

## **Session Notes:**

### **Incentivizing Adoption of Living Shorelines and Nature-based Approaches**

*(2<sup>nd</sup> National Living Shorelines Tech Transfer Workshop)*

Date: February 22, 2018

Facilitator: Rebecca Schwartz Lesberg (San Francisco Bay Program Director, Audubon California)

Notes: James Han (Research Assistant, Boyer Lab, Estuary & Ocean Science Center)

#### **List of Acronyms:**

BCDC – (San Francisco) Bay Conservation and Development Commission

CCC – California Coastal Commission

CCRCD – Contra Costa Resource Conservation District

DOT – Department of Transportation

EOS – Estuary & Ocean Science Center

EPA – Environmental Protection Agency

ISP – Invasive *Spartina* Project

LGB – Lesbian, Gay, Bisexual

LS(P) – Living Shorelines (Project)

NERR – National Estuarine Research Reserve

NOAA – National Oceanic and Atmospheric Administration

NOAA CPC – NOAA's Climate Prediction Center

NOAA Fisheries – National Marine Fisheries Service

OA – Ocean Acidification

POC – People of Color

RAE – Restore America's Estuaries

SLC – State Lands Commission

SLR – Sea Level Rise

SFSU – San Francisco State University

TES – Threatened, Endangered, and Sensitive Species

USFWS – United States Fish and Wildlife Service

#### **Summary**

The session began with introductions, where everyone in the room introduced themselves, identified the institution or program or group with which they were affiliated, and spoke about their desired goals in attending the session. Common themes kept emerging within the goals: a desire to hear about best practices from other parts of the nation and to hear from people from other fields outside of one's personal range of experience with regards to designing, implementing, and getting community buy-in with regards to LSPs.

After introductions, a short list of session goals was outlined for the attendees. These goals included discussing incentives that could be implemented to encourage adoption of LS

techniques, discuss differences in working with public and private entities, and identifying and sharing solutions.

With these goals in mind, attendees broke out into smaller groups based on region/location to identify key stakeholders, challenges, and solutions in our regions. After reporting back, it was apparent that several key challenges and solutions were on most people's minds:

Most people were concerned with definitions and terminology. Without the right definitions and terms, how do you get a message out? How do you communicate with laypeople to get buy-in? How are definitions laid out so that regulators, NGOs, communities have consistency?

Attendees highlighted the myriad agencies and overlapping jurisdiction, and how there was a need to decrease timelines by streamlining or centralizing the permitting and decision-making process around LSPs. Attendees also were interested in increasing and expanding lines of communication: not just from experts to laypeople, or agencies to communities, but also peer-to-peer, within the same fields, and across disciplines.

Everyone seemed to suggest only positive, "carrot"-based incentives, not punitive, "stick"-based approaches.

Most of all, everyone seemed to agree that buy-in was a high priority. Just not getting buy-in from the public, but buy-in from stakeholders, governments, businesses, and other experts.

After this breakout session, attendees shuffled into new groups and were asked to pick a specific audience or audience type, to identify that audience's concerns and motivations, and to think of messages and actions that that particular audience would need or respond best to.

The reports back to the entire group after the second breakout session mirrored the first in that the need for buy-in was again considered a central issue and most discussion seemed to be centered around ways of ensuring buy-in, particularly from private entities like homeowners and businesses/corporations.

As with the first breakout session, "carrot" approaches were unanimously favored over more punitive approaches. Emphasis was placed around focusing on the community benefits of LSPs and private benefits to landowners, ensuring that LSPs are easy to understand and can appeal to people's emotions besides "mere" policy and scientific concerns, and addressing community concerns head-on to defuse opposition to LSPs.

## **Synthesis**

Overall, I believe the session was a great success. People from all over the country, from very different disciplines, came together to share their experiences working with LSPs or on behalf of LSPs or the communities that stand to benefit from them.

As a gay person and an Asian person, I did leave feeling concerned that the conference was not racially diverse at all, with hardly any POC in attendance. (It was great to see a majority of women in this session, and there was quite a strong showing from LGB people overall.) I didn't feel out of place or excluded, but I definitely have reservations about the fact that the overwhelming majority of attendees, who represent a broad spectrum of experts, regulatory agencies, non-profits, researchers, consultants, and more do not reflect the broader community or communities where restoration work needs to be done.

One of the things we discussed at our session was the need to have “trusted ambassadors” who can work with communities to get their buy-in on living shorelines projects. I wonder how much easier obtaining such trust would be if government bodies, NGOs, and research centers had more people in their employ who came from those communities and understood their concerns firsthand. Efforts to create shoreline resilience will not be successful in the long-term unless the entire community feels included in the process at all its many levels. Despite the much-needed mention of the idea of trusted community ambassadors, little to no discussion was had about promoting STEM in communities of color, educating impacted communities about sea level rise, and hiring more from local communities.

I was also greatly concerned that one of the community “benefits” that was mentioned with regard to achieving community buy-in on LSPs was the notion that LSPs are tied into the beautification and “clean-up” of old, neglected areas. One example was specifically mentioned where homeless people vacated an area after cleanup and mitigation efforts were undertaken by the SLC. Mentions were made about an alleged increase in “safety” which was purported to have been a benefit to the local community, but no mention was made of where these people went, or if the SLC or the local communities near the cleanup site were aware that homeless people, already displaced from permanent housing, were displaced yet again to make room for what would eventually become a candidate site for an LSP. What is “beautification” and “safety” to some could mean “displacement” and “gentrification” to others, and I feel that that should have at least been mentioned.

Also, I was a little concerned that almost every suggestion made with regards to achieving buy-in on LSPs were positive, beneficial incentives and none were punitive. While staying positive may be important for achieving buy-in with regular community members, homeowners, and small business owners, such tactics often will not work against recalcitrant corporations that have a culture of placing environmental concerns last and have the money and resources to resist efforts at doing what is best for the community. For such entities, punitive measures such as fines and stricter regulations absolutely should be considered an option, especially when “carrot”-based approaches have failed. As an on-the-ground advocate who has successfully worked to stop a corporation from developing wetlands in my hometown, I know firsthand that sometimes engagement and beneficial incentives are not the right solution when dealing with entities that have very different priorities to the scientific community and to the local communities that would be most impacted.

Perhaps due to my background as an on-the-ground organizer, I was also somewhat concerned by the paternalistic nature of a couple discussions that I heard around community buy-in. Some folks seemed to consider community buy-in low-priority, or something boring and unpleasant that had to be done to ensure that a project would be successful instead of being sabotaged or stonewalled by people who might not know any better, unlike the experts in the room. Instead, the attitude should be one of eager engagement, one where community members are valued for their historical and local knowledge and their deep, on-the-ground understanding of the issues at play in their backyards. Communities impacted by LSPs should be approached as equals, and not as empty minds waiting to be “educated” by those of us with scientific knowledge.

Despite these concerns, I believe that the session was incredibly beneficial to all those who attended, and I doubt that I would have thought about these concerns as much as I did if I

not had the opportunity to attend. My hope is that those who attended the session left more motivated to engage with each other and with the public in an egalitarian, open fashion that fosters excitement around LSPs and their implementation in the Bay Area.

### **Detailed Notes of Proceedings**

#### *(Introductions)*

Rebecca Lesberg from San Diego. Is fascinated by the differences in how Northern and Southern California think about LS, also the differences in thinking she's been seeing nationally thanks to attendees at this conference who came from all over the nation. Her main goal in attending the session is to get out of her "SoCal bubble."

Carolyn Lieberman – With the USFWS Coastal Program. Originally from Maryland and now in San Diego.

James Han – Undergraduate research assistant with the Boyer Lab at the EOS Center of SFSU. Wants to learn about what others are doing across the nation with regard to LSPs.

?? – (Could not hear most of comment.) From India originally, has lived here for many years.

Bruce Vogt with NOAA, does oyster restoration work.

Janine Harris, also with NOAA.

Jodie Palmer – from Florida, doing oyster restoration work in the Indian River Lagoon. Her county, Broward County, passed a tax to fund the installation of 20 miles of LSPs.

Todd Bridge – Army Corps of Engineers, based out of Vicksburg, MS. Interested in seeing what projects might be of federal interest.

Brenda Goeden – Permitting agent from the BCDC. Has knowledge of wetland restoration, dredging, and dredge material reuse.

Ben Seigel – social science doctorate student from the University of Arizona who wants to talk to actual practitioners and on the ground researchers who are designing and implementing LSPs.

Heidi Petty of CCRCD – Works in creeks mostly, such as the Alhambra (Creek) watershed, Walnut Creek watershed, etc. Is looking into horizontal levees with the Carquinez Watershed Council.

Jeff Benoit, RAE – Is here to help us all network!

Amanda Santoni(?) of the EPA – Work is focused on OA. She is interested in the OA aspect of LSPs.

Vince Geronimo.

Cheryl Hudson, leasing agent with the SLC – Wants to hear about projects, especially those on sovereign state lands. Wants to know the long-term benefits of using more natural ways to mitigate for SLR.

Laura Ingemann(?) with the Center of Climate Change Impact and Adaptation(?). Works in the San Diego region to advance coastal resilience and LS concepts.

Danielle Boudreau of NERR – Wants to incentivize community and local government involvement in LSPs.

Kate – Texas Coastal Management Program in Austin, TX. Works on long-term planning and coastal policy projects. With NOAA grant funding, is working on updating the Texas Coastal Resiliency Master Plan. Wants to learn about how to get into communities and places where the shoreline is already built up/urbanized.

Dominic MacCormack of the EPA. He is in Ocean and Coastal Management, mapping coastal wetlands and looking analyses of wetlands losses. Interested in connections between green corridors and green infrastructure and how LS fits into that.

Haille Leija – Works in oyster reef restoration and marsh restoration.

Melanie Anderson – A local field biologist with Olsen Environmental working under the ISP to remove invasive cordgrass. She does on the ground work but wants more knowledge on how to implement LSPs.

Stephanie Chen – A “real” biologist with Olsen Environmental who wants more knowledge about LSPs since it’s just starting in the Bay Area.

Fernando – With the Frost(?) Science Museum in Miami. Engaging volunteers in habitat restoration like in mangrove dunes. Got funding to restore habitats and wants to learn more about nomenclature, monitoring, incentivization, and more.

#### *(Workshop Goals)*

1. Examine what incentives can be implemented to encourage adoption of LS techniques.
2. Discuss differences in working with public vs. private entities – there can be very different incentives at play, for instance.
3. Identify and share what has been successful elsewhere. For instance, what do you do when you have a private landowner that can or should do a LSP, but isn’t required to? How do or did you get them to?

#### *(Region Specific Conversations)*

We broke out into four groups loosely based on regions that session attendees were from: One group for people from the East Coast, one group for people from the South, and two groups for people from California. Each group was asked to answer the following four questions and report back to the wider group:

Stakeholders: Who are the main implementers of LSPs in your region?

Challenges: What are the challenges in communities in getting entities to adopt LS approaches?

Solutions: What has been done to move past these challenges?

Sharing Solutions: What key aspects of solutions are applicable elsewhere?

#### CA Group #1 (Brenda Goeden, James Han, Cheryl Hudson, Heidi Petty, Ben Seigel)

- Stakeholders: CCRCD, SLC, BCDC, landowners, developers, universities, local governments, community groups, tribal communities, NGOs that work on LSPs.

- Challenges: Definitions! Getting people to see what is a real shoreline, educating people on what a shoreline is. Where does a shoreline begin/end? It should be seen as a continuum? Is it defined as a thin line, or a diffuse band? Shorelines are vulnerable, but how do you define vulnerability? Vulnerable to what? Vulnerable to whose interests? What is a LS? How do you define your baseline? I.e. What are you restoring TO when you do restoration work (habitat conversion)? And how do you assess the value and impact of your work?
- Solutions: Work with stakeholders to define baselines, goals, and get community input. Involve people with historical knowledge. Community involvement. Clear communication of definitions. Make sure to have agreed upon terminology. Define restoration boundaries based on community/ecological benefit and possible impacts.

### CA Group #2

- Stakeholders/Challenges: Overlapping Entities: Cities, counties, state and regional governments, special districts, new regulations, working around TES, physical limitations (e.g. working around transportation infrastructure), public access (could be not enough or too much).
- Solutions: Incentivize LSPs by showing benefits such as increased public access, cost-effectiveness (fiscal responsibility!) of LSPs as a possible solution to SLR. Show that these solutions can help with getting buy-in on projects with the CCC. Maryland has a law that is helpful in getting such LSPs permitted.

### East Coast

- Stakeholders: State-level DOTs that are interested in mitigation incentives for transportation projects.
- Challenges: People trust traditional engineering versus new, “soft”/natural approaches. Permitting timelines can be extensive. The permitting environment can be unfair (e.g. it takes less time for a bulkhead to be permitted versus a LS installation of the same size). Getting funding.
- Solutions: Create pathways for engineers to share on a peer-to-peer basis best practices and solutions. Have trusted communicators and community ambassadors to help with community buy-in. You will need numerous ambassadors from numerous areas, because some people trust certain entities more than others, whether it be government agencies, interest groups, community organizations and clubs, and so on. Get the next generation of coastal engineers out there to see actual LSPs being installed.

### South

- Stakeholders: Similar to other groups, but would add to the list community volunteers and regulatory agencies.
- Challenges: Tragedy of the commons – a term used in social science to describe a situation where individual users of a resource, by acting according to their own self-interest, behave contrary to the common good of all users and deplete or spoil that resource through their collective action. Also, how do you get long-term buy-in with stakeholders who want immediate results? How do you make that buy-in sustainable?

There are a lot of timing issues as well (length of process, seasonality, unique opportunities within small time windows that come up on short notice, etc.). Also, in the South there are considerably less public lands so you need to work more with private entities. Invasive species can be an issue. Funding/Costs are issues as well, especially for private landowners/NGOs.

- Solutions: What about some sort of general, regional or state permit and permitting process to help streamline the implementation of LSPs? Look into creative funding opportunities and cost-sharing. Using free resources such as online GIS modeling databases as informative, decision-making tools that can guide design and implementation of LSPs. Also, it's easier to bring in investment and funding when you can make the data more available and easily approachable to those with money. For example, in Texas lots of private money is flowing into the state for development around the shale oil and gas industries. Why not tap into that somehow?

### *(Targeting Programs by Audience)*

We shuffled ourselves around into four new groups in which we tried to mix with people from other regions. In these groups, we were asked to answer the following questions:

Audience: Identify an example of a key stakeholder when it comes to implementing LSPs. Are they a "show me" audience? A "help me" audience? Or a "make me" audience?

Concerns: What are this audience's main concerns?

Motivators: What would or what does motivate this audience to sign on to LSPs?

Messages/Actions: What are the key messages you need to get out to this audience, or the actions that you need to take?

#### Group 1

- Audience: A State Legislature.
- Concerns: Wants to limit liability. Is confined by law and funding.
- Motivators: Easy to understand, "tee-ed" up examples of LSPs make it easier to get buy-in from government. If it's familiar and easy to understand, like a slightly modified version of a project that was already successfully implemented elsewhere, that would help in getting buy-in. You could start with pilot projects to reduce fears around long-term commitment to a new type of project.
- Message/Actions: East Coast has ease of messaging because annual hurricanes create a sense of urgency that isn't there on the West Coast. Politicians want to avoid embarrassment that comes from a lack of action and that could be tapped into as well.

#### Group 2

- Audience: Municipalities (and the land they own).
- Concerns: Loss of land/property/assets. Concerns around flooding and storms could be present as well.
- Motivators: Funding opportunities, minimizing risk/liability

- Messages/Actions: It's important to hit that emotional core, like using photos instead of a wall of text. Like having a graphic where a kid is having fun in a marsh in comparison to a child playing on a dangerous, boring bulkhead. It's important to be advocates for policy too.

### Group 3

- Audience: Homeowners.
- Concerns: Losing their property.
- Motivators: They might prefer to go with practices and approaches that are easier and more familiar, and which costs less. They might understand traditional types of engineering more. Also they might be fixated on particular needs, like having a hard wall for boating.
- Messages/Actions: Point out to hunters/fishermen that they could you get more fish, birds, etc. with LSPs! Have an ambassador in the community – an early adopter who “goes first” and gets the rest of the homeowners on board. Have local municipalities be part of the communications aspect when it comes to reaching out to homeowners on LS alternatives. Also, it might be easier to get in early and do LSPs BEFORE traditional installations like bulkheads come in. Much easier to start with a blank slate than change something already in place.

Rebecca Lesberg: Interesting that audiences can also become messengers/ambassadors and play both roles at different points in the process.

### Group 4

- Audience: Local communities, such as the communities of Rodeo and Crockett, where a literal junkyard was cleaned up and how there is an opportunity for a LSP.
- Concerns: How will LSPs affect water quality, public access, economic livelihoods, and more? Communities are also concerned about being left out of process, or not getting a piece of the pie.
- Motivators: Community benefits like keeping garbage out of an environment, keeping the place beautiful, improving public access and water quality, improving safety, etc.
- Messages/Actions: Media outreach, community input, workshops, and having lots of public input is important to get the community on board. No LSP will be successful without buy-in. Positive message that reaches everybody.

*(Acknowledgments and Adjournment)*

(END)