

2012 Long-term Operations Opinions Annual Review Panel Biographies

Dr. James J. Anderson

Dr. Anderson is a Research Professor in the School of Aquatic and Fisheries Sciences at the University of Washington and Co-Director of Columbia Basin Research, a group that focuses on salmon issues in the Columbia Basin.

Dr. Anderson has been teaching at the University of Washington since 1983. Prior to joining the faculty at the University of Washington, he did research work at the University of Kyoto in Japan, the National Institute of Oceanography in Indonesia, and Institute of Oceanographic Sciences in Wormley, UK. For three decades he has studied the effects of hydrosystems and water resource allocations on salmon and other fish species. He has developed computer models of the migration of juvenile and adult salmon through hydrosystems and heads the DART website, an internet database serving real-time environmental and fisheries data on the Columbia River. His other research interests include mathematical studies in ecosystems, biodemography, toxicology and animal behavior. He has served on a number of regional and national panels and has testified numerous times before Congress on the impacts of hydrosystems on fisheries resources including the National Research Council Committee on Sustainable Water and Environmental Management in the California Bay-Delta. He has over 100 scientific publications and has supervised twenty-five graduate students. He received his B.S. and Ph.D. in oceanography from the University of Washington.

Dr. Jim Gore

Dr. Gore is a Professor of Biology and the Dean of the College of Natural and Health Sciences at the University of Tampa. Dr. Gore received his B.A. degree from the University of Colorado and M.A. and Ph.D. degrees (Zoology) from the University of Montana. Dr. Gore has held professorships at the University of Tulsa, Eminent Scholar Chair in Environmental Science in the Alabama University system, Professor and Chair of the Department of Environmental and Health Sciences at Columbus State University, and Professor and Chair of the Department of Environmental Science, Policy and Geography at the University of South Florida St Petersburg. He is a Fulbright scholar having held senior research fellowships in Israel and southern Africa. Dr. Gore has over 135 publication credits including three books, *The Restoration of Rivers and Streams*, *Alternatives in Regulated River Management*, and *Rapid Bioassessment of Stream Health* plus more than 75 papers, book chapters and technical reports in aquatic biology and hydrology. Dr. Gore's primary research interest is in the influence of channel hydraulics on the distribution of riverine biota, establishing

conservation flows for river ecosystems, and the potential impacts of climate change on the success of invasive species. He is currently authoring two papers and editing a special edition of *Freshwater Biology* on the ecology and restoration of the Rhone River.

Dr. Ronald T. Kneib

Dr. Kneib is a private ecological consultant (RTK Consulting Services) based in Hillsboro, New Mexico and Senior Research Scientist Emeritus at the University of Georgia, where he served on the resident research faculty of the University of Georgia Marine Institute on Sapelo Island from 1980 to 2010. He received his B.S. in Zoology from Pennsylvania State University, and earned Masters and doctoral degrees in Ecology at the University of North Carolina at Chapel Hill. Dr. Kneib's national and international research programs and scientific publications have explored the roles of fishes and invertebrates in ecological processes, production dynamics and functional genomics within coastal landscapes across a range of spatial and temporal scales. He has served on the editorial boards of several international journals including Marine Ecology Progress Series, Wetlands, and Endangered Species Research. Dr. Kneib is certified as a Senior Ecologist by the Ecological Society of America's Board of Professional Certification and has assisted citizen groups, private industry and government agencies with major restoration projects and management of tidal wetlands on the Atlantic, Gulf and Pacific coasts of the U.S. for 19 years. He has been actively involved with issues in the San Francisco Bay-Delta region as an invited participant in workshops to develop models and approaches for the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP), the Bay Delta Conservation Plan (BDCP), and served as a science advisor in the process of developing BDCP Goals & Objectives for fish species. He has been an invited member of numerous technical review panels including the Inter-agency Ecological Program on Pelagic Organism Decline (POD, 2005/06), Environmental Water Account (EWA, 2006), and the 2008 U.S. Fish & Wildlife Biological Opinion on long-term Operations Criteria and Plan (OCAP) for coordination of joint federal-state water projects (2009). In the past two years, he also served as chair and/or lead author on the first two OCAP Annual Review Panels (2010 & 2011).

Dr. Mark Lorang

Dr. Lorang is a research Associate Professor at the Flathead Lake Biological Station, The University of Montana. He received his B.A. (Geology) from the University of Montana and his M.S. and Ph.D. (Oceanography) from Oregon State University. Dr. Lorang has taught at the University of Southern California and University of Oregon prior to his current position at the University of

Montana. His research has largely focused on quantitatively developing links between process geomorphology and ecology. In that role he has spearheaded the development of new techniques for utilizing satellite and airborne multi- and hyperspectral imagery in his ongoing studies of river-lake systems. He has published most recently in *Marine Geology* on the subject of tsunamis, in *Engineering Geology* on the topic of controlled flow release from dams to re-naturalize river systems. He has developed a new software program called *River Analyzer* that couples flow data with Lidar and other remote sensing data to map complex flow fields in rivers. In addition Dr. Lorang has over ten years of experience working in the San Joaquin- Sacramento River Delta studying levee erosion processes from currents, tides, wind waves and boat wakes. In this last project he has helped map levee attributes over the entire delta system.

Dr. John M. Nestler

Dr. John Nestler retired from the Engineer Research and Development Center of the Corps of Engineers as a research ecologist in 2010. Before retirement he was recognized as the agency expert on the environmental impacts of dams and their mitigation. He continues to be professionally active as: a partner in Fisheries and Environmental Services; an adjunct associate professor in the University of Iowa, IIHR-Hydroscience and Engineering; an honorary professor at the University of Birmingham (UK); a scientist for Badger Technical Services; an associate of HydroPlan LLC, and an associate editor for River Research and Applications. Dr. Nestler's research focuses on the convergence of environmental fluid dynamics, fluvial geomorphology, and aquatic ecology/biology. He has made contributions to methods to determine environmental flows, techniques for predicting the effects of turbine passage on fishes, concepts for river restoration, and methods for fish protection and passage at dams. More recently, he co-developed and continues to contribute to the coupling of fish movement and population models to engineering water quality and CFD models. He has worked on most of the major rivers of the USA as well as the Parana River and other rivers in South America. He has nearly two hundred professional publications, ten patents, and regularly consults with a broad range of national and international clients. Dr. Nestler received his B.S. degree (Biology) from Valdosta State College, M.S. (Zoology) from University of Georgia and Ph.D. (Zoology) from Clemson University.

Dr. John Van Sickle

Dr. Van Sickle is a consulting environmental statistician, recently retired from the U.S. Environmental Protection Agency's Office of Research and Development. Since 1998, his research has focused on the monitoring and assessment of

freshwater ecosystems, with an emphasis on indicators of health for multispecies biological assemblages, and on estimating the risks of aquatic stressors to biota. Prior to 1998 Dr. Van Sickle taught and did research in systems modeling, mathematics, statistics and ecology at Oregon State University and the University of Zimbabwe. He has served as an associate editor for the Journal of the North American Benthological Society, and is currently a member of the State of California's Biological Objectives Scientific Steering Committee. Dr. Van Sickle earned his B.S. and M.S. in mathematics, and his Ph.D. in systems science, from Michigan State University, and also received an M.S. in statistics from Oregon State University.