has a BA in psychology (UC Riverside), a BS in natural resource management (California Polytechnic University, San Luis Obispo), and MS and Ph.D. in fisheries science from Oregon State University. Alec has been conducting research in the Columbia River Basin for almost 30 years and has over 50 peer-reviewed publications and numerous project reports. Alec's research has covered many levels of biological organization from basic aquatic ecology to an investigation of contaminant effects on gene expression. Current work attempts to connect the impacts of poor water quality (e.g., temperature, gas supersaturation, chemical contaminants) on the physiological functioning of individual fish, and connect that to effects at the population level. This line of research has led Alec to examine Arctic charr above the Arctic Circle and Moapa dace in 36° C pools in Nevada. He has been at the Columbia River Research Lab since 1991 and is an adjunct Professor of Biology at Portland State University and in Fisheries at Oregon State University.

Steve Miller, Ph.D., Science Advisor, FWS Pacific Islands Fish and Wildlife Office:
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Philip Mote, Ph.D., Research Scientist, University of Washington, Climate Impacts Group:
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Dr Philip Mote is a research scientist at the University of Washington, in the Climate Impacts Group, and an Affiliate Professor in the Department of Atmospheric Sciences. His research interests include Northwest climate and its effects on snowpack, streamflow, and forest fires. A frequent public speaker, he has also written over 70 scientific articles and edited a book on climate modeling, published in 2000. In 2003 he became the Washington State Climatologist. He served as a lead author of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change released in 2007, and was honored with a share of the 2007 Nobel Peace Prize which was awarded to the many scientists worldwide who contributed to the Intergovernmental Panel on Climate Change.

Philip studied at the University Of Washington, Seattle, WA, where he received his Ph.D. in Atmospheric Sciences, January 1994. He previously attended Harvard University, Cambridge, MA, and earned a B.A.with Honors in Physics, June 1987.

His research experience comprises research at JISAO/SMA Climate Impacts Group, University of Washington Seattle, WA, Scientist Climate variability and change, description and impacts; public outreach, interdisciplinary research (1/98-present); Consultant at NorthWest Research Associates Bellevue, WA, Dynamics of the stratosphere and upper troposphere (7/98-present); Research at

NorthWest Research Associates Bellevue, WA, Scientist Dynamics of the stratosphere (8/96-6/98); Research Department of Meteorology, University of Edinburgh Edinburgh, Scotland Fellow UK Universities' Global Atmospheric Modelling Programme (2/94-7/96).

Kathy A. O'Halloran, Natural Resources Staff Officer for the Olympic National Forest:

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Kathy received a BS in wildlife management from Humboldt State University in 1980 and a MS in biology from Steven F. Austin State University in 1984. She began her career in the research branch of the Forest Service, working for the Southern Forest Experiment station. In the late 80's she moved to the national forest branch and served as the regional spotted owl coordinator out of Portland, OR when the owl was listed. Since 1992, Kathy has been on the Olympic National Forest overseeing all aspects of natural resources and planning. She has a keen interest in bringing science findings to management and recently has focused this attention on the interface of climate change science and forest management. She has served on the Washington State Preparation and Adaptation Working group for the forestry sector dealing with climate change impacts and currently serves on the Forest Service's Region 6 climate change strategy group.

Tim Personius, Deputy Regional Director, Bureau of Reclamation: tpersonius@pn.usbr.gov
(208) 378-5006

Tim Personius has been the Deputy Regional Director of the Bureau of Reclamation's Pacific Northwest Region since May, 2008. He started his career with the Federal Government as a range technician for the Forest Service while working his way through college. After seasonal appointments with the BLM and Forest Service, Tim received a permanent appointment as a range conservationist with the Bureau of Indian Affairs in South Dakota. He made the jump to Reclamation in 1990 and has since held respective positions in Montana, Washington, Idaho, and Washington D.C. as a Natural Resource Specialist, Land Resources Manager, Resource and Technical Services Program Coordinator, and the Regional Liaison Officer to the Commissioner's Office.

Prior to his selection as Deputy Regional Director, Tim served as a Special Assistant to the Regional Director, working on various issues including Indian water rights settlements, Lake Roosevelt contamination, and the Federal Columbia River Power System ESA consultation.

Tim earned a Bachelor of Science in Forestry from the University of Montana in Missoula and a Master of Science in Range Science from Montana State University in Bozeman.

Tim, his wife, and their two younger children live in Boise, Idaho, while their oldest son, a recent University of Washington forestry graduate, lives in Seattle.

Dave Peterson, Ph.D., Research Biologist, USFS Pacific Northwest Research Station, Professor, College of Forest Resources, University of Washington: peterson@fs.fed.us or wild@u.washington.edu (206) 732-7812

Dave received his B.S. in Zoology from the University of Illinois, Urbana in 1976; M.S. Botany, University of Illinois, Urbana in 1977; Ph.D. Forest Ecology, University of Illinois, Urbana in 1980.

Dave's professional experience includes 2001- present as a Research Biologist, USDA Forest Service, Pacific Northwest Research Station, Fire and Environmental Research Applications Team; and Professor, College of Forest Resources, University of Washington, Seattle, WA; 1989-01 Research Biologist (Field Station Leader), U.S. Geological Survey, Cascadia Field Station; and Professor, College of Forest Resources, University of Washington, Seattle, WA. From 1984-89 he

was a Research Ecologist, USDA Forest Service, Atmospheric Deposition Effects Research Work Unit, Pacific Southwest Research Station, Riverside, CA; Unit Leader 1988-89; 1981-84 Research Ecologist, USDA Forest Service, Fire Management Planning Research Work Unit, Pacific Southwest Research Station, Riverside, CA; and 1980-81 Visiting Assistant Professor, Department of Forestry, University of Illinois, Urbana.

Dave was honored for his work related to climate change: he shares the 2007 Nobel Peace Prize with many other scientists worldwide who contributed to the Intergovernmental Panel on Climate Change.

Michael Powelson, Director of Agency Relations, Western U.S., The Nature Conservancy:
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Michael Powelson is The Nature Conservancy's Director of Agency Relations for the Western United States, a position he has held for the last four years. In the five years prior to that he was the Director of Agency Relations for the Conservancy's Pacific North America Region and the Northwest Division. His focus is primarily working on federal issues of regional and national significance, working with federal agencies, the Administration and Congress. Prior to that he spent eight years as a Fish and Wildlife Policy Analyst for the Northwest Power and Conservation Council and the Oregon Governor's Natural Resources Office. Michael is a native Oregonian and currently resides in Portland, OR.

Frank Shipley, Acting NW Area Executive, U.S. Geological Survey: Frank_Shipley@usgs.gov
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Information forthcoming

John Vaccaro, Hydrologist, USGS, Washington Water Science Center: jvaccaro@usgs.gov
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John is a hydrologist with the U.S. Geological Survey, Washington Water Science Center where he has worked for 31 years. John is a project member for studies of the major aquifer systems in the Pacific Northwest including: the Columbia Plateau regional aquifer, the Spokane aquifer, the Puget Sound Lowland aquifer system, and the Willamette Lowland aquifer system. Highlights of his work include developing techniques to estimate ground-water recharge, and a finite-element ground-water transport model. He has analyzed interdecadal changes in hydroclimate of PNW; and the hydrochemistry of the Columbia Plateau regional aquifer. He has undertaken stream discharge and temperature modeling, watershed modeling, and ground-water flow modeling; and developed methods to thermally profile long river reaches.