



## Bay Area Ecosystems Climate Change Consortium

Friday, October 18, 2013, 10 a.m. – 12:30 p.m.  
26<sup>th</sup> Floor Conference Room, Bay Conservation and Development Commission  
50 California Street, San Francisco, CA 94610

### Meeting Summary

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#### Attendees:

*Sarah Allen, <i>National Park Service</i>	*Anne Morkill, <i>USFWS</i>
Louis Blumberg, <i>The Nature Conservancy</i>	*Sara Moore, <i>NBCAI</i>
*Erin Chappell, <i>CA DWR</i>	*Carl Morrison, <i>Bay Area Flood Protection Agencies Association</i>
*Ellie Cohen, <i>Point Blue Conservation Science</i>	*Elizabeth Murray, <i>USACE</i>
Kelsey Ducklow, <i>CA Coastal Commission</i>	Heidi Nutters, <i>SF Bay NERR</i>
Jenn Fox, <i>Bay Area Open Space Council</i>	Hilary Papendick, <i>CA Coastal Commission</i>
Matt Gerhart, <i>CA State Coastal Conservancy</i>	*Bruce Riordan, <i>Joint Policy Committee</i>
*Sara Hutto, <i>GFNMS</i>	*Aleka Seville, <i>Joint Policy Committee</i>
Andy Gunther, <i>BAECCC</i>	Eric Simons, <i>Bay Nature</i>
Marilyn Latta, <i>CA State Coastal Conservancy</i>	*Caitlin Sweeny, <i>SF Estuary Partnership</i>
David Loeb, <i>Bay Nature</i>	*Linda Tandle, <i>CEMAR</i>
Max Loewenstein, <i>NASA Ames Research Ctr</i>	Sam Veloz, <i>Point Blue Conservation Science</i>

\* = via teleconference

#### 1. Introduction of participants and their BAECCC-related projects

Participants introduced themselves and the interests of their organizations in BAECCC.

#### 2. Review Agenda

No new items were added to the agenda.

#### 3. Group discussion: Climate Risk Reduction and Response Policy

Louis Blumberg of The Nature Conservancy led a discussion regarding the current state of climate risk reduction and response policy, and the policy barriers to climate smart action. BAECCC is forming a Policy Subcommittee, co-chaired by Louis Blumberg and Ellie Cohen, to research and recommend policy changes that promote BAECCC goals.

To frame the discussion, Louis proposed the following questions:

- If BAECCC is going to identify policy changes that need to be made, which policies should those be and why? What criteria should inform that decision-making process?

- What barriers or obstacles have surfaced with regard to climate smart conservation actions? Are they policy or regulatory related?
- What policies/tools at the state level will catalyze action at the local or regional level?
- How would a revised state climate change adaptation plan influence actions at the regional/local level?
- How much direction in a state plan is appropriate or needed to drive action?
- What policy measures/changes should BAECCC promote?
- What are key federal policies that could advance climate smart actions?

He then clarified that he is using the term, “climate change risk reduction and response” as a replacement for the term, “adaptation to climate change.”

### **FEDERAL ACTIVITY**

- Louis stated there is a lot of activity on climate risk reduction and response by federal agencies that is driven by a presidential directive (through the Council on Environmental Quality). However, there is no overarching federal mandate and funding has been “mercurial” at best.
- Sarah Allen commented that the National Park Service is incorporating climate adaptation and response into their training program, and Max Lowenstein noted that NASA is considering climate change in its infrastructure planning in the South Bay.
- Bruce Riordan mentioned that the [Georgetown Climate Center](#) offers a series of workshops for states and regions on interfacing with federal agencies regarding climate change.
- Ellie noted that nature-based solutions are available for mitigation, risk reduction, and response, and so the BAECCC Policy Subcommittee should promote policy change that encourages all of these areas. She explained the definition of climate-smart conservation we’ve adopted in our strategic plan.

### **LEGISLATION**

Louis commented that while there is a lot of activity in the area of risk reduction and response, there is very limited policy based on legislation, so there is no mandate to conduct risk reduction and response action. Among the few laws passed are:

- SB 1066 provides authority to the State Coastal Conservancy to incorporate climate change into its plans and grant programs,
- AB 691 provides that leaseholders of submerged tidelands that generate over \$250,000 in annual revenues must produce an “assessment”—not a plan—on how they plan to address sea level rise. However, the bill doesn’t mandate implementation of a plan or the actions included in the plan.
- AB 2094 gives BCDC, as a member of the Joint Policy Committee, the authority to develop regional strategies that address impacts of and adaptation to effects of sea level rise on the bay. BCDC incorporates consideration of sea level rise in its project confirmation process.
- Senator Leno has sponsored SB 461 that would establish a coastal adaptation fund that would be used to address and adapt to sea level rise and coastal climate change.

However, the bill is currently hung up in committee, and might move in the upcoming legislative session.

## **GRANT PROGRAMS**

Save-the-Bay and others are promoting a 2014 parcel-tax initiative to raise money for the activities of the [San Francisco Bay Restoration Authority](#). Louis commented this is an area BAECCC should track to see if we can do anything to help.

The [Bay Area IRWMP](#) grant program requires that grantees provide information on climate change adaptation in their proposals. Carl Morrison referred those interested to [bairwmp.org](http://bairwmp.org).

The [California Strategic Growth Council](#), a cabinet level committee created by SB 732, is tasked with coordinating the activities of member state agencies that promote development of sustainable communities and environmental stewardship. Many of the proposed provisions that would have required it to consider climate change risk reduction and response were rebuffed in the legislative process.

The [Ocean Protection Council](#) has authority to fund local coastal projects that address sea level rise. The State Coastal Conservancy also has a grant program through its [Climate Ready](#) program. Louis agreed to send his presentation outline to Andy for distribution to the BAECCC list serve. (Developing and maintaining a list of available grant programs could be a task that the sub-committee and the coordinator undertake.)

A \$6 million annual CEC fund (from the now-defunct public goods charge) that supported climate change research through the PIER program has been eliminated. Senator Fran Pavley, chair of the Senate Select Committee on Climate Change, conducted a hearing in May 2013. The Assembly has two select committees one on the coastal protection and one on sea level rise and the California economy. Each has had one hearing so far.

## **REGULATION**

Louis mentioned the Delta Protection Commission. Though BAECCC's area of focus doesn't include the delta, how should or could BAECCC interface with the Delta Commission?

There have been two executive orders. S-1308 directed the Ocean Protection Council to develop sea level rise projections for the California coast. S-305 directed the state Resources Agency to develop biannual climate adaptation assessment reports.

The [Little Hoover Commission](#) is a state oversight agency that makes recommendations and legislative proposals to promote government efficiency and effectiveness. The Commission is reviewing [climate change adaptation in California](#); recommendations to guide responses should be available soon. A state omnibus climate change agency could be a response suggested by the Commission. Bruce Riordan stated that he is a witness scheduled to testify before the Commission this week on October 24.

## STATE PLANNING ACTIVITIES

The Governor's [Office of Planning and Research](#) (OPR) is charting climate change efforts; an update is due soon. However, the list they have produced is not comprehensive and some efforts do not address climate change adaptation or risk reduction. Louis noted a list from OPR of some 20 plans was recently distributed through the BAECCC list serve.

Hilary noted that the Coastal Commission just released [DRAFT Sea-Level Rise Policy Guidance](#). The document includes a detailed list of principles and does prioritize nature-based solutions (including limitations to the use of sea walls). The document relies on the National Research Council [report](#) on sea level rise, and includes consideration of wave impacts. It contains several appendices covering science, resources, potential adaptation measures, and other topics, and provides information on sea level rise adaptation measures local governments and others can consider for their projects.

The California Coastal Commission LCP Planning [grant](#) program (due November 22) includes climate change adaptation as criteria to be considered in the application.

The Nature Conservancy is looking at developing a unified set of state climate change principles. Louis is drafting a letter on climate adaptation/risk reduction principles for the update to the *Safeguarding California Plan: Preparing for Climate Risks*. Almost every state agency is involved; as yet there is no overarching set of common goals or coordination between agencies.

Should BAECCC do something to push this; perhaps get support from partners to leverage the administration? Louis commented that he made a pitch to the governor's office several weeks ago. Ellie added that as input to *Safeguarding California*, BAECCC could start with a letter along with support letters from partners about requiring coordination across state agencies to lessen political influences. Louis responded that the way to do that is through legislation.

Andy suggested going through the Association of Regional Collaboratives for Climate Adaptation (ARCCA), which has a direct relationship with the Governor's office. ARCCA includes four areas: San Diego, Los Angeles, Bay Area, and Sacramento.

- Bruce Riordan noted that ARCCA is working to develop relationships with state agencies, but it is a slow and difficult process. State agencies are thinking more about their internal operations, and less about partnerships.
- The Little Hoover Commission has invited ARCCA to testify, and Bruce invited meeting participants to email him ideas for his testimony. In addition, he suggested that at ARCCA's December meeting nature-based solutions be on the agenda and BAECCC could lead the discussion.
- Andy commented that risk reduction and response is a very regional issue; there are different risk priorities based upon regional geography/ecology. He hopes that the state will recognize that strategies of value to one region will be a low priority in others.

Louis said the other ARCCA locations don't have anything similar to BAECCC; they don't have the same emphasis around green infrastructure that we do in the Bay Area. Andy added that he has searched for collaboratives similar to BAECCC across the country, but has not found

anything similar, possibly because ecosystem health has not been a long-term priority in other areas as it has the Bay Area.

Bruce asked people's opinions about recommending that ARCCA ask the State to require regional adaptation plans.

- Matt Gerhart asked who would pay for the planning process?
- Louis asked what areas would be classified as regions, and how would the plans lead to implementation?
- Matt also noted that there is no answer yet as to how big, how long, and by when for adaptation planning. There isn't a real model yet that provides standards and consistency.
- Erin Chappell noted that clarifying the guidelines for any regional planning effort would be critical from the state perspective in order to get comparable products from each region.

## **REGIONAL AND LOCAL EFFORTS**

Only the Port of Oakland has an adaptation plan. San Francisco has looked at developing one, but there isn't one yet. There is a draft plan in San Diego on which the port commissioners have not acted. Louis said there are 90 jurisdictions/cities/local governments with climate action plans, but 70 of them are emission reduction plans only.

## **DISCUSSION**

It's clear there is no mandate yet for implementation of risk reduction and response policies. What is the best way to achieve a mandate? It is important to know what we want to accomplish and the best way to do that. Should it be an obstacles and barriers approach?

Andy commented that one method for strategically advancing our goals for considering nature-based solutions would be to select an iconic project and specifically promote a nature-based solution. For example, all three major bay area airports and access to the airports are vulnerable to sea level rise and storm impact. Are there nature-based solutions that could be included in risk reduction plans? It would be a way to advance a discussion about nature-based solutions in this region. Projected impacts of climate change on fog will also attract attention.

Anne Morkill commented that working around the vulnerability of Highway 37 to sea level rise might be a great opportunity to demonstrate benefit for a major public transportation corridor through restoration of tidal marsh. Matt noted that at CALTRANS in Sacramento there is now a climate policy staffer who is available to work with Districts.

Marilyn noted that airports and ports have specific maintenance and safety requirements that might challenge the creation of habitat. She noted some subtidal approaches (reefs) might be more acceptable. Anne Morkill noted that USFWS is creating habitat near the San Carlos airport as part of restoration at Bair Island. They had to create upland habitat rather than wetland habitat to address the requirements of the FAA. Matt noted other iconic issues (coastal economy, fog, fire, drought), and in southern California the beaches (as an economic rather than ecological issue). How could BAECCC use these iconic issues to encourage climate adaptation efforts are on nature-based paths?

Bruce mentioned sea level rise and storm damage to Silicon Valley's iconic companies; their locations are in jeopardy. How do we promote nature-based solutions with those companies? Andy commented that the terrain of possible involvement is so broad that we need to focus more narrowly on where to get involved. Selecting iconic impacts is one possible criterion as these will be highly visible issues to promote the idea that nature-based solutions should be part of the mix. Another criterion would be demonstrating the economic benefits that derive from considering nature-based solutions. Another criterion might be to focus on areas that result in demonstrating solutions, so that we can state confidently that we know how to implement nature-based solutions and that they work.

Bruce asked about how much impact BAECCC wants to have beyond the Bay Area. Matt responded that another criterion for BAECCC's policy focus could be policy changes that advance nature-based solutions in the Bay Area and also serve as examples for other regions in the state. Louis noted that BAECCC might not consider just policy barriers and obstacles. BAECCC could look for opportunities to be proactive and get in at the planning level to develop new policies.

Caitlin mentioned the potential opportunities around the aging flood control channel structures; that there is an opportunity to incorporate innovative solutions. These on-the-ground projects have challenging regulatory issues with great lessons to be learned. BAECCC could work with agencies to develop smoother processes.

Louis noted that The Nature Conservancy will issue a report soon on nature-based solutions. It features seven actual projects and two still in the planning stages. He added that there are opportunities through the state hazard management plan to obtain federal dollars from FEMA for proactive projects, especially for flood control. FEMA is recognizing the importance of natural infrastructure.

Louis also noted that in CEQA cases the court has held that project proponents are not required to consider impacts of climate change on their projects under current CEQA guidelines, only the impacts of their projects on the environment. Legislative changes could be made to CEQA to incorporate climate change impacts (Tom Ammiano [D-San Francisco] carried a bill this year on this topic but it was unsuccessful). Bruce added that if projects are within BCDC jurisdiction then consideration of climate change on projects must be included.

## **NEXT STEPS**

Andy said the next step is for the BAECCC Policy Subcommittee to decide where to focus its efforts. He invited anyone who is interested in helping to contact him.

## **4. Updates**

- a. Summer school: lessons learned connecting science to management at UC Davis and the National Conservation Training Center (S. Veloz)

Sam reported on his participation two workshops. The first, *Scenario Planning Toward Climate Change Adaptation*, was hosted by the Wildlife Conservation Society and the

National LCC, and conducted at the USFWS National Conservation Training Center in West Virginia. Scenario planning and case studies are emerging as popular planning tools for climate change adaptation. He noted that case studies are frequently useful for detecting problems, gathering information, and refining the problem definition. Scenario planning is a method to help move from planning to implementation.

The second course, *Best Practices for Systematic Conservation Planning*, was hosted by UC Davis Information Center for the Environment, Point Blue Conservation Science, USFWS, CALCC, and Natural Resource Ecology Center at Colorado State University. This workshop focused on helping managers identify the best tools and practices for systematic conservation planning to support conservation and adaptation efforts.

Sam noted that workshops such as these help resolve misunderstandings regarding existing approaches, provide valuable checklists for participants to use in their own processes, and generate discussion among participant's communities in learning more about these techniques. Sara Hutto suggested that there might be significant local interest in a scenario planning workshop. Sara will contact NCTC about their minimum requirements for their workshops. Andy said BAECCC could organize and promote the workshop.

**b. Living Shorelines Project (M. Latta)**

Marilyn briefly summarized this project, which is testing the effectiveness of restoration techniques in subtidal habitats and the value of these techniques on providing physical benefits to protecting and buffering adjacent shorelines in the face of sea level rise and other climate changes. The pilot project, conducted in San Rafael Bay and along the Hayward shoreline, compares the effectiveness of different restoration treatments (establishment of native oyster reefs and eelgrass) with the goal of restoring ecological function and ecosystem services that may better facilitate resilience to changing environmental conditions. Preliminary results have demonstrated excellent oyster recruitment, growth, and survival. Since construction in 2012, more than two million native oysters have settled at the site; eelgrass is establishing; invertebrate, fish, and bird diversity is increasing; and model results show that the reefs reduce wave action by 28%. The project will be monitored through December 2017. The Coastal Conservancy is the lead sponsor for the \$1.5 million project, which includes multiple local, state, federal, and non-profit partners.

**c. Navigating Environmental Compliance in Coastal California (M. Latta)**

Marilyn briefly summarized her experience at *Navigating Environmental Compliance in Coastal California*, a workshop conducted by The Coastal Training program at Elkhorn Slough. She noted that the main theme of the workshop was that successful coastal permitting requires good planning and a lot of time (some permits take a year or longer). A key take home message was to focus on relationship building with the staff of the permitting agencies, and getting input from them early so that you can incorporate this

information into your draft designs, and then again get early feedback on these in order to incorporate all final feedback into final designs.

**d. Climate Smart Grant Program, California Coastal Conservancy (M. Gerhart)**

Matt reported that the Conservancy is nearing the end of the review process. Their focus has been on proposals that facilitate on-the ground strategies for development of climate resilience. They received 79 applications totaling nearly \$15 million; \$1.5 million is currently available, and the Conservancy is trying to raise money to fund more proposals. The staff will make initial recommendations within the next month with Board consideration in early 2014.

**e. Green Infrastructure for Coastal Resilience workshop (H. Nutters)**

This workshop will be conducted December 12, 9:30 a.m. to 4:30 p.m. at David Brower Center in Berkeley. The sponsors are San Francisco Bay National Estuarine Research Reserve and the NOAA Coastal Services Center. This introductory course presents fundamental green infrastructure concepts that play a critical role in making coastal communities more resilient to natural hazards. The NERR is also sponsoring a series of tidal wetland workshops at different sites across the region. If you are interested in more of these at other locations, please contact Heidi, at (415) 338-3511 or [heidin@sfsu.edu](mailto:heidin@sfsu.edu).

**5. Announcements**

Heidi announced NERR is having a celebration on November 1 to commemorate the 10-year anniversary of designation of the Reserve. For more information visit <http://www.sfbaynerr.org/2013/10/14/sf-bay-nerr-will-host-10-year-anniversary-party/>.

**6. Adjourn**

The meeting was adjourned at 12:30 p.m.