

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 Wunderman, President & CEO, Bay Area Council
- 10:35 AM *Jean Auer Award*
- 
- 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**
- 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**



[www.sfestuary.org/soe](http://www.sfestuary.org/soe)

# Concurrent Sessions THURSDAY AFTERNOON, SEPTEMBER 17, 2015

## 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, SCC, and John Bourgeois,  
South Bay Salt Pond Restoration*

## Critters and Communities: New Approaches to Flood Management I

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

### 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  
Ingrid Hogle, Invasive Spartina Project  
Cristina Grosso, 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, SFEP*
- 1:40 PM **GreenPlan-IT 101: Where to Improve  
Water Quality in Your Watershed**  
*Jen Hunt, Lester McKee, Jing Wu, and Pete  
Kauhanen, SFEI*
- 2:15 PM **Stormwater Infrastructure Funding**  
*Mitch Avalon, Contra Costa County*
- 2:30 PM **Greening Oakland: Plans & Projects**  
*Kristin Hathaway and Rebecca Tuden, City  
of Oakland*
- 2:55 PM **Beyond Demonstrations: Making  
Greens Streets a Reality**  
*Jennifer Krebs and Joshua Bradt, SFEP*
- 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**

### **Premier Sponsors:**

**California State Coastal Conservancy**  
**Delta Stewardship Council**

### **Major Sponsors:**

**Bay Area Clean Water Agencies**  
**Regional Monitoring Program**

### **Anchor Co-Sponsors:**

**California Department of Water**  
**Resources**

**City of San Jose**

**Contra Costa County Flood Control**  
**District**

**Friends of the San Francisco Estuary**

*H. T. Harvey & Associates*

*San Francisco Public Utilities Commission*

*Santa Clara Valley Water District*

*U.S. Environmental Protection Agency*

*Zone 7 Water Agency*

### **Co-Sponsors:**

AECOM

A Cleaner Bay Foundation

Association of Bay Area Governments

The Bay Institute

California State Lands Commission

Central Contra Costa Sanitary District

Ducks Unlimited

Marin Audubon Society

Mountain Hardwear

North Bay Watershed Association

Restore The Delta

Sacramento Regional County Sanitation  
District

San Francisco Bay Conservation and  
Development Commission

San Francisco Bay Joint Venture

San Francisco Estuary Institute

Save The Bay

Sonoma County Agricultural Preservation  
and Open Space District

Sonoma County Water Agency

Sonoma Land Trust

The Watershed Nursery

Western State 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 in SF Bay: Wildlife First Responder's Report**  
*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 **Restoring Ecosystems as Sustainable Infrastructure in a Changing World**  
*Andy Gunther, BAEECC*
- 3:55 PM **Climate Change: Policy Challenges for Restoration**  
*Stuart Siegel, Siegel Environmental, SF Bay NERR*
- 4:20 PM **South Bay Salt Pond Restoration Project: Adaptive Management in Action**  
*Laura Valoppi, USGS*

## 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*
- 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**  
*John Wiens, Colorado State University*
- 4:20 PM **Translating Science for Management: The Art of Decision-Making Frameworks**  
*Richard Norgaard, UC Berkeley*

## 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*  
*Louise Bedsworth, Deputy Director, Governor's Office of Planning and Research*  
*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*

