2-Gates Review Panel Short Bios

Dr. Stephen Monismith

Professor Monismith received BS, MS, and PhD degrees from the UC Berkeley Department of Civil Engineering. After Berkeley, he did a postdoc in Western Australia focusing on the fluid mechanics of stratified flows in lakes and reservoirs. Prof. Monismith has been at Stanford University in the Department of Civil and Environmental Engineering since 1987, and has been the director of the Environmental Fluid Mechanics Laboratory at Stanford since 1996. Through his work on estuarine dynamics, he has been active in Bay-Delta issues, including chairing the IEP Science Advisory Group and helping to develop the scientific underpinnings of the Bay-Delta Accord. His current research uses field, lab, and computational experiments to look at estuarine and lake physics as well as nearshore flows with waves and stratification, focusing on mixing and transport processes that are central to ecology, biogeochemistry and environmental management.

Dr. James J. Anderson

Dr. Anderson is a Research Professor in the School of Aquatic and Fisheries Sciences at the University of Washington. He is the Co-Director of Columbia Basin Research, a group in the School that focuses on salmon issues in the Columbia Basin. His research group has developed models to evaluate the impacts of the Columbia River hydrosystem and fisheries on salmon. These include the CRiSP juvenile and adult salmon passage models and the Coast harvest model. In addition, he heads the Internet database (DART), which contains real-time and historical environmental and fisheries data from the Columbia River. He has served on a number of national review panels and currently serves on the CALFED Bay-Delta Environmental Water Account Review Committee and the California Central Valley Salmon Technical Recovery Team. His fisheries research spans twenty-five years and has been funded by the Army Corps of Engineers, National Marine Fisheries Service, Bonneville Power Administration, Washington State and private industry. He has over 100 publications on a variety of topics including salmon migration, fish passage at hydroelectric dams, toxicology, fisheries oceanography, fisheries ecology, and decision science. He has given over 70 invited lectures and seminars and has testified numerous times before Congress and state legislatures on salmon issues.

Dr. Charles “Si” Simenstad

A Research Professor at the School of Aquatic and Fishery Sciences, University of Washington, Dr. Simenstad studies shallow-water communities and food webs of estuarine and coastal marine ecosystems along the Pacific Northwest coast, from San Francisco Bay, the Oregon and Washington coasts, Puget Sound, and Alaska. Ecosystems that have especially attracted his interests include: coastal marshes, mudflats and eelgrass of Pacific Northwest estuaries; nearshore, kelp-dominated shores of the Aleutian Islands, Alaska; and San Francisco Bay-Delta. Much of his recent research is involved in the Columbia River estuary, where he is particularly intrigued by ecological processes associated with estuarine turbidity maxima and the importance of brackish marshes and forested wetlands to juvenile Pacific salmon. Since 1990, he has been particularly

dedicated to coordinating the Wetland Ecosystem Team (WET), a small team of research scientists, educators, and graduate students that conducts both basic and applied research on these topics. Current research initiatives include: (1) leading WET's CALFED research on tidal freshwater wetland restoration patterns and rates in the Sacramento-San Joaquin rivers delta; (2) evaluating the importance of estuarine life history diversity of juvenile Pacific salmon in population resilience and recovery, and the potential role of estuarine habitat restoration in increasing life history diversity; (3) restoration of natural ecosystem processes as a sustainable approach to recovery of endangered salmon; and, (4) the practical application of landscape ecology concepts and quantitative metrics to planning and implementing coastal ecosystem restoration. Dr. Simenstad is a fellow of the AAAS and has been on the editorial board of Estuaries and Coasts since 1998. A member of the IEP SAG since its founding, he has participated in numerous scientific reviews of estuarine and wetland projects and programs across the United States.

Dr. Alan F. Blumberg

Dr. Alan F. Blumberg is George Meade Bond Professor of Ocean Engineering and Director of The Center for Maritime Systems at Stevens Institute of Technology. The main focus of Dr. Blumberg's work is directed towards understanding and predicting the flow processes operating in rivers, lakes, estuaries and the oceans. Dr. Blumberg is recognized as one of the pioneers and leading experts in modern estuarine and coastal ocean prediction and has contributed significantly to the creation of integrated modeling and observing systems. Presently, he leads the New York Harbor Observation and Prediction System which facilitates an assessment of ocean, weather, and environmental conditions throughout the New York Harbor region. He is at the forefront of hydrodynamic model development and application and has written over 125 peer-reviewed journal articles and conference proceedings. Dr. Blumberg is the recipient of the 2001 American Society of Civil Engineers Karl Emil Hilgard Hydraulic Prize and the 2007 Denny Medal from the Institute of Marine Engineering, Science and Technology. He received a doctorate in ocean physics from The Johns Hopkins University and did post-doctoral work with Princeton University in their Geophysical Fluid Dynamics Program.

Dr. Peter Goodwin, P.E.

As the Director of the Center for Ecohydraulics Research, Dr. Goodwin heads an interdisciplinary program researching the linkages between ecological response to management actions or changes in physical processes of rivers, lakes, estuaries and wetlands. Current research activities in watershed management include the Coeur d'Alene River basin, the Upper Salmon River basin and the Lake Amatitlan watershed in Guatemala. He was elected to the Council of the International Association for Hydraulic Research in 2003 and was a member of the CALFED Independent Science Board. Dr. Goodwin earned his doctorate in civil engineering from the University of California, Berkeley.