

September 17–18, 2015

Oakland Marriott City Center, Oakland, CA

12th Biennial State of the San Francisco Estuary Conference

Plenary Session THURSDAY, SEPTEMBER 17, 2015

- 9:00 AM **Opening Remarks**
Andrew Gunther, Executive Coordinator, Bay Area Ecosystems Climate Change Consortium
- 9:10 AM **Rising Tides—Where Can Our Shorelines Be and What We Can Do About It**
Zachary Wasserman, Chair, San Francisco Bay Conservation and Development Commission
- 9:20 AM **San Francisco Bay Year 2115: Three Science Fictions**
Kim Stanley Robinson, Writer
- 9:40 AM **Drought, Demography, and Conservation in 21st Century California**
Glen MacDonald, John Muir Memorial Chair of Geography and UCLA Distinguished Professor
- 10:05 AM **From American Samoa to California: Confronting the Environmental Challenges of the 21st Century**
Jared Blumenfeld, Administrator for EPA's Pacific Southwest Region (Region 9)
- 10:20 AM **Surviving the Storm**
Jim Levine, Managing Partner, Montezuma Wetlands and Co-Chair of the Bay Area Council Water Committee
- 10:35 AM *Jean Auer Award*
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- 10:50 AM **BREAK**
- 11:10 AM **How Healthy is Our Estuary?: The 2015 State of the Estuary Report**
J. Letitia Grenier, Resilient Landscapes Program Director, SFEI
- 11:35 AM **Climate Change and the Estuary—Perspectives from the Next Generation**
Diana Gomez, Woodland High School and UC Davis Aggie Mentors
Reginald Quartey, Oakland High School Environmental Science Academy
Paloma Siegel, Marin School of Environmental Leadership
- 11:45 AM **The Bay and the Delta: Making Connections during Drought, a Scientific Update, and Insights from Europe**
Cliff Dahm, Professor Emeritus, University of New Mexico
- 12:00 PM **The Fruits of Our Labors: Progress in Restoration and the Challenges Ahead**
John Bourgeois, Executive Project Manager, South Bay Salt Pond Restoration Project
- 12:15 PM **LUNCH & POSTER SESSION**



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State of the Estuary Report 2015: How Healthy is Our Estuary?

- 1:35 PM **Introduction**
Letitia Grenier, SFEI
- 1:40 PM **Freshwater Flows**
Tina Swanson, NRDC
- 2:05 PM **Habitat**
Josh Collins and Sam Safran, SFEI
- 2:30 PM **Living Resources**
Nadav Nur, Point Blue; Hildie Spautz, DFW; and Ali Weber-Stover, The Bay Institute
- 3:05 PM **Water Use and Re-use**
Peter Vorster, The Bay Institute
- 3:20 PM **BREAK**

Baylands Ecosystem Habitat Goals Science Update 2015

- 3:40 PM **Introduction**
Matt Gerhart, SCC
- 3:45 PM **The Baylands and Climate Change: What We Can Do**
Letitia Grenier, SFEI
- 4:10 PM **Landscape Vision and Implementation Ideas for Suisun and North Bay**
Donna Ball, Save The Bay, and Jeremy Lowe, SFEI
- 4:35 PM **Landscape Vision and Implementation Ideas for Central and South Bay**
Marilyn Latta and Amy Hutzel, SCC

Critters and Communities: New Approaches to Flood Management I

- 1:35 PM **Introduction**
Caitlin Sweeney, SFEI
- 1:40 PM **Flood Protection Meets Climate Change**
Robin Grossinger, SFEI
- 2:05 PM **Flood Protection Meets Ecosystem Restoration: A New Vision for Managing Channels at the Bay Margin**
Scott Dusterhoff, SFEI
- 2:30 PM **Flood Protection Meets Ecosystem Restoration: A New Approach to Regional Planning in the Delta**
Campbell Ingram, Delta Conservancy
- 2:55 PM **Levees Meet Habitat Creation: A New Strategy for the Delta**
Cindy Messer, Delta Stewardship Council
- 3:20 PM **BREAK**

Critters and Communities: New Approaches to Flood Management II

- 3:40 PM **Introduction**
Jessica Davenport, Delta Stewardship Council
- 3:45 PM **Delta Case Study: Integrating Flood Protection, Habitat Enhancement, and Agriculture in the Yolo Bypass**
Kris Tjernell, California Natural Resources Agency
- 4:10 PM **Bay Case Study: Integrating Flood Protection, Habitat Enhancement, and Groundwater Recharge in an Urbanized Watershed**
Norma Camacho, Santa Clara Valley Water District
- 4:35 PM **Moderated Panel Discussion: Obstacles and Opportunities**

Wildlife Responses to Change

- 1:35 PM **Introduction**
Cheryl Strong USFWS and Kathy Hieb, DFW
- 1:40 PM **Below the Surface: Fish Response to Hamilton Restoration**
Chris Fitzer, ESA
- 2:05 PM **Below the Surface: Bugs and Fish in the South Bay**
Jim Ervin, City of San Jose
- 2:30 PM **Up in the Air: Bird Response to Restoration**
Susan De La Cruz, USGS
- 2:55 PM **River Otters: Back on the Bay Area Map**
Megan Isadore, The River Otter Ecology Project
- 3:20 PM **BREAK**

Data and Tools: Modern Information-Sharing to Promote Beneficial Resource Outcomes

- 3:40 PM **Introduction**
Tony Hale, SFEI
- 3:45 PM **Video Presentation: Collaboration in Practice: What Does Modern Information-Sharing Really Look Like? (Featuring live voiceovers)**
Leonardo Salas, Point Blue
Jennifer McBroom, Invasive Spartina Project
Pete Kauhanen, SFEI
Mary Miller, Exploratorium
- 4:05 PM **Transforming Data into Information to Serve Management Concerns**
Orien Richmond, USFWS
Mark Tompkins, NewFields
Kris Jones, DWR
- 4:30 PM **Discussion Panel:**
This panel will probe the successes and the continuing challenges for well-integrated information technology. (Demonstrations afterward in the tech section of the poster room)

Urban Greening of the Bay Area

- 1:35 PM **Introduction**
Jennifer Krebs, SFEI
- 1:40 PM **GreenPlan-IT 101: Where to Improve Water Quality in Your Watershed**
Lester McKee and Pete Kauhanen, SFEI
- 2:15 PM **Stormwater Infrastructure Funding**
Mitch Avalon, Contra Costa County
- 2:30 PM **Greening Oakland: Plans & Projects**
Rebecca Tuden, City of Oakland
- 2:55 PM **Beyond Demonstrations: Making Green Streets a Reality**
Jennifer Krebs and Joshua Bradt, SFEI
- 3:20 PM **BREAK**

Nutrients in the Bay-Delta

- 3:40 PM **Introduction**
Jim Cloern, USGS
- 3:45 PM **Nutrients in the Bay: Science to Inform Management Decisions**
David Senn, SFEI
- 4:05 PM **Future Nutrient Loads to the Estuary and Approaches for Monitoring**
Brian Bergamaschi, USGS
- 4:25 PM **Adaptive Management of Nutrients in the Delta: Integrating Science and Policy**
Lisa Thompson, Sacramento Regional County Sanitation District
- 4:45 PM **POTWs' Role in the Nutrient Management Strategy for San Francisco Bay**
Laura Pagano, SFPUC



Plenary Session **FRIDAY, SEPTEMBER 18, 2015**

8:30 AM **Opening Remarks**
Randy Fiorini, Chair, Delta Stewardship Council

8:40 AM **Can We Get There from Here?—Water, Energy, Climate and Resilience, What the SF Bay Could Teach the World**
Bob Perciasepe, President, Center for Climate and Energy Solutions

8:55 AM **Water and Drought Panel**

Coping with Year 4—How are We Doing and What's Needed Next

Jay Lund, Professor of Civil and Environmental Engineering, UC Davis

Economic Impacts of the Drought—Facts, Fiction, and Uncertainty

Jeffrey Michael, Director, Center for Business and Policy Research, University of the Pacific

Drought Impacts on Native Fishes of the Delta and Central California

Peter Moyle, Distinguished Professor, Dept. of Wildlife, Fish, and Conservation Biology, UC Davis

Discussion Panel

Moderator: Randy Fiorini, Chair, Delta Stewardship Council

10:00 AM **CCMP Outstanding Environmental Awards**

10:15 AM **BREAK**

Future Visions for Estuary Water Quality

10:35 AM **Introduction**
Terry Young, Chair, SF Bay Water Board

10:40 AM **The End of Wastewater: Sustainable Infrastructure for an Urban Estuary**
David Sedlak, Malozemoff Chair Professor, University of California, Berkeley

11:00 AM **The Future of Green Infrastructure for Stormwater Management and Climate Resilience**
Andy Lipkis, President, TreePeople

11:20 AM **Greener Products for Bluer Waters: California's Safer Consumer Products Regulations**
Meredith Williams, Deputy Director, California Department of Toxic Substances Control

11:40 AM **Futuristic Water Quality Management is Happening**
Thomas Mumley, Assistant Executive Officer, SF Bay Water Board

12:00 PM **LUNCH & POSTER SESSION**

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Shelterbelt Builders
Sonoma County Agricultural Preservation and Open Space District
Sonoma County Water Agency
Sonoma Land Trust
The Watershed Nursery
Western States Petroleum Association

Concurrent Sessions FRIDAY AFTERNOON, SEPTEMBER 18, 2015

Responses to a Changing Bay

- 1:20 PM **Introduction**
John Bourgeois, SCC
- 1:25 PM **A Return on Restoration: Species Coming Back to the Bay**
Cheryl Strong, USFWS
- 1:50 PM **Mystery Goo: An Investigation of Unknown Pollutants and Wildlife Losses**
Daniel Orr, DFW
- 2:15 PM **The Forgotten Habitats: Re-envisioning the Bay's Urban Edge**
Marilyn Latta, SCC
- 2:40 PM **Invasive Spartina Project Update and the Case for Active Restoration**
Whitney Thornton, Invasive Spartina Project
- 3:05 PM **BREAK**

Guiding the Future of Restoration

- 3:25 PM **Introduction**
Beth Huning, SFBJV
- 3:30 PM **South Bay Salt Pond Restoration Project: Adaptive Management in Action**
Laura Valoppi, USGS
- 3:55 PM **Restoring Ecosystems as Sustainable Infrastructure in a Changing World**
Andy Gunther, BAEECC
- 4:20 PM **Climate Change: Policy Challenges for Restoration**
Stuart Siegel, Siegel Environmental, SF Bay NERR



A Preview of the State of Bay-Delta Science, 2015

- 1:20 PM **Policy, Regulatory, and Management Challenges to Science in the Anthropocene**
Peter Goodwin, University of Idaho
- 1:25 PM **Challenges of Building the "One Delta, One Science" Approach**
Peter Goodwin, University of Idaho
- 1:50 PM **Climate Change and the Bay-Delta: Bounding the Uncertainties of Sea-level Rise and Changes in Precipitation**
Michael Dettinger, USGS
- 2:15 PM **Science for Water Management: Advances, Challenges, and Implications for California's Future**
Jay Lund, UC Davis
- 2:40 PM **Beyond Fishable and Swimmable: Water Quality and Contaminant Effects on Species and Water Supply**
Stephanie Fong, SFCWA

3:05 PM BREAK

A Preview of the State of Bay-Delta Science, 2015

- 3:25 PM **Communicating at the Science-Policy Interface in the Bay and Delta**
Jay Lund, UC Davis
- 3:30 PM **The Bay-Delta Food Web: Why We Care about the Dynamics of Sustaining Native Species**
Wim Kimmerer, SFSU
- 3:55 PM **Delta Landscapes: Translating the Findings of Historical Ecology to Inform Ecological Restoration**
Robin Grossinger, SFEI

- 4:20 PM **Panel: Translating Science for Management: The Art of Decision-Making Frameworks**

Rising Waters: Rethinking Our Shoreline

- 1:20 PM **Panel: The rising Bay will drive a transformation of the Bay shoreline and force us to reconsider Bay fill, public access and development patterns. Our panel will address this from a local, state and regional perspective.**
Zack Wasserman, Chair of BCDC
John Gioia, Contra Costa Supervisor & BCDC Commissioner
JR DeLaRosa, California Natural Resources Agency
Kristina Hill, PhD, Associate Professor, UC Berkeley College of Environmental Design

3:05 PM BREAK

"End of the Drought?" NOT so fast...

- 3:25 PM **Introduction**
G. Reid Fisher, Cal Engineering & Geology and Barry Hecht, Balance Hydrologics
- 3:30 PM **Slope Response to Drought and Fire: Possible Parallels**
G. Reid Fisher, Cal Engineering and Geology
- 3:55 PM **Sediment, Salts, and Bed Mobility: Movement Spikes Following Droughts**
Barry Hecht, Balance Hydrologics
- 4:20 PM **What Every Resource Plan Should Include Following Droughts**
Rich Casale, USDA NRCS

Bay Area Water Infrastructure Planning and Implementation: The Future is Now

- 1:20 PM **Introduction**
Karin North, Palo Alto Regional Water Quality Control Plant
- 1:25 PM **Big Plans for Improving Wastewater Infrastructure in San Francisco**
Michael Carlin, SFPUC
- 1:50 PM **Water Recycling Becomes Reality in the South Bay**
Pam John, SCVWD
- 2:15 PM **Challenges of Water Recycling**
Ashwini Kantak, City of San Jose
- 2:40 PM **The Economics of Clean Water in San Francisco Bay**
Ellen Hanak, PPIC

3:05 PM BREAK

Water Quality in the Bay-Delta Estuary: Now and in the Future

- 3:25 PM **Introduction**
Adam Olivieri, EOA Inc.
- 3:30 PM **The State of Estuary Water Quality: 2015 and 2065**
Jay Davis, SFEI
- 3:55 PM **Emerging Contaminants: Tackling Tomorrow's Problems, Today**
Rebecca Sutton, SFEI
- 4:20 PM **Green Infrastructure in San Mateo: A Vision of the Future**
Matt Fabry, San Mateo County-wide Water Pollution Prevention Program