## Plenary Program  
**MONDAY, OCTOBER 21, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speakers</th>
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<tbody>
<tr>
<td>9:00 AM</td>
<td>Ohlone Welcome and Land Acknowledgement</td>
<td>Kanyon Sayers-Roods (Hahashkani), Costanoan Ohlone and Chumash</td>
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<tr>
<td>9:05 AM</td>
<td>Welcome</td>
<td>Libby Schaaf, Mayor of Oakland</td>
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<td>9:10 AM</td>
<td>Opening Remarks</td>
<td>Mark Gold, Deputy Secretary for Ocean and Coastal Policy and Director of the Ocean Protection Council, California Natural Resources Agency</td>
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<td>9:25 AM</td>
<td>Climate Change and the Future of California’s Water</td>
<td>Geeta Persad, Senior Climate Scientist, Western States Office, Union of Concerned Scientists</td>
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<td>9:45 AM</td>
<td>Toward Social-Ecological Resilience: The State of the Estuary Report 2019</td>
<td>Letitia Grenier, Resilient Landscapes Program Director, San Francisco Estuary Institute, Gabby Trejo, Executive Director, Sacramento Area Congregations Together, Jacqueline Zipkin, General Manager, East Bay Dischargers Authority, Will Dominie, Policy Manager of Housing and Equitable Development, Bay Area Regional Health Inequities Initiative</td>
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<td>10:20 AM</td>
<td>Jean Auer Award</td>
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<td>10:40 AM</td>
<td>Break</td>
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<tr>
<td>11:00 AM</td>
<td>Building Trust: Striving Toward Equitable and Inclusive Outcomes</td>
<td>Nahal Ghoghaie Ipakchi, Director, EcoEquity</td>
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<td><strong>Moderator:</strong> Nahal Ghoghaie Ipakchi, Director, EcoEquity</td>
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<td><strong>Panelists:</strong></td>
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<td>LaDonna Williams, Programs Director, All Positives Possible</td>
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<td>Violet Saena, Resilient Communities Program Manager, Acterra</td>
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<td>Beth Rose Middleton, Associate Professor, UC Davis</td>
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<td>Yana Garcia, Assistant Secretary for Environmental Justice and Tribal Affairs, CalEPA</td>
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<td>Josue Medellin-Azuara, Associate Professor, UC Merced</td>
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<td>12:15 PM</td>
<td>Lunch</td>
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**Drone Demonstration** – Pete Kauhanen, SFEI  
Participants can pick up their lunch and cross the street to participate in a 20-minute lunchtime demonstration of an unmanned aerial vehicle (UAV) flight on the shoreline of Lake Merritt (approximate start time is 12:35 PM).
## Concurrent Sessions Monday Afternoon, October 21, 2019

### Habitats & Living Resources

**From Regional to Local: Integrated Monitoring for Healthy Wetlands**

**1:35 PM** Introduction
Heidi Nutter, SFEP

**1:40 PM**
- A Regional Vision for Coordinated Monitoring: The Wetland Regional Monitoring Program
  - Luisa Valiela, U.S. EPA and Xavier Fernandez, SF Bay Water Board

**2:00 PM** Connecting the Dots on Regional Sediment Management: Coordinating Sediment Monitoring in the Watersheds, the Bay, and the Wetlands
- Jeremy Lowe, SFEI and Brenda Goeden, BCDC

**2:20 PM** South Bay Salt Pond Restoration Project: Science and Adaptive Management in Action
- Rachel Tenes, USFWS

**2:40 PM** Integrating our Past and Future Monitoring in the South Bay Salt Pond Restoration Project
- Dave Halsing, SBSP Restoration Project

**3:00 PM** Panel Discussion

### Climate Resilience

**Forward-Looking Science in the San Francisco Estuary**

**1:35 PM** This panel will discuss how the science enterprise across the estuary can best support strategic and forward-looking management and stakeholder needs in the face of a rapidly changing environment.

- **Moderator:** Yumiko Henneberry, Delta Science Program-Delta Stewardship Council
- **Panelists:**
  - Steve Brandt, Delta Independent Science Board
  - Liz Whiteman, Ocean Science Trust
  - Jessie Lacy, USGS
  - Mike Chotkowski, Pacific Region, USGS
  - Steve Goldbeck, BCDC

**3:20 PM** Break

**Policy Updates to Support a Healthy, Resilient Estuary**

**Moderator:** John Callaway, Delta Science Program-Delta Stewardship Council/USF

**3:40 PM** BCDC Bay Plan Amendments and Special Plans with Advancing Policies for a Rising Bay: BCDC’s Long-Range Planning Efforts
- Shannon Fiala, BCDC

**3:50 PM** Water Board Policy Update on Wetlands and Climate Change
- Christina Toms, SF Bay Water Board

**4:00 PM** The BRRIT: Coordinated Permitting for the Ecosystem Chapter of the Delta Plan
- Amy Hutzel, State Coastal Conservancy

**4:10 PM** Using Best Available Science to Update the Ecosystem Chapter of the Delta Plan
- Ron Meiler, Delta Stewardship Council

**4:20 PM** Panel Discussion

### Water Quality

**Contaminants of Emerging Concern in the Estuary**

**1:35 PM** Introduction
- Kelly Moran, TDC Environmental

**1:40 PM** Elevating the Status of Emerging Contaminants in San Francisco Bay
- Melissa Foley, SFEI

**2:05 PM** California’s Safer Consumer Products Program Overview and Efforts to Protect Aquatic Health
- Anne-Cooper Doherty, DTSC

**2:30 PM** Pesticides in Surface Water: Sources, Pathways, and Fate
- Jennifer Teerlink, DPR

**2:55 PM** Microplastics Everywhere: Understanding Microplastics in the Bay and Recommended Actions
- Diana Lin, SFEI

**3:20 PM** Break

**Nutrients in the Estuary**

**3:40 PM** Introduction
- Eric Dunlavey, City of San Jose

**3:45 PM** Bay-Delta Nutrient Science Update
- Dave Senn, SFEI

**4:10 PM** Wastewater Treatment Plant Upgrades and Nature-Based Solutions for Reducing Nutrient Loads from Wastewater
- Holly Kennedy, HDR and Ian Wren, SF Baykeeper

**4:35 PM** Potential Effects of the Sacramento Regional Wastewater Treatment Plant Upgrade
- Tamara Kraus, USGS

**4:40 PM** Panel Discussion

### Human Dimensions

**The Next Wave in Conservation: Community-Based and Design Approaches**

**1:35 PM** Introduction
- Allison Brooks, Bay Area Regional Collaborative

**1:40 PM** Designing the Caloma Creek Project
- Richard Mullen, Hassel Studio

**2:05 PM** Parks as Resilient Infrastructure in the Wild West: A Houston Example
- Amy Morris, Land and Water Connections Consulting

**2:30 PM** Nature as Infrastructure in the SF Bay Area: A Brief History of the Long Path to Conservation for Coyote Valley
- Amanda Brown-Stevens, Greenbelt Alliance

**2:55 PM** An Ecological Framework for Urban Infrastructure Planning to Improve Human Health
- Brent Bucknum, Hyphae Design Lab

**3:15 PM** Panel Discussion

**3:45 PM** Humanizing Homelessness for Healthier Creeks and Communities

**3:40 PM** Throughput the estuary, practitioners are working across traditional divides to take a human-centered approach to the challenges created by unsheltered and vulnerable communities along creeks, resulting in benefits to people, water quality, and habitat. Panelists will discuss successes, challenges, and ways they have formed innovative partnerships to foster collaborative solutions to the regional crisis of homelessness.

- **Moderator:** Mike Antos, Stantec
- **Panelists:**
  - Chris Brokate, Clean River Alliance
  - Julia Lang, Downtown Streets Team
  - Cori Ring-Martinez, Environmental Justice Coalition for Water
  - Taka Rubin, City of Oakland

**5:00 PM – 7:00 PM** Poster Session, Reception, and Arts Showcase

**Grand Ballroom—1ST Floor**

**Exploratorium Field Station: Arts & Artifacts from the Fisher Bay Observatory Gallery**

www.sfestuary.org/soe
Green is the New Gray: Nature-Based Infrastructure

9:00 AM Introduction
Thomas Mumley, Assistant Executive Officer, San Francisco Bay Regional Water Quality Control Board

9:05 AM To Resiliency and Beyond: Multi-Benefit Highway 37
Ashley Nguyen, Director of Design and Project Delivery, Metropolitan Transportation Commission

9:25 AM Green Infrastructure Implementation Challenges and Opportunities: Navigating Constraints and Issues of Scale
Keith Lichten, Division Chief, San Francisco Bay Regional Water Quality Control Board

9:45 AM Living Shorelines: Linking Estuary Habitats and Building Capacity to Adapt to Rising Seas
Katharyn Boyer, Professor of Biology, Estuary & Ocean Science Center—San Francisco State University, and Marilyn Latta, Project Manager, State Coastal Conservancy

10:05 AM Outstanding Environmental Awards and Creative Environmental Award

10:25 AM Break

Zooming Out to the Full System

10:45 AM Welcome
John Callaway, Lead Scientist, Delta Science Program-Delta Stewardship Council and University of San Francisco

10:50 AM One Delta, One Estuary: Connecting California through Water
Felicia Marcus, Former Chair, State Water Resources Control Board

11:10 AM Viewing Estuaries from a Macrooscope
Jim Cloern, Senior Scientist Emeritus, U.S. Geological Survey

11:30 AM Standing Too Close to the Elephant: Addressing Scales in Restoration and Fisheries Conservation
Rachel Johnson, Research Fisheries Biologist, National Marine Fisheries Service and UC Davis

11:50 AM The Sacramento-San Joaquin Delta National Heritage Area: California’s First Heritage Area
Erik Vink, Executive Director, Delta Protection Commission

11:55 AM San Francisco Bay is a Hope Spot for People and Ocean Wildlife
Karina Nielsen, Executive Director and Professor of Biology, Estuary & Ocean Science Center—San Francisco State University

12:00 PM Lunch

Oakland Green Infrastructure Walking Tour
Participants can pick up their lunch and cross the street to participate in a 30-minute lunchtime walking tour (approximate start time is 12:35 PM).
### Concurrent Sessions Tuesday Afternoon, October 22, 2019

#### Habits & Living Resources
- **The Sierra Nevada to the Farallones: How Birds, Fish, and Mammals Connect the Estuary and Ocean**
  - **1:20 PM** Introduction
    - Kathy Hieb, CDFW
  - **1:25 PM** Seabirds from the Bay to the Gulf: What 20 Years of Seabird Monitoring Tells Us About Food Webs
    - Dan Robinette, Point Blue Conservation Science
  - **1:50 PM** Whales, Dolphins, and Porpoises: Harbingers of Recovery and Changing Seas
    - Tim M. Markowitz, UC Berkeley/TMMC/SFSU
  - **2:40 PM** Vital Signs of the San Francisco Estuary
    - Erika Powell, CHARG and San Mateo SLR Agency
  - **3:05 PM** Break

#### Climate Resilience
- **Regional Science for Decision-Making in Uncertain Times**
  - **1:20 PM** Introduction
    - Julie Beagley, SFEI
  - **1:25 PM** A Risk Management Approach to Delta Water Supply Vulnerability
    - Andrew Schwarz, Delta Stewardship Council
  - **1:50 PM** Underappreciated Effects of Sea-Level Rise on Groundwater
    - Reid Fisher, Cal Engineering
  - **2:15 PM** Sediment Dynamics and Wave Attenuation at the Marsh Edge
    - Jessie Lacy, USGS
  - **2:40 PM** Informing Development and Evaluation of Nature-Based Shoreline Adaptation Strategies in a Changing Climate
    - Maya Hayden, Point Blue Conservation Science
  - **3:05 PM** Break

#### Water Quality
- **Integrating Green Stormwater Infrastructure into the Bay Area’s Urban Landscape**
  - **1:20 PM** Introduction
    - Melody Tovar, City of Sunnyvale
  - **1:25 PM** A 15-year Retrospective: Large-scale Green Infrastructure Changes via Private Redevelopment in the South Bay
    - Chris Sommers, EOA/SCVURPP
  - **1:50 PM** Getting It Done: Public Right-of-Way Green Stormwater Infrastructure
    - Teri Fashing, City of Oakland and Amanda Booth, City of San Pablo
  - **2:15 PM** Modeling and Planning for Long-Term Green Infrastructure Implementation in San Mateo County
    - Matt Fabry, City/County Association of Governments of San Mateo County
  - **2:40 PM** What’s So Hard About Digging a 40” Hole? Perspectives on Green Infrastructure Municipal Staff and Water Quality Regulators
    - Andrew Schwarz, Delta Stewardship Council, EOA/SCVURPP
  - **3:05 PM** Break

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<th>Planners and Engineers and Regulators...Oh My! Roles in Regional Governance</th>
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<td><strong>3:25 PM</strong> Recent work by Dr. Mark Lubell, UC Davis, has identified governance as a critical impediment to successful regional implementation of sea level rise adaptation strategies. Numerous agencies and organizations in the Bay Area have been taking action to fill this gap and provide leadership in a variety of ways, resulting in a complex landscape. This panel will explore the roles and strategies of various organizations, and discuss how they can fit together to achieve a sound strategy for regional governance.</td>
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<td><strong>Moderator:</strong> John Bourgeois, ESA</td>
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<td><strong>Panelists:</strong> Jessica Fain, BCDC/ART, Katie Smith, UC Davis/VRA, Inc., Mark Lubell, UC Davis, Jim McGrath, SF Bay Water Board, Mike Mielke, Silicon Valley Leadership Group, Erika Powell, CHARG and San Mateo SLR Agency</td>
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#### Human Dimensions
- **Urban Biodiversity and Human Health**
  - **1:20 PM** Introduction
    - Micaela Bazo, SFEI
  - **1:25 PM** Using Science to Guide Urban Design for Biodiversity and Human Health
    - Erica Spotswood, SFEI
  - **1:50 PM** Flora, Fauna, and Folks: Reimagining the City as a Park
    - Chryl Corbin, UC Berkeley
  - **2:15 PM** Design and the Interconnected Scales of Well-Being
    - Chris Garvin, Biome Impact LLC
  - **2:40 PM** Biodiversity for All at the Presidio of San Francisco
    - Michael Bolland, Presidio Trust
  - **3:05 PM** Break

#### Public Learning in an Era of Climate Crisis
- **Accelerating Improvement of Water Quality and Habitat on Working Lands**
  - **3:25 PM** Moderator
    - Frances Knapczyk, Napa County RCD
  - **3:30 PM** Improving Water Quality and Achieving TMDL Compliance in Suisun Marsh
    - Stuart Siegel, SFSU/SF Bay NERR
  - **3:50 PM** LandSmart Program: Helping Vineyard Managers Meet Resource Conservation Goals in the North Bay
    - Lucas Patzek, Napa County RCD
  - **4:00 PM** Managing Grazed Rangelands for Water Quality in Alameda County
    - Aiyon Aquino, USDA-NRCS Alameda County
  - **4:10 PM** Cows, Water, and Wildlife in the North Delta
    - Wendy Rash, USDA-NRCS Solano County
  - **4:20 PM** Panel Discussion

- **Panel Discussion**
  - **3:25 PM** Moderator
    - Maira McEnespy, SCC
  - **3:30 PM** Public Education at the Exploratorium—Science, Art, and Social Connection
    - Susan Schwartzengen and Shawn Lani, Exploratorium
  - **3:50 PM** Paired Conversations with Curators, Artists, Social/Cognitive Scientists
    - • Middle Ground: Social Perspectives on Collaborative Engagement Shawn Lani and Heike Winterfeld, Exploratorium
    - • The Brain and Observation: Towards a Language of Resilience Susan Schwartzengen, Exploratorium and Pireeni Sundaralingam, Poet/Cognitive Scientist
  - **4:20 PM** Panel Discussion

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**4:45 PM Adjourn**