

Science Panel & Town Hall Meeting

Beyond the Shore

The Facts About Sea Level Rise in San Francisco Bay

Tuesday, April 2, 2013 1:00 to 4:00 pm

Bay Theater, Aquarium of the Bay
Pier 39, San Francisco

Panelists

Robin Grossinger
San Francisco Estuary Institute

Matt Heberger
Pacific Institute

Sam Veloz
PRBO Conservation Science

John Bourgeois, Manager
South Bay Salt Pond Restoration Project

Jeremy Lowe
ESA

Moderator

Marc Holmes
The Bay Institute

Robin Grossinger is a Senior Scientist at the San Francisco Estuary Institute, where he directs SFEI's Resilient Landscapes program. For over twenty years, Robin has analyzed how San Francisco Bay and other California landscapes have changed since European contact, using these data to highlight opportunities and guide landscape-scale restoration strategies. The innovative work of Robin and his colleagues to synthesize history and science has been acclaimed for helping scientists, managers, and the public appreciate both the dramatic transformation and the impressive resilience of the state's ecosystems. Last year Robin's *Napa Valley Historical Ecology Atlas* was published by the University of California Press and he received a Local Hero award from *Bay Nature* magazine.

Matthew Heberger, P. E. is a Research Associate with the Pacific Institute's Water Program. Most recently, he spent three and a half years with the consulting firm of Camp, Dresser, and McKee in Cambridge, Massachusetts as a water resources engineer, performing hydraulic, hydrologic, and water quality analyses and modeling. He has also worked for the non-profit International Network on Participatory Irrigation Management in Washington, DC. Matt spent two years with the Peace Corps as a water and sanitation extension agent in Mali, West Africa. Matt is a licensed Professional Engineer, registered as an Environmental Engineer in the Commonwealth of Massachusetts. He holds a BS in Agricultural and Biological Engineering from Cornell University and an MS in Water Resources Engineering from Tufts University in Boston.

Sam Veloz, Ph.D., is a spatial ecologist with PRBO Conservation Science. Sam is primarily working on projects that explore how species will respond to global change, including climate change and other human modifications to the environment. Using models that test the sensitivity of species to changing environmental conditions, Sam seeks to evaluate what species or places might be most vulnerable to global climate change. Recent work includes collaborating on the development of a decision support tool to analyze what effects sea level rise and climate change will have on tidal marsh species within the San Francisco Estuary. This online mapping tool allows users to explore how tidal marsh habitat and species will respond to a range of future climate change scenarios and can be used by decision makers to evaluate alternative adaptation strategies. As a member of the Climate Change and Informatics group at PRBO, Sam's work is dedicated to the development of tools, frameworks and techniques for transforming the wealth of scientific data compiled by PRBO and its partners into successful conservation outcomes and ecosystem knowledge.

John Bourgeois, Executive Project Manager, South Bay Salt Pond Restoration Project, California Coastal Conservancy. John has over 18 years of experience working on large-scale wetland restoration projects. For over 12 years he was a restoration ecologist with the Los Gatos-based ecological consulting firm H.T. Harvey & Associates. John is well acquainted with the South Bay Salt Pond Restoration Project, having worked on the initial planning and permitting phases of the restoration, as well as many other related projects in the South Bay, including Bair Island. Prior to moving to California in 1999, John worked for the National Wetland Research Center, the Louisiana Department of Natural Resources, and the Institute of Pacific Islands Forestry. He has an M.S. in biology from the University of Louisiana at Lafayette and a B.S. in biology from Tulane University.

Jeremy Lowe, ESA, is a Coastal Geomorphologist with over 25 years experience of tidal wetland restoration and sea level rise adaptation planning on the Pacific West Coast and in Europe. His work has included the design of sea defenses to reduce flood hazards in Venice, Italy; leading wetland restoration planning and design at Ballona Wetlands in Venice, California; and he is the author of tidal wetland design guidelines for San Francisco Bay and for the Lower Columbia Estuary. More recently, Jeremy has been working on ecosystem-based climate change adaptation in San Francisco Bay and on the Lower Columbia.

Marc Holmes, The Bay Institute, is a wetland regulation and restoration policy expert with 26 years of experience. He served as a United States delegate to the Ramsar Convention on Wetlands of International Importance and represented the U. S. Information Agency as part of a program to discuss wetland protection in Brazil. From 2003 until 2009, he was the California State Senate appointee to the CalFed Bay-Delta Authority, the agency charged with restoring the ecological vitality of the San Francisco Bay estuary. Marc is Director of The Bay Institute's Bay Restoration Program where he was Project Manager for the recently released sea level rise study, *The Horizontal Levee*.