



## CLIMATE READINESS INSTITUTE

**Ocean Protection Council AB 2516 Implementation Project**  
**Deliverable 2B: Regional Stakeholder Meetings**  
**Deliverable 2C: Barriers and Solutions**  
**Bruce Riordan & Sandra Lupien, Climate Readiness Institute**  
**FINAL — May 2017**

### **Deliverable 2B: Stakeholder Meetings**

As the second step in the AB 2516 project, CRI conducted 90-minute meetings via phone with key sea-level rise stakeholders from five different regions: San Diego, Los Angeles, Central Coast, SF Bay Area, and the North Coast. These meetings were supplemented with individual phone interviews where needed.

The purpose of the meetings was to better understand the barriers facing coastal planners and other stakeholders as they address the impacts of sea-level rise and extreme storms. This input will be critical to designing effective on-line and human-based resources for planners in the next phases of this project. The meetings also served to introduce the project and the CRI staff to the key stakeholders in each region.

Using a list of barriers to planning (funding, staff expertise, etc.) identified in the literature review (Deliverable 2A), we asked participants to respond to three basic questions:

- How would you prioritize the barriers listed below for your region?
- What's missing that is important to your region?
- How could new online resources—including a database of local/regional sea-level rise reports, snapshots of each region's status/progress, a funding source guidebook, or a help desk—best address these barriers and support your work?

List A: Top barriers from the literature review

1. Funding is insufficient for both planning and implementation.
2. Local and regional entities lack staff time and expertise to plan for sea-level rise.
3. Planners are hampered by insufficient local data (or a perception of inadequate data) and a lack of expertise to effectively integrate scientific research into adaptation planning.
4. While the State's world-class climate *mitigation* efforts have featured quantifiable goals, major regulations and substantial funding programs, the State's policy actions for climate

*adaptation* have only recently become more clear and direct and still do not address the primary need for adequate funding for regional and local planning.

5. A lack of formal structures for shared decision-making and planning undermines collaboration across city and county borders, and by overlapping authorities.

List B: Additional barriers identified in the literature review

1. Lack of clarity around the application of California's Public Trust Doctrine.
2. Lack of public demand for action on sea-level rise and climate change.
3. Continuous pressure on local governments to move ahead with development on coast and bayside areas.
4. A lack of *regional* leaders and champions to address threats that transcend local entities.

*A sample agenda is included as Attachment A.*

### **Participants:**

#### **San Diego Region: January-February, 2017**

Amber Pairis – South Coast Climate Science Alliance

Laura Engeman – San Diego Regional Climate Collaborative

Carl Stiehl – City of Carlsbad

25 members of the San Diego Regional Climate Collaborative (1/31 group interview)

#### **Central Coast Region: February 6, 2017**

Brian Brennan – County of Ventura; Beach Erosion Authority for Clean Oceans and Nourishment (BEACON)

Mindy Fogg – Santa Barbara County

Adrienne Greve – Cal Poly State University, San Luis Obispo

Kelly Leo – The Nature Conservancy; CA Coastal Adaptation Network

Chris Read – San Luis Obispo County

Tiffany Wise-West – City of Santa Cruz.

Marc Beyeler – Beach Erosion Authority for Clean Oceans and Nourishment (BEACON)

#### **San Francisco Bay Area: February 22, 2017**

David Behar – SFPUC –

Liz Gagneron – California Coastal Conservancy

Allison Hooks – City of Oakland

Jack Liebster – County of Marin

Len Matterman – SF Joint Powers Authority

Erik Pearson – City of Hayward

Alex Porteshawver – Michael Baker International

Sally Prowitt – San Mateo County

Damon Golubics – City of Hayward

**Los Angeles Region: February 27, 2017**

Juliette Finzi-Hart – United States Geological Survey

Phyllis Grifman – USC Sea Grant Program

Sean Hecht – UCLA School of Law, Emmett Institute on Climate Change

Ismael Lopez – Los Angeles County Planning Division

Laura MacPherson -- City of Los Angeles Community Planning

Dana Murray – Heal the Bay

Monique Myers – California Sea Grant

Shannon Parry – City of Santa Monica

Nick Sardpour – USC Sea Grant Program

Sarah Sikich – Heal the Bay

Guangyu Wang – Santa Monica Bay Restoration Commission

**North Coast Region: February 28, 2017**

Aldaron Laird – Trinity Associates

John Ford – Humboldt County Planning & Building

Joel Gerwein – California Coastal Conservancy

Kristen Goetz – City of Eureka

David Loya – City of Arcata

Cristin Kenyon – California Coastal Commission

Michael Richardson – Humboldt County

Elizabeth Schatz – City of Arcata

Hank Seemann – Humboldt County Public Works

**Sacramento/San Joaquin Delta**

Despite numerous attempts, we were unable to recruit individuals and organize a group phone meeting for this region. (Flooding in the region during February affected participation.) We will make sure that a Delta stakeholder group is organized for Task 3.

**Deliverable 2C: Summary of Barriers and Solutions**

(numbers and letters are for identification only, NOT for ranking)

**1. Funding is insufficient for both planning and implementation.**

Key comments (in the voice of the participants):

- A. The funding picture is difficult to understand and to successfully access. Different funders each have their own different criteria and goals. This is a maladaptive environment that is not helpful to local governments with very limited time to go after funds. We need to move in the direction of reducing the time and risk (opportunity costs) of applying for grants.
- B. We need the state to “get its act together” to make it a predictable understandable process. How about California developing something like the old HUD-style block grants if the state really wants locals to do this planning? A guidebook and training for planners in how to access funding would be helpful.

- C. It would be great if the state would start thinking through how to be a *funding* partner to local jurisdictions on adaptation solutions, not just a *planning* partner.
- D. We need to get more creative in our financing approaches. For example, we need help developing assessment districts and green infrastructure bonds. Not everyone has to use these approaches, but we should develop them for use by those who see them as appropriate actions.
- E. We should be developing financing mechanisms that will allow us to start now to gradually put away funds that can be used later for costly implementation. Don't wait until we need to replace infrastructure and the bill is much larger than our local resources.
- F. Provide state funding to support locals developing 1-3 key strategies all the way from concept to implementation so we can go beyond the high-level strategies found in most adaptation plans. Most funding is just for one step in a much longer process.
- G. From a funder's perspective, providing funds for SLR and adaptation planning is difficult because there are so many first-time efforts. It's hard to know what measures will be effective. It's hard to fund untested strategies and rank their possibility of success.
- H. We lack funding to hire consultants to fill major gaps in our knowledge, time, and expertise. We are stretched between so many different tasks already.
- I. We have little funding to hire consultants who have more experience than we do in this type of planning and who can bring methodologies and lessons learned from elsewhere.
- J. Funding for implementation is a growing concern as more jurisdictions complete their initial planning stages and see themselves closer to actual projects.
- K. There are funds available for planning but little funding is available for *designing* and *implementing* actual policies with real teeth.
- L. Most grants are for actual planning and leave very slim or non-existent pots for outreach and engagement.
- M. We need funding so we can do comprehensive assessments of existing infrastructure, including elevation and lifespan. It's not a simple task and we lack the resources.
- N. We need to do a big shoreline plan and we just don't have the funding at the city to do it. We can't devote the staff time needed without supplemental funding.
- O. The San Diego region has a large (\$690K) grant from NOAA for the San Diego Coastal Resilience Project that will connect initiatives, fill knowledge gaps and engage experts and communities. We need that kind of grant in each of our regions.

## **2. Local and regional entities lack staff time and expertise to plan for sea-level rise.**

Key comments (in the voice of the participants):

- A. This work has not yet become mainstream in many of our cities — there are higher priorities for staff to do their “regular” work. This will improve as sea-level rise planning eventually becomes part of our standard planning work program and staff are redirected.
- B. Staff in most cities don’t have the bandwidth or space for this work on top of all of their existing duties.
- C. At some point, this work will become a more important role of the agency and they will have to reallocate funding and acquire the expertise to do the work. For now, they haven’t been redirected because of barriers # 5, #4, and #3 (lack of champions, state direction, and data/expertise).
- D. This is really hard for smaller cities with few staff resources. Bigger entities have relatively large planning departments and often have substantial developments proposed so they have both funding (through fees) and demand for sea-level rise planning.
- E. Many/most of the strategies we could employ have not been tried in the real world, at least in our local area. Therefore, it is very difficult for staff to evaluate them and recommend one over another.
- F. There is a greater demand for legal support than most cities can provide. (Can’t get enough time from legal staff.) The state should conduct sea-level rise training for city attorneys and city managers.
- G. Staff turnover is a problem. This is really important on getting help with topics such as laws and regulations.
- H. It would really be helpful if we had access to GIS expertise since we don’t have that in-house.

## **3. Planners are hampered by insufficient local data (or a perception of inadequate data) and a lack of expertise to effectively integrate scientific research into adaptation planning.**

Key comments (in the voice of the participants):

- A. There is plenty of data and scientific information, but it keeps changing and looks like it will continue to change. This makes it hard to get our elected officials, developers, and others really on-board. It seems like we get new science every year.
- B. We need more reliable predictive data about the future if we are going to get policy makers and elected officials to support this work.

- C. It is harder to see current data as reliable when it is extrapolated into the distant future.
- D. There are too many competing or conflicting models and maps. We need a set of state-approved sea level rise inundation maps like the tsunami hazard area maps.
- E. We generally have a good amount of data but certain data sets are lacking—riverine flooding, coastal erosion of cliffs, land subsidence, comprehensive hydrological data and data on sea-level rise impacts of runoff from contaminated land.
- F. Even “beach-to-beach” profiles are very diverse and regional-level data does not fit. We need hyper-local data.
- G. We need better financial information about coastal assets. Help us with evaluating the cost of X being done vs. the economic value of the targeted infrastructure.
- H. Interpreting and making decisions based on sea-level rise maps is challenging because we don’t have the decision analysis skills and tools that we need.
- I. We have data but need help evaluating what to DO—what options should we consider and how do we evaluate them?
- J. We have too much local data and insufficient resources and time to sift through it to integrate it into planning. How do we translate data into long-range planning and action for cities?
- K. We have good data and expertise, but it’s not clear how we will turn these findings into actual plans and regulations. We are missing that kind of guidance.
- L. We need a way to connect the data to a menu of options in order to explain this to city staff, as well as for getting community buy-in. We need to be able to clarify what the options are and how the science backs up those options.
- M. Correctly applying the data we have continues to be a problem or need. Figuring out which data to use is an ongoing problem for most cities.
- N. We need more scenario planning and pilot projects — not endless vulnerability assessments and more data. Help our stakeholders take the next step.
- O. South Coast Climate Science Alliance has produced a detailed Regional Research Needs document by working with stakeholders. Now, groups of practitioners and stakeholders are self-organizing around one or more of these big needs. This is a good model for other regions.
- P. Science has been used heavily to drive sea-level rise issues forward — that is a problem because science can be difficult for people, messages are not in everyday language, etc.

**4. While the State’s world-class climate *mitigation* efforts have featured quantifiable goals, major regulations and substantial funding programs, the State’s policy actions for climate *adaptation* have only recently become more clear and direct and still do not address the primary need for adequate funding for regional and local planning.**

Key comments (in the voice of the participants):

- A. For smaller jurisdictions, it is very hard to carry forward plans or policies that are not required. For example, jurisdictions won’t add another layer of review on top of CEQA unless it is required.
- B. Lack of clear direction from government above our region is a problem—many disconnected pieces: LCP guidance, sea-level rise guidance, various models, FEMA, etc. This leads to questions we can’t answer from developers about the eventual process: How will this go? Will X pass with FEMA, state, etc.?
- C. When stormwater and GHG reduction started becoming key issues, there were many “baby steps” available to enable cities to enact policies that can get the ball rolling. But with sea-level rise it seems that the only option is to take really big steps that will be unpopular, create property value issues, require property takings, etc.
- D. Sea-level rise is a new and emerging science that is changing rapidly. The policy level discussion is having trouble keeping pace with the changes. For example, permitting makes it very difficult or impossible to fill wetlands (for good reason), but structures may now be threatened by flooding, and being unable to fill to protect those assets is a policy lag.
- E. Crafting local solutions for a statewide problem is really challenging. While conditions and threats vary among regions, it could be helpful if each region did not have to invent new processes on their own but instead had more state guidance and assistance. Maybe a framework?
- F. There’s an emerging need for official, publicly released inundation maps from the state (like for tsunamis) – something like FEMA’s flood insurance maps. Having the State put its stamp on such resources will help reduce the fears and suspicions of property owners.
- G. Let’s set up an incentive system vs. a regulation system for adaptation—a coalition of the willing of local governments that want to do adaptation planning for their areas. Those that don’t join will have lower priority in the future for state funding for planning and implementation.
- H. A number of municipalities have gone through the LCP process, but are now experiencing tension from state agencies asking them to stick their necks out and essentially “be first.”

**5. A lack of formal structures for shared decision-making and planning undermines collaboration across city and county borders, and by overlapping authorities.**

Key comments (in the voice of the participants):

- A. We have MANY land-owners and asset-owners who should be involved but we don't have a structure for bringing them together to learn about the problem and potential solutions. The LCP process is not sufficient for this because it does not cover the existing built environment.
- B. There are lots of assets that cross land-use districts and infrastructure but are not owned by land-use decision-making bodies. We need a structure that enables collaboration with those who own the assets and the properties and structures behind them. Need to get them together with the land-use decision makers to grapple with the infrastructure and land-use needs.
- C. We are finding that city-to-county and county-to-county collaboration is improving a lot and steadily. The harder collaboration is with utilities, railroads, and other big entities.
- D. Lots of special districts operate important and vulnerable infrastructure. They have maybe not been brought into the fold as much. We are missing many of the big players—Caltrans, state parks, etc., which should be at the table with cities but they are missing and/or are doing their own planning for sea-level rise.
- E. We have a big problem with not being able to get big players to the table to discuss these issues. Planners would like to be consistent with neighboring land owners and jurisdictions. We need to understand how companies – railroads, refiners, others along shorelines—are preparing for sea-level rise.
- F. We have a problem when it comes to high-value regional assets like power plants, wastewater treatment facilities, etc. that are in inundation zones. Who makes the call whether to protect them in place or do something else? How do we deal with the impacts of their decisions on their neighbors?
- G. For our region, this should be a higher priority. We need help creating a collaborative structure to bring together many players.
- H. In our region, dikes that protect agricultural areas are owned by many different people and they have the right to do their own individual things with them. However, we will need to be able to eventually coordinate efforts.
- I. Different jurisdictional issues are in conflict. County has land use authority, but Coastal Commission takes the lead role in most of the most vulnerable areas. The local policy is subjugated to the Coastal Act, so, the ability for local governments to actually affect what's happening on the ground is very limited.



- J. A lack of shared decision-making is creating challenges. Forcing cities to cut off their projects based on borders rather than efficacy doesn't make sense from a policy perspective.
- K. It would be great to have a structure for talking with and sharing best practices with planners in other California regions.

**6. The lack of clarity around the application of California's Public Trust Doctrine is affecting sea level rise planning in some areas.**

Key comments (in the voice of the participants):

- A. In our region, we are trying to find ways to help property owners continue to enjoy value from their land as it gets inundated. Part of making this possible is clarifying the Public Trust Doctrine.
- B. It's a broader issue of property rights and statutory duties, not just the Public Trust Doctrine.
- C. This is a very important issue. Whose responsibility is it (City? Property owner?) to take action to comply with the Public Trust Doctrine?
- D. There are plenty of adaptation-planning toolkits, but can we use them to create a legally defensible layer of ordinances and regulations?

**7. The lack of public demand for action on sea-level rise and climate change is holding back the planning process.**

Key comments (in the voice of the participants):

- A. The lack of public awareness about these issues is a serious problem. We are mostly focusing on the LCP process and are neglecting educating communities and building support for action.
- B. We have very limited resources for this work, so education and public outreach has not been a funded priority.
- C. Lack of problem-awareness by public officials is a big challenge because it leads to low funding, staffing, etc.
- D. Lack of public demand or sense of urgency means decision makers lack the will to move forward.
- E. If we spent more time on education and building public awareness, many of our problems of resources, political will, etc. would be reduced.

- F. Public engagement is hard on this issue—how to convey the urgency and relevancy to people’s everyday lives. They have more pressing and immediate concerns, so how do we get them to engage?
- G. Part of the trouble might be that we’re not clear on what we’re asking of the public. FEMA, flood insurance, mapping—do people understand where sea-level rise is going?
- H. In our area, when there is demand for action it is often around environmental justice issues and concerns.
- I. The average person in our area knows very little about sea-level rise. It is hard to engage them because they tune us out. We want to engage—we have always prided ourselves on lots of public process (we were social media pioneers) but sea-level rise does not seem important to people right now. This could blow up on us when we get to public hearings and/or we won’t get the level or quality of input that improves our proposals. Especially true because we normally get an older crowd who are engaged on development or city issues, but they don’t see this being important in their lifetimes. We need help engaging a younger, hipper crowd who should care.
- J. We need graphics and videos that can explain the science. This is a huge need if we are going to engage people. We can’t do them, but the State could do them for all regions to use.
- K. Start working more with kids in schools. They will be interested and will listen. Maybe they will take the messages back to parents.
- L. Show that this is not just a coastal resident issue, but one that affects everyone who is dependent upon the coast or likes to use the coast.

**8. There is continuous pressure on local governments to move ahead with development on coast and bayside areas.**

Key comments (in the voice of the participants):

- A. This is one of the biggest barriers. It’s about an opposition to regulations that could impede what is perceived as private rights, etc.
- B. In our urban area, most of development is happening in the floodplain and there is a lot of pressure to develop.
- C. We need to talk more about a variety of approaches, and expand and couch the planning conversation in terms of economic benefits.
- D. There is a flipside to this. There are significant premature negative economic impacts of NOT allowing development in areas that could be vulnerable to sea-level rise in the future. This is coming up in the North Coast Region.

E. We have to move ahead somehow. We can't stop development.

**9. Sea level rise planning is being held back by a lack of *regional* leaders and champions to address threats that transcend local entities.**

Key comments (in the voice of the participants):

A. In our region, there is a lack of a political champion on adaptation. With a real champion or leader, a lot more would get done and there would be a public engagement strategy.

B. Local elected officials are not yet championing SLR adaptation – there's been no superstorm Sandy wake-up call.

C. Leaders are needed in our region but the time frame is difficult for them (long) and the science has such uncertainties.

## ATTACHMENT A – SAMPLE MEETING AGENDA



### Central Coast Sea Level Rise Stakeholder Group

February 6, 2017 — 1 pm to 2:30 pm

Slides and computer audio: <https://global.gotomeeting.com/join/501433597>

Phone audio: (571) 317-3122 — Access Code: 501-433-597

1. Welcome and introductions
2. Project overview and meeting objectives
3. Group input on 3 questions:
  - How would you prioritize the barriers listed below for your region?
  - What barriers are missing that are important to your region?
  - How could new online statewide resources—including a database of local/regional sea level rise reports, snapshots of each region’s status/progress, a funding source guidebook, or a help desk—best address these barriers and support your work?

#### **Possible barriers to efficient and effective local and regional action to build resilience to sea level rise and extreme storms (based on literature review):**

##### **Group A:**

6. Funding is insufficient for both planning and implementation.
7. Local and regional entities lack staff time and expertise to plan for sea-level rise.
8. Planners are hampered by insufficient local data (or a perception of this) and a lack of expertise to effectively integrate scientific research into adaptation planning.
9. While the State’s world-class climate *mitigation* efforts have featured quantifiable goals, major regulations and substantial funding programs, the State’s policy actions for climate *adaptation* have only recently become more clear and direct and still do not address the primary need for adequate funding for regional and local planning.
10. A lack of formal structures for shared decision-making and planning undermines collaboration across city and county borders, and by overlapping authorities.

##### **Group B:**

5. Lack of clarity around the application of California’s Public Trust Doctrine.
  6. Lack of public demand for action on sea-level rise and climate change.
  7. Continuous pressure on local governments to move ahead with development on coast and bayside areas.
  8. A lack of *regional* leaders/champions to address threats that transcend local entities.
4. Wrap-up and next steps