

14th Biennial
State of the San Francisco Estuary Conference
October 21-22, 2019
www.sfestuary.org/soe



Session Organizing Team Guidelines

Conference Organizing Responsibilities

- **Core Conference Planning Team**
 - Jillian Burns, Concurrent Sessions Organizer, jillian.burns@sfestuary.org, 415-778-6751
 - Karen McDowell, Conference Coordinator karen.mcdowell@sfestuary.org, 415-778-6685
 - Liz Juvera, Conference Coordinator, liz.juvera@sfestuary.org, 415-778-6630
- **Conference Steering Committee**
 - A team of people who meet monthly, develop the plenary sessions, and oversee all components of the conference.
- **Session Organizing Teams**
 - A team of 2-5 people who develop a concurrent session. The teams will develop a session and then select a session chair and session moderator to take on the work after the session has been approved (see more details below).
- **Session Chair**
 - **Description**
 - The session chair is the main point of contact for the speakers in the session. The conference coordinator will provide the chair with speaker guidelines, speaker confirmation letters, and information about logistics that the chair will need to distribute to the speakers.
 - You can choose to have 1 or 2 session chairs. Most of the time, a member of the Session Organizing Team will become a session chair, but that is not a requirement.
 - **Duties**
 - Remind speakers that they will need to submit abstracts and bios after the agenda is finalized (anticipated deadline in July).
 - Thank the session organizing team members for their work in developing the session (The team's work is completed once the session is finalized.)
 - Organize and facilitate at least one conference call prior to the conference with everyone in the session to review the flow of the session and the topics to be covered in each talk (a practice run is also recommended if possible).
 - Remind the moderator and speakers to register for the conference:

- The speakers and moderators will receive free registration the day that they speak. They will be offered a reduced rate to attend the full conference. They will be given a special registration form.
- **Session Moderator**
 - The moderator is the person that will be talking at the conference. This could be the same person as the session chair, but many times the moderator will not be the person performing the session chair duties.

Session Organizing Teams Duties

- After the May 17th Steering Committee Meeting, Session Organizing teams will be formed and given instructions on how to proceed with session development. The committee will make an effort to select the approximate number of sessions that is needed for the final program.
- Session organizing teams will pull together a concurrent session on a specific topic, with oversight from the SOE Steering Committee.
- Each team will probably consist of 2-5 people.
- **Each team will have a lead contact.** The lead contact does not necessarily have to be the most experienced person on the team, they just have to send out the coordinating e-mails and make sure the deliverables are submitted on time.
- All team members should be active in contacting each other (do not just wait for the lead contact).
- All team members will work together to put together the session proposal.
- If you need assistance with obtaining a conference call line please contact Jillian Burns, jillian.burns@sfestuary.org, 415-778-6751.

Session Organizing Team Timelines

- The SOE steering committee will make sure the sessions are developing in a way that will flow throughout the conference and will depict a comprehensive view of issues affecting the estuary, while avoiding overlap.
- The SOE Steering Committee reviewed all session ideas on May 17th. The core conference planning team made final adjustments and determined the final 16 sessions moving forward needing full proposals.
- Final session proposals are due to the core conference planning team (see above) **COB June 17th**. All speakers, session chairs, moderators, session titles and presentations titles should be close to final.
- The Steering Committee will review session proposal on **June 20th**, then give the session teams a week to make any final adjustments if necessary.
- **Once a session is finalized the Session Chairs will then assume control of the session. Members of the session organizing teams can become session chairs, but session chairs can also be recruited and don't necessarily have to be on the session organizing team.**

Things to consider while forming your sessions

- Note that the final session titles and talk titles should be interesting and intriguing. This is basically our marketing brochure – the better it sounds, then more people will come.

- Speakers should be experienced and high quality.
- We allotted 5 minutes for an introduction for each session.
- Each presentation should each be given a 25 minute time slot (20 minutes for the presentation and 5 minutes for Q&A and transition time for the next speaker).
- You can also propose to set up your session as a panel. Which could include a series of short presentations (i.e. 5 minutes), then a moderated discussion.
- Session Length: First sessions of each day will be 1 hour and 45 minutes and the second session on each day will be 1 hour and 20 minutes.

Final Product – Due June 17th

The final product needed from the session organizing teams include:

- Session Title
- Moderator Name and Affiliation
- Title of Presentation, Presenter Name and Affiliation
- Exact times of each presentation.
- If you have a panel you can include a panel name along with some additional text (realize that we are somewhat limited on space).
- **Items needed for other portions of the program**
 - **Send a list of the names and affiliations of everyone who helped organize your session,** we will have a list of people on signs at the conference and on the web site who helped pull all of the sessions together (it will not be listed directly under the session but will be noted in the section listing the conference committees).
 - We would also like to know who the **session chair** is for the session. The session chair will not be noted in the schedule portion of the program (unless they are also the moderator), but they will be listed as part of the session organizing committee.

Example of final format needed for the program (please put titles in title case and follow format below).

Day 2 (10/22/19)

The Estuary and California Water Management

1:20 PM

Introduction

Moderator: Tim Jones, California Resources Agency

1:25 PM

The Big Picture: The Estuary's Role in Statewide Water Management

John Smith, California Resources Agency

1:50 PM

The Estuaries Connection to the Colorado River and the Significance of taking a Regional Approach to Water Management

Patrick Swanson, California Bay Delta Authority

2:15 PM

The Estuary and Southern California – Developing a Reliable Water Supply Portfolio

Judy Johnson, Metropolitan Water District of Southern California

2:40 PM

Californians Can Keep Water in the Estuary and Meet Future Demands by Water Recycling

Joan Horton, DWR

3:05 PM BREAK

Other Items

Session Chair(s): Name, Affiliation, e-mail

Session Organizing Team Members: Name and Affiliations

Concurrent Session Time Allotments: Session should be designed to fit in the below format. The 4 different session blocks are shaded by 4 different colors below. There will be 4 rooms within each block for a total of 16 blocks.

Day 1 Concurrent Sessions		Day 2 Concurrent Sessions		1 hour, 45 min
1:35 PM	Intro	1:20 PM	Intro	
1:40 PM	Talk	1:25 PM	Talk	
2:05 PM	Talk	1:50 PM	Talk	
2:30 PM	Talk	2:15 PM	Talk	
2:55 PM	Talk	2:40 PM	Talk	
3:20 PM	BREAK	3:05 PM	BREAK	1 hour, 20 min
3:40 PM	Intro	3:25 PM	Intro	
3:45 PM	Talk	3:30 PM	Talk	
4:10 PM	Talk	3:55 PM	Talk	
4:35 PM	Talk	4:20 PM	Talk	
5:00 PM	Poster Session	4:45 PM	Raffle/Adjourn	

Note: 20 minute talks, with 5 minutes for questions on each talk

Panel session can also be proposed. Panel sessions would not have to stick to the individual time allotments, but they would have to fit into a 1 hour and 45 minute slot or a 1 hour and 20 minute slot

State of the San Francisco Estuary Conference 2019

Stormwater/Watershed Proposals

1. Stormwater/Watershed

a. Green Stormwater Infrastructure Session

Lead: Matt Fabry, Melody Tovar

- Presentation on Green Infrastructure Plans (could be one or more cities)
- Presentation on Reasonable Assurance Analysis GI Modeling results (basically, model results saying how much GI and where to meet long-term wq outcomes, could be one or more countywide programs)
- Presentation on GI Projects (could be green streets or regional projects, one or more cities)

b. Stormwater Management in San Mateo County – Achieving Water Quality and Resilience Outcomes

Lead: Matt Fabry, Melody Tovar

- Presentation on our RAA GI Modeling Results (how much GI do we have to do and where – looking at agency by agency vs. countywide approaches)
- Presentation on our development of a Sustainable Streets Master Plan (under a Caltrans adaptation planning grant – how do we manage runoff from roadways under a changing climate and to meet wq goals)
- Presentation on regional stormwater management projects (two projects under design and two more moving into design)
- Presentation on the new Flood and Sea Level Rise Resilience Agency (new agency being created out of existing Flood Control District that will be charged with SLR and coastal erosion, flooding, and regional stormwater management – talk about agency creation, city/county funding commitments, process, etc).

c. Green Infrastructure

Carol Mahoney

Likewise, green infrastructure is a bit of a catch all – If we can convince an actual city official to speak on behalf of a project that has been installed, a regulator to honestly assess the challenges that they face in getting the project permit out the door, and a city engineer or contractor to talk about what's really going to be the outcome of the project – I think these things will be very valuable to a wide audience. I don't want to see a shiny projects with glamour shot style photos...I want to know how the underdog project found a way to get built or how all the competing interests found a way to sit at the table together. I know that the City of Livermore's downtown was not well received at first, but the businesses are really reaping the benefits of changing to more stormwater friendly parking – so I'm sure there's a more recent project that could be discussed.

d. Informing Stormwater Management through Watershed Monitoring (three-talk session)

Lead: Chris Sommers (EOA) and Others (TBD)

Session will provide an overview of changes in Bay Area watershed processes that are occurring overtime and the results of recent watershed monitoring efforts about the health of our watersheds and the sources of impacts to local water ways.

- 1) The evolving urban watershed landscape (big picture concepts on changes in population, urban impervious surfaces, green infrastructure, hydrology, land use, infiltration, water quality drivers, etc.)
- 2) First regional report on stream health and sources of impacts
- 3) Preliminary results from the first regional assessment of trash in local water ways

e. Bay Area Stormwater Management in 2019 – An update on significant programs

Lead: Chris Sommers (EOA) and Others (TBD)

Session will provide information on key stormwater and watershed management programs that are being implemented to address key water quality impacts identified through watershed monitoring and modeling.

- 1) Green Stormwater Infrastructure and Stormwater Resources Planning
- 2) An update on trash management – source and institutional controls, trash capture systems, and waterway cleanup and direct discharge programs
- 3) Managing PCBs in buildings during demolition – a new regional program

2. Alameda Creek

Lead: Tim Ramirez, Jane Lavelle

A similar session was done in 2007). It would involve some of the partners in that “anchor watershed” working together on steelhead issues and would provide an update (much progress has been made since '07!). He has already talked to Jeff Miller of Alameda Creek Alliance about it (both of them presented in '07).

Talks

Redwood Creek Restoration with Grassroots Ecology

Contact: Kelly Malinowski

Potential Speaker: Junko Bryant

2019 State of the Estuary Conference

Concurrent Sessions

05/23/2019

On May 17, the State of the Estuary Conference Steering Committee discussed the potential themes for the concurrent sessions. All concurrent session proposals were compiled for this discussion and can be found [here](#). Staff reviewed the results of the discussion and determined a final list of concurrent session themes. The final themes are listed in the following table and supporting text. Any documents linked throughout this document are also attached to the email providing this document.

Concurrent Session Themes by Room

Day and Time	Room 1 Habitats & Living Resources	Room 2 Climate Resilience	Room 3 Water Quality	Room 4 Stewardship	# of talks
Day 1					
Day 1 Session A	Monitoring/ Restoration	Policy Update	Emerging Contaminants	Resilience through Design	4 talk block
Afternoon Break Day 1					
Day 1 Session B	Monitoring w/ New Technology	Forward-looking Science	Nutrients	Homeless & Creeks	3 talk block
Day 2					
Day 2 Session A	Delta-Bay-Ocean Connection	Resilience	Stormwater/ Watershed	Urban Greening & Health	4 talk block
Afternoon Break Day 2					
Day 2 Session B	Continuation of Species - TBD	Resilience	Agriculture	Exploratorium Education	3 talk block

CCMP Goal #1: Habitats and Living Resources

Day 1

Session A: From Regional to Local: Integrated Monitoring for Healthy Wetlands

Session Team: Dave Halsing, Heidi Nutters, Jillian Burns

1. A Regional Vision for Coordinated Monitoring: The Wetland Regional Monitoring Program
 - Josh Collins (San Francisco Estuary Institute) or Heidi Nutters (SFEP)
2. Regional sediment management through the WRMP, Bay RMP, Healthy Watersheds Resilient Baylands Program, and BCD's fill for habitat Bay Plan Amendment
 - Scott Dusterhoff, Jeremy Lowe or Josh Collins (SFEI)

- Potential collaborator?: Sediment demands for supporting resilient Baylands - Katie McKnight (SFEI)
- 3. SBSP Update: South Bay Salt Pond Restoration Project's synthesis of Phase 1 applied studies and monitoring, application to Phase 2 planning, and need for regional monitoring data
 - Rachel Tertes (U.S. Fish & Wildlife Service), Laura Cholodenko (State Coastal Conservancy), or Dave Halsing (SBSP Restoration Project) or other speaker TBD
- 4. OPEN? Another SBSP talk?
 - Utilizing a Public-Private Partnership to Restore Native Fish Habitat in the Yolo Bypass: The Yolo Flyway Farms Restoration Project - Carl Jensen (ICF)/Chris Campbell (CBEC)

Session B: Monitoring with New Technology

Session Team: Dave Halsing, Heidi Nutters, Jillian Burns

1. Opportunities and challenges for use of drones or other unmanned aerial vehicles to improve efficiency of data collection.
 - Brian Fulfrost (Fulfrost & Associates) or other speaker TBD
2. Mosquito Monitoring
 - Erika Castillo/Miguel Barretto (Alameda County MAD)
3. New applications of remote sensing for regional monitoring in San Francisco Bay
 - Iryna Dronova (UC Berkeley)

Day 2

Session A: Delta-Bay-Ocean Connection

Session Team: Kathy Hieb, Jillian Burns

1. Herring Fishery
2. Harbor seals or other marine mammals
3. Birds – cormorants
4. Dungeness crab? Shrimp/mysids/larval fish? Zooplankton?

Session B. Continuation of Species – connection/exciting research/seascape ecology/fish

Session Team: Kathy Hieb, Jillian Burns, Brian Meux

TBD

CCMP Goal #2: Resilience of Shorelines, and Communities, and Ecosystems to Climate Change

Day 1

Session A: Forward-Looking Science

Session Teams: John Callaway, Amanda Bohl, Nir Oksenberg,

Panel: Potential speakers include members of the Delta Independent Science Board, Bay and Delta agency leaders, and academic researchers and practitioners.

Session B: Policy Update

Session Team: Christina Toms, John Callaway

Short presentations followed by a panel discussion.

1. BCDC: Fill for Habitat
2. Water Board
 - Christina Toms
3. BRRIT
4. Possibly include Sustainable Conservation (Erika Lovejoy) or Delta policy updates?

Day 2

Session Team: Caitlin Sweeney, Julie Beagle, Karen McDowell, John Bourgeois, Amanda Brown-Stevens

There will be two sessions on resilience. The identified team will form the two sessions using the [submitted session and talk proposals](#).

Session A: Resilience

TBD

Session B: Resilience

TBD

CCMP Goal #3: Water Quality and Freshwater Supply

Day 1

Session A: Emerging Contaminants

Session Team: Melissa Foley, Tom Mumley, Jay Davis

1. Update to CEC risk assessment and overview
2. Management update from Department of Pesticide Regulation OR Current-use pesticides in the margins
3. Management update from Department of Toxic Substances Control
4. Microplastic – science results & policy directions

Session B: Nutrients

Session Team: Melissa Foley, Tom Mumley, Jay Davis

1. Nutrients and sediment management – conceptual model and implications
2. Algal toxins and accumulation in mussels
3. Upgraded treatment works outlook
4. Potential alternative talk: nutrient issues in the Delta – or this idea could be incorporated into the other talks.

Day 2

Session A: Stormwater/Watershed

Session Team: Matt Fabry, Melody Tovar, Chris Sommers, Jane Lavelle, Josh Bradt, Karen McDowell

The following talk themes were chosen from multiple [stormwater/watershed session proposals](#).

1. Alameda Creek

- Tim Ramirez (SFPUC)
- 2. Stream Health
 - First regional report on stream health and sources of impacts.
- 3. Green Infrastructure
- 4. Green Infrastructure

Session B. Agriculture

Session Team: Lucas Patzek, Alyson Aquino

TBD

Note from SC discussion: Suisun Marsh will be included elsewhere.

CCMP Goal #4: Stewardship

Day 1

Session A: Fostering Resilience through Design/Community-Based Risk

Session Team: Heidi Nutters, Allison Brooks, Amanda Brown-Stevens

Four talks chosen from the following list. This session will be primarily modeled off the Fostering resilience proposal, while incorporating a talk(s) from the Community-Based Risk proposal.

1. The People's Plan, a project that came out of Resilient by Design. Engaging community members to develop design solutions to address complex issues. Community-led strategies and planning.
 - Pandora Thomas, Movement Strategy Center: (<https://movementstrategy.org/>) and the Urban Permaculture Institute
2. Using design thinking to respond to sea level rise
 - Richard Mullane -- Hassel Studio (<https://www.hassellstudio.com/en/>) Designing the Colma Creek project, a project that came out of Resilient by Design.
3. Bringing design into the conversation with government. Training on design thinking and the emerging "govtech" movement.
 - Cristelle Blackford, CivicMakers <https://civicmakers.com/>
4. Someone from the Creative Reaction Lab: <http://www.creativereactionlab.com/>
5. Note: Community-Based risk – this talk would be developed from a [session proposal](#) by Amanda Brown-Stevens.

Session B. Humanizing the Homeless: A Way Toward Cleaner Creeks?

Session Team: Darcie Luce, Melissa Gunther

Three speakers chosen from the following list.

- Mike Antos, Senior Integrated Water Management Specialist, Stantec Consulting
- Chris Brokate, Founder, Clean River Alliance
- Mark Boucher, Senior Hydrologist, Contra Costa County Public Works Dept.
- Deb Kramer, Keep Coyote Creek Beautiful
- Downtown Streets Team (maybe in tandem with Deb Kramer)

- Laura Feinstein, Pacific Institute

Day 2

Session A: Urban Greening & Human Health

Session Team: Erica Spotswood

Four speakers chosen from the following list.

1. Using Science to guide urban design for biodiversity and human health
 - Erica Spotswood (SFEI)
2. Promoting equitable access to the largest urban national park
 - Michael Boland (Presidio Trust)
3. Environmental justice and the distribution of health and green space in the Bay Area
 - Rachel Morello-Frosch (UC Berkeley)
4. The SHINE program, park prescriptions, and promoting equitable access to the East Bay Parks.
 - Mona Koh (East Bay Regional Park District)
5. Prescribing nature to improve children's health
 - Nooshin Razani (UCSF Medical Center)
6. Race, class, green cities and gentrification
 - Cheryl Corbin (UC Berkeley)

Session B: 20. Learning about How We Learn: Informal Environmental Education at Exploratorium

Session Team: Moira McEnepsey, Susan Schwartzenberg

This session is a panel with one opening presentation. Note: potentially include science communication messaging throughout the panel discussion.

1. Opening talk
 - Susan Schwartzenberg (Curator of the Bay Observatory Gallery and Director of the Environmental Initiative)
2. Paired conversations between Susan; Shawn Lani, Director of the Studio for Public Spaces; Heike Winterheld, Director of Social Science; and Pireeni Sundaralingam, Urban Fellow, Poet, Cognitive Scientist
3. Audience Q&A and discussion

Lunch Activities

Day 1

Drone demonstration

Day 2

[Science Shark Tank?](#) - Organizing Team: Caroline Warner

State of the San Francisco Estuary Conference 2019

Resilience Talk Ideas

1. Resilience

a. Shoreline Resilience

Lead: Julie Beagle (SFEI)

Potential talks:

- Julie Beagle (SFEI): Adaptation Atlas: Working with nature to plan for sea level rise
- Kathy Boyer (SFSU): Advances in living shoreline approaches: Oysters, Eelgrass, Suaeda, and beaches
- Chris Choo (Marin County) or Maya Hayden (Point Blue): Marin Adaptation Framework- evaluating ecosystem services of shoreline adaptation strategies
- Katie McKnight (SFEI): Sediment demands for supporting resilient Baylands
- Steve Deverel (Hydrofocus): Subsidence and Elevation Change in the Delta

This session will highlight recent work related to how the shoreline might be managed in more resilient ways that benefit both people and wildlife. This includes integrating nature based adaptation measures into shoreline protection, evaluating trade-offs between approaches, better understanding local sediment supply and demand, and monitoring and managing for relative elevation change and subsidence. This session could be integrated with proposed talks by Heidi Nutters (SFEP) related to shoreline resilience. We haven't coordinated about that yet.

b. Transforming Urban Water for Resilient Shorelines

Lead: Heidi Nutters, Adrien Baudrimont

Adapting communities and natural landscapes for resilience and protection requires innovative, boundary-spanning approaches. Over the coming years and decades, the Bay Area faces multiple complex, interrelated, and expensive water management and infrastructure decisions motivated by the need to remove contaminants, restore natural services to aquatic ecosystems, secure potable water resources, mitigate sea level rise impacts, and replace aging infrastructure. The Transforming Urban Water Initiative is advancing nature-based solutions. We coordinate with wastewater treatment facilities on local project design and implementation, support ongoing research at the Oro Loma Horizontal Levee Living Laboratory and facilitate regional forums to coordinate across disciplines to advance successful projects.

For the State of the Estuary Conference, we have proposed some individual talks to highlight the exciting results from the Oro Loma Horizontal Levee project, as well as a possible full panel on nature-based shoreline resilience projects at wastewater treatment plants around the SF Bay. We are happy to coordinate with others who might want to combine into this session, or have it be standalone. If the Steering Committee only have space for one talk, we suggest Dr. Sedlak's talk

that highlights some very exciting water quality monitoring results coming out of the Oro Loma project.

Full Session -- Talks would be reduced down to 3-4, and follow the usual SOE format for concurrent sessions

1. The fate of nutrients and trace organic contaminants in a horizontal levee: Results from the Oro Loma Horizontal Levee project -- Dr. David Sedlak, Angela Perantoni & Aidan Cecchetti, UC Berkeley
2. Lessons Learned and Future Directions for the Oro Loma Horizontal Levee Project -- Donna Ball, Save the Bay; Jason Warner, Oro Loma Sanitary District
3. Implementing a Horizontal Levee - Design and Construction Challenges -- Mark Lindley, ESA
4. Transforming Urban Water Initiative -- Advancing Design and Implementation -- Heidi Nutters, SFEP
5. The East Bay Dischargers Authority First Mile Project -- Jack Zipkin, East Bay Dischargers Authority
6. Scaling up a pilot project to help meet the challenge of climate adaptation in San Francisco Bay. -- Jeremy Lowe, SFEI

c. Horizontal Levees

Idea submitted by: Carol Mahoney

Horizontal Levees have multiple components that have to be planned, communicated, permitted, constructed, and maintained. What if you had a person speak about each of those elements in shorter talks. How did the planner overcome obstacles to understanding or communicate the need? How did the municipality communicate to the public what was planned? How did the regulatory community come together to support the project or overcome obstacles of regulation and paperwork? What challenges will there be or were there to physically building the feature? And, almost more importantly, what have they learned since the feature has been in place? Has it been what they expected? How did each player see their role in the project? Maybe the discussion of the oyster beds could take this tack. I think what planners and administrators are looking for is a path to get their ideas/projects through the mire of all the pre-construction actions. We should probably leave the "F-word" of funding out of it.

d. Suisun Marsh

Lead: Stuart Seigal

Full session that would include 4 talks on Suisun Marsh that focus on

- How managed wetland BMPs can help achieve TMDL objectives
- Current tidal restoration in Suisun Marsh – including specific projects and efforts underway by DWR and CA FWS
- Latest findings and aquatic resource functions in Suisun Marsh – could be given by Kimmerer's lab or Moyle's lab
- Suisun Marsh: Potential responses to Sea Level Rise and Climate Change

Talks

Interconnectedness of the entire Bay

Idea submitted by: John Bourgeois

Mark Stacey's modeling work showing what one City does affects other Cities around the Bay.

New San Mateo County flood control district

Idea submitted by: John Bourgeois

Maybe Sup. Dave Pine? to discuss the formation of a new agency to address SLR

Adaptive Management - Fish

Potential speaker: Carson Jeffries

How fish are using flooded islands, process of using adaptive management.

Role of BayCAN (David Behar or Bruce Riordan) vis-à-vis CHARG

Contact: Kelly Malinowski

Engineering Realities of Sea-Level Rise in Flood "Control"

Lead: Reid Fisher

A simple toolbox for review of the engineering realities that accompany designing, retrofitting, and improving flood control measures would help to identify and/or eliminate infeasible or unaffordable alternatives early on. Too often to date, an "adaptive management" approach has assumed that, for instance, levee crests could be raised without major issue. As a first cut, it is useful to know for example that for every foot rise in levee crest, the levee footprint on the land side may need to expand laterally 3 feet. Levees built from materials that are adequate for a given seepage gradient may not perform with raised water levels. Higher groundwater levels may mean that a given area, while "protected" from waterside flooding, will be subject to flooding simply from groundwater. The measures needed to address considerations such as these may be unacceptable from any one of several standpoints. The ongoing, cumulative effect of sea-level rise may mean that a mitigation adequate for one increment of rise is not adaptable/sufficient for a subsequent increment of rise.

Other focus areas/questions could include:

- Standard of Practice – it is evolving, can no longer ignore or punt.
- What happens at end of return period for a given water surface elevation? If you plan for a 100-year sea level projection, realistically can your project be adapted to address the next 100 years?

The Underappreciated Effects of Sea-Level Rise on Groundwater

Lead: Reid Fisher

For Bay/Delta margin sites, sea-level rise will be commonly accompanied by a rise in groundwater elevations. At sites with currently shallow groundwater, sea level rise may be accompanied by flooding simply due to groundwater rise. Proposed developments and improvements are just now beginning to be designed with this in mind, reflecting an evolution in standard of practice. Retrofit of existing developments and improvements simply may not be feasible. Planning scenarios will need to consider not just a finite time window (e.g. 100-yr rise), but must also consider how the site will be protected/managed during the following increment(s) of time. Completely apart from engineering/design effects, there will be associated effects on biotic communities (at the ground surface), and on the freshwater/saltwater interface (below ground).

The history of Measure A, how it came about and what it resulted in.

Lead: Lucas Patzek

Speaker: Someone from Napa Flood Control/Lucas Patzek

- Measure A - the Napa County half-cent flood control sales tax - over 20 years generated \$271 million and attracted enough federal funds, grants and other monies for \$650 million in projects. The “living river” idea became a Measure A cornerstone. The tax came with the promise to do more than bring 100-year flood protection to the county. For the most part, it would tame the Napa River not with concrete, but with flood plains and wetlands.
- Someone from Napa Flood Control would be a great speaker, and I could help facilitate the process of identifying a speaker. I could also co-present to speak to biological restoration/mitigation work over time.
- Perhaps this could be one presentation in a whole session focused on local fundraising/creative financing for large-scale projects.

ART Bay Area

“Regional Planning for SLR,” Planning Director Jessica Fain to focus on ART Bay Area and how we are transitioning to a Regional Shoreline Adaptation Plan. Jessica would be happy to work with John Bourgeois to scope out the session. Jessica Fain is point of contact.

ART Delta

ART Eastern Contra Costa County project. Heather Dennis is point of contact.

Sonoma Creek Enhancement Project

Lead: Stuart Siegal

Project combines many hot topics of the day – wetland-upland transitions, habitat levees, fill in the bay for habitat and SLR accommodation purposes, thin layer deposition, constructing in suite of ESA habitats.

Geomorphic Dredge: updated tidal hydraulic geometry curves for central and north bay marshes

Lead: Roger Leventhal

I developed this concept for a “geomorphic dredge” template a couple of years ago which means to design a dredging plan that is based on the tidal hydraulic geometry curves that relate equilibrium tidal channel dimensions to tidal prism. In theory, since the dredge design geometry is based on restoration science, it should have less impacts and be more sustainable over time. But its an approach right now and not totally proven.

However, the available tidal hydraulic geometry curves available for design work, which are from a 2002 paper by Phil Williams are really not suitable (or usable) for design in the larger tidal channels with a larger fluvial input – which are in fact the channels that we actually dredge (i.e. Petaluma, Napa, Novato, San Rafael, Corte Madera Creek etc etc). The 2002 paper (while very well written and is great but I am sure Phil and all never intended that no additional analysis work would be done for 17 years afterwards), needed to be updated so I have spent the last two years working with Laurel Collins (Josh’s wife and one of our leading geomorphologists in the bay) to develop updated tidal hydraulic geometry curves for central and north bay marshes and to develop a dredge plan for Corte Madera Creek. So I think this talk will be useful to present the updated dataset for central and north bay marshes (its detailed and fairly sciency in that we have lots of new curves- although its applied science but gives insights into the complexity of our larger river/tidal systems) as well as get this more “*design with nature*” approach out there maybe for others. I think it’s a pretty big update but I am a dork about this stuff so this may not be as of quite the same interest to others. Josh Collins is pretty plugged in so you can check with him if he is on your organizing committee.

Marin Rainfall Analysis: Climate Change Signal/Flood Control

Lead: Roger Leventhal

My other project is an analysis of Marin rainfall data to develop flooding triggers based on statistical analysis of past storm event data (25 plus years) plus do a local assessment of climate change signals in our data. This is more flood control hydrology and seems probably of less of interest to SOE folks. If you are doing a climate change hydrology session, this would fit right in but most ecotypes don’t seem to think about rainfall as much.

Science Shark tank: Pitching your Story - Scientists wooing Journalists to make their science more interesting to more people!

Gist of the session:

Our science is so interesting to us! But how do we make it more interesting to everyone else, or at least a wider audience? Especially now, when our information is so important and timely and urgent. And if people don't know about what we do, how will the needed changes in behavior ever take hold so we can reach our goals of improving the state of the estuary?

In this session, 2-4 brave scientists will pitch their stories in front of a live audience to three representative journalists from Newsprint, Radio and Podcast programs. In turn, the Journalist will put them to the test by asking a round of pointed questions ultimately to help them answer the question - Why should I be interested in this story? Additional benefits will be to help them hone their messages, determine best practices and criteria for sharing content, and overall cultivate a better sense of how to share their knowledge and information. Perhaps the audience will vote on the story that is most interesting to them both in the beginning and the end? or in some way get involved in the conversation. Ideally, no one will leave the session without having a better idea of what it takes to get story coverage by the media.

State of the Estuary Conference

In the past the SOE conference has invited journalists to cover the conference with varying degrees of success. With this offering, journalists would have an esteemed role and as such may be more interested in attending and as a result, cover the conference. I would imagine inviting them to come as guests for both days, or at minimum the entire day they are involved in this session. The audience

Potential Journalists:

Print: Paul Rogers, San Jose Mercury News or Peter Fimrite, SF Chronicle

Radio: (NPR/KQED) - Ira Flatow, Science Friday, John Sepulvado - California Report; Michael Krasny - Forum, Kris Welch - KPFA

Podcast - Jerry Kay, "Earth News Journal"; "60-Second Science" (Scientific American) - Christopher Intagliata or other, "Talk Nerdy" with Cara Santa Maria, "Stuff you should know" - Charles Bryant/Josh Clark

Potential Scientists: - those who say 'Yes' to this will need to have tough skin, confidence and a story/topic they know inside and out so they can address potentially tough questions from the journalists.

1. Jeremy Lowe, or Letitia Grenier SFEI
2. Stuart Siegel, SF Bay NERR
3. Peter Baye
4. John Bourgeois, ESA
5. someone from SFEP? Save the Bay? ...

Project Contact/Organizer/moderator?: Caroline Warner, San Francisco Bay Joint Venture (cwarner@sfbayjv.org)

TIMING: This session could be made to fit in any of the available time slots. (1 hr 20 or 45 minutes)

The Next Generation of Risk – a Holistic and Community-Centered Approach to Resilient Conservation

- Highlight the connections and multiple benefits of conservation both along the shoreline and in the uplands to benefit the larger Bay ecosystem and community
- Show examples from other regions of both urban and coastal resilience projects
- Highlight how community participation is crucial in the success of large-scale conservation efforts

1:20 PM Introduction Moderator: Amanda Brown-Stevens, Greenbelt Alliance

1:25 PM Framing: how economic, social, and ecological goals must be balanced across scales for a resilient future. Katie Coyne Asakura Robinson Company, Austin, TX

1:50 PM Parks as Resilient Infrastructure in the Wild West: A Houston Example, Amy Morris, Land and Water Connections Consulting

2:15 PM Nature as Infrastructure in SF Bay Area: A brief history of the long path to conservation for Coyote Valley, (speaker TBD)

2:40 PM Community Resilience on the Gulf Coast: The Gentilly Resilience District example, Colleen McHugh, The Water Institute of the Gulf