

Coastal Resilience Network
 FEMA, Insurance, & Obstacles to Smart Redevelopment
 May 5, 2015
 9:30 AM – 11:00 AM

Meeting Summary

Agenda
1. Welcome, review agenda, round-robin introductions
2. Progress since last call
3. Context
4. Local barriers to nature-based strategies for coastal hazard mitigation in CA
5. Obstacles to Smart Redevelopment
6. Prioritization of Next Steps
7. Summarize, Action Items, Close

In Attendance:

Kelsey Ducklow	CCC
Carey Batha	CCC
Hilary Papendick	CCC
Mary Matella	CCC
Maggie Ide	City of Ventura
Heather Allen	Santa Barbara Co
David Carlson	Santa Cruz Co
Joel Gerwein	SCC
Philip King	SFSU
Anne Siders	Stanford University PhD Candidate
Simone Barley-Greenfield	Stanford University Student
Lily Verdone	TNC
Kelly Leo	TNC
Sarah Newkirk	TNC
Alex Leumer	TNC
Louis Blumberg	TNC
Aldaron Laird	Trinity Assoc. Humboldt
Alyssa Newton-Mann	USC SeaGrant

Goal of call: to better understand the potential obstacles (or lack thereof) of using FEMA hazard mitigation funding for nature-based sea level rise adaptation projects. Anne Ronelle Siders, JD, Stanford University PhD Candidate presented the scope of her white paper to the group.

Quick summary: there are no legal barriers to using FEMA hazard mitigation funding for nature-based adaptation; local jurisdictions need support in applying for funding; the adaptation community needs to work to create a database of monitoring results to build the case for nature-based adaptation approaches to be considered as a tool in the adaptation toolkit.

Announcements:

- Last Wednesday, Governor Brown signed an Executive Order to reduce greenhouse gas emission by 40% of 1990 levels and prioritize natural infrastructure solutions in CA!

- Lily Verdone (TNC) had a very successful field visit with Senator Jackson – amongst others - at Ormond beach to show natural infrastructure on the ground and emphasize multi-benefit solutions and public private partnership options for adaptation.

Notes:

Can FEMA's hazard mitigation grant programs be used to fund communities' sea level rise adaptation work – particularly nature-based adaptation? AND, if yes, what are the obstacles? (Regulatory? Local?)

The Center for Ocean Solutions & FEMA held a Policy Lab to ask:

- Are there obstacles to applying FEMA hazard mitigation money to nature based adaptation solutions in local context? &
- Are there other local barriers to achieving nature-based strategies for coastal hazard mitigation in CA?

The COS Policy students (led by Anne Siders) developed two white papers answering these questions that are nearly finalized, which will be shared with the group once available.

The students examined the laws, regulations & policies around FEMA's major hazard mitigation programs. Although there are some perceived barriers, both internally and externally, from a legal standpoint there are no official barriers to utilizing mitigation funding for proactive nature-based sea level rise adaptation projects.

Technical Standards

A standard rule is that projects need to be technically feasible, effective, & cost effective. A potential barrier would be that nature based-solutions are new and have limited to no track records nor technical standards, so how could we effectively measure their feasibility? However, FEMA does not require that there be technical standards so, just “best practices”, so examples of other places where strategies have been implemented and monitored should be sufficient.

ACTION: Change FEMA policy requiring use of their CBA methodology, improve the usability of the FEMA CBA software, and/or educate potential applicants on how to use software.

There are unjustified perceptions that nature-based adaptation solutions do not meet FEMA cost-benefit requirements. Applicants are required by FEMA policy (not a legislative requirement) to use FEMA's cost benefit (CBA) methodology, which is confusing and not transparent. Their software is difficult to use and further adds to the confusion about the requirements.

FEMA is keen to improve awareness and usability of FEMA CBA software. If software is really the barrier to people using their system, and using their CBA methodology is not a legislative requirement - just a FEMA policy, it could be something we might target to change.

For an adaptation option to be considered cost effective to FEMA does not mean that it needs to be more cost-effective than another solution, just more cost effective than doing nothing.

ACTION: Increase transparency regarding how this funding flows so that people are aware of how to access it and what it can be used for. FEMA recently released new guidelines regarding environmental values and ecosystem services, making a push towards making these more cost-effective options a priority; however, FEMA has not been overly effective at communicating this to

the communities that might apply. One of the goals of publishing the white paper is to raise awareness that municipalities can apply for these grants.

We have not yet seen CA coastal communities pursue funding from FEMA for nature based adaptation solutions. Santa Cruz did receive funding for sea level rise planning from FEMA's Disaster Recovery Initiative subsequent to wildfires, through the State's OES. This funding can be used to mitigate future disasters, not necessarily of the same kind, meaning that wildfire induced FEMA funding *can* be used to plan for sea level rise.

Stanford University students interviewed City & County coastal planning & emergency planning officials. The local decision makers identified their own barriers for engagement with FEMA for nature based solutions as:

1. Lack of technical info
 - a. People are less familiar with these options than structural approaches; people tend to stick with what they're comfortable with
 - b. In the absence of strict technical standards, feel unable to justify them as being as effective
 - c. Feel they need more local data
 - d. Data being collected is not the right kind of data to inform this type of planning/decision making
 - e. Pilot projects would/do build up confidence that projects can be effective – monitoring pilot projects is critical!
2. Coordination
 - a. Require more coordination between local jurisdictions and between levels (state, local, county, federal); not parcel by parcel, need regional approach; there is not a lot of money for regional coordination
 - b. In person meetings are critical for regional collaboration – when we only meet by phone we miss out on interpersonal knowledge exchange
 - c. There is very little funding to support pre-planning and nature based sea level rise adaptation approaches require more pre-planning than some of the structural solutions that are already well understood
 - d. Need slightly longer planning horizons for implementation; funders want to fund what's ready to go RIGHT NOW but these types of projects are novel and take longer
 - e. The public is less aware and less trusting of nature to protect their homes – again monitoring of other case studies/pilots would be useful in changing the tone of that conversation
3. Funding
4. Political will

Overcoming barriers

None of these self-identified barriers for engaging with FEMA on nature-based adaptation approaches are insurmountable.

ACTION: Develop Technical Specifications & Performance Standards: it is critical that some level of technical standards are developed, establishing “best practice” for nature based adaptation

approaches; this should come from a state/federal level agency rather than a local jurisdiction and would give greater reassurance to local jurisdictions that they are taking the right approach. The group raised concerns that these projects are inherently site-specific and trying to create a “technical manual” could be negative in that it establishes a “guilty-until-proven-innocent” mentality around nature-based approaches; however, the main point of the manual would be to familiarize local decision makers with the suite of adaptation options available and provide case studies they can reference.

ACTION: Monitor Pilot/Demo Projects: Pilot projects that could demonstrate the effectiveness of nature-based adaptation need to be heavily monitored and results should be widely shared to build the case that these approaches can be effective

ACTION: Official Communication from FEMA endorsing use of Nature based adaptation: Ideally, the group would like to see additional and clear outreach from FEMA (i.e. issuing a statement that they support nature-based adaptation) that encourages local jurisdictions to apply for hazard mitigation funding for SLR adaptation projects; FEMA should hold more webinars demonstrating how their benefit cost analysis works

ACTION: Standardized Cost Benefit Approach (including methodology for valuing ecosystem services): We (the adaptation community) need to establish a standard methodology for valuing value ecosystem services; not having a standard methodology confuses the cost-benefit analysis because most of the benefits of nature-based adaptation will come from valuing the ecosystem services. FEMA includes “environmental values” in their CBA but nowhere do they tell what they are or how to calculate them.

ACTION: Funding: Post-disaster, FEMA awards money to a state and up to 5% of that funding can be used for projects that are not necessarily cost-effective but are designed to test out more novel/experimental approaches. This money can also be used for evaluation or for the application of new, unproven mitigation/protection measures/procedures. We need to find examples of how that money has been spent to-date and what kind of leeway for experimental approaches has been allowed.

ACTION: Support local jurisdictions to apply for this funding: The most significant barrier seems to be getting local jurisdictions to apply for these types of projects. In order for local jurisdictions to have the flexibility to pursue this funding, these approaches need to fit in with the municipality’s greater strategy but do not necessarily have to be listed in the Local Hazard Mitigation Plans specifically; they must be consistent with the General Plan, but those plans allow the flexibility to propose new projects through these sources of funding. Local jurisdictions might not have the staff/resources to even apply for the grants, let alone manage the resulting projects.

ACTION: Improve coordination between emergency plan writers and Local Coastal Program writers so that these considerations are included in - and consistent between - both types of plans. Perhaps we can start by inviting hazard mitigation folks to participate on targeted Network calls.

ACTION: Develop “How to” Guide for adapting with FEMA funding
The average long-range planner needs support working with FEMA on adaptation pre/post disaster, possibly in the form of a “How to” guide that outlines the structure of the agencies, potential funding sources & mechanisms, and fills the gap in communications.