

11.24 SAGE Policy Team Meeting

Takeaways:

- Please share this group widely with your networks
- Melissa will send out an e-mail to meet again after the New Year

Agenda:

1. Introductions
2. Individual activities and thoughts
3. Coordinating efforts
4. Observations and next steps

Introductions – How does your work relate to SAGE?

- Melissa Kenney
 - Research Assistant Professor in Decision Science at UMD
 - Co-PI on the SAGE Grant
 - Developing a coastal resilience case study in conjunction with Betsey Albright and Ariana Sutton-Grier
 - Works on ecosystem services and is the Lead PI for the USGCRP Indicator System
- Allison Bredder
 - Research assistant at USGCRP Indicators working on a database of ecosystem services efforts
- John Duff
 - Attended a Lincoln Institute forum about climate change and the aftermath of Sandy
 - Looking to do more work with the Institute
 - Teaches a climate change law policy and management course
 - NOAA grants doing public policy and decision-making along with impacts and likely future impacts
 - Effort to create a network within which people can share information (working with Elizabeth)
 - 'Sea Harmony' networking tool
 - Serve as a research tool as a way to communicate between meetings
- Elizabeth Hamin
 - PI on the Grant working with Tom DeGroot and John, mostly organizing the workshop in Jamaica
 - Worked on a project in Belize funded through the Lincoln Institute for developing climate change plans for coastal communities
- Ariana Sutton-Grier
 - Research faculty at UMD, sitting at NOAA
 - Working on the benefits of coastal infrastructure summarizing research directions and literature on green infrastructure

- Works generally on ecosystem services
- Kim Penn
 - NOAA Office for Coastal Management
 - Across the agency with natural infrastructure thinking about strategy in forwarding natural infrastructure
 - Green infrastructure effectiveness literature review (peer-reviewed articles, white papers, etc.)
 - Projected to have summary report in the next months on the findings
 - Organized by region and looking for policy and research gaps
 - Will have a database that has searchable terms
- Roger Pulwarty
 - Works for NOAA on climate-related things
 - Developed training course for 60 people in a host of agencies who have become the point of capability for infrastructure
 - Working in Jamaica to investigate the role of green infrastructure
 - Working on capacity building to have a network for people to work with and identifying the people who are working with resilience
 - What is an effective network?
 - Plans to have a workshop document *Ecosystem Services and Reduce Disaster Risk in Jamaica*
 - Paper on the role of small-scale and community-based insurance mechanisms coming out in *Disasters* May of next year

Individual Activities and Thoughts and Coordinating Efforts

- **Melissa:** Betsey Albright's work at Duke
 - Betsey Albright and one of her Masters' students are developing a database related to grey-green cultural infrastructure by focusing on peer-reviewed literature
 - They are doing an assessment of literature and policy to investigate policy flexibility and incentives/disincentives for incorporating a more holistic approach to coastal infrastructure to integrate grey-green and cultural aspects
- **Roger:** It may be useful as a research question to find if the timing of interventions matters, and whether there are elements of work that we can build off of work that would give a real sense of when this information is most useful in the policy context. It will also be helpful to investigate what temporal and spatial scale is going to be important to support the kind of coastal decisions that may be made in these regions to also understand decisions and scaling.
- **Melissa:** Short-term or long-term goals from the group?
 - NCSE Conference in D.C.
 - **John:** The focus is energy and climate change and it be a great way to dovetail as a way to be a convening force. It will also be easily accessible for many in the group
 - **Kim:** Hoping to put together a panel
 - **John:** May send out an e-mail to see who can get together before the Conference closer to the date

- **Melissa:** We will turn to policy initiatives first. Anything on the horizon in the next months to make headway and find ways to where such scientific information will be useful?
 - **Kim:** There is a lot of interest in the policy and information realm; Town Hall for natural and nature based infrastructure
 - **Roger:** March 2015 meeting
 - New evolution of the framework Sustainable Development Goals
 - More important than IPCC in terms of risk reduction
 - Caribbean Barbados meeting
 - Stronger role for the indicators for infrastructure will be more critical
 - Caribbean is trying to take on the regional climate center
 - Risk and resilience best to be fit
 - Understanding the diverging perceptions on the value of grey-green infrastructure is crucial (On the ground)
 - **Elizabeth:** Good progress on the literature results but the policy framework is an open cross jump
- **Melissa:** Are there particular case study locations to start engaging?
 - **Roger:** Smaller Eastern Caribbean islands are trying to make a major effort on rainwater harvesting. The relationship between adaptation strategies are being made for climate and adaptation in general
- **Melissa:** Have you been looking at interactions between particular interventions or their integration of those interventions? How are those interventions mapped?
 - **Ariana:** A lot of frustration from people who would do something like living shoreline, etc.
 - In the U.S., it is easier and faster to get a permit for breakwater or engineered structure than something is with natural features (restored wetland, etc.). If a landowner is trying to put something in, it is hard to incentive someone to go through the long process to get natural infrastructure because of the policies we have in place.
 - The engineered approach has benefits only during the storm event; however, a hybrid approach has benefits before and after the event. Essentially, the hybrid approach provides a more “complete story” to inform the decision-making process. Overall, permitting processes can be more informed.
 - Education? Socialization? Or, a more comprehensive understanding of values?
 - This work is from a Task Force and only internal as of now, but it is a great starting point
 - **Kim:** A group of Yale students is looking on barriers to green infrastructure
 - The work has been discussed in NJ trying to get changes in regulations for permitting to have things like living shorelines to be more acceptable.
 - These findings are available.
 - Additionally, Kim is working on a project with Corps to identify metrics for things that would provide better documentation of full services provided
 - **Roger:** A synthesis on a core set of questions that people have about short-term and long-term would be beneficial way to begin these synthesis by providing benefits and

costs of different land uses, and asking what is the perception of the longer term investment, etc.

- **Ariana:** Estuary Conference
 - Everyone thinks that anything with a green plant means it is a living shoreline. We are instead trying to look at projects post-Sandy and assess ecosystem services they are providing besides storm water management.
 - There is a pushback from the Corps; their hands are tied, and must only look at storm water benefits and no other benefits when making decisions
 - Some of their mandates state they have no choice to choose project for other benefits
- **Roger:** It is important to understand the flexibility in existing policy processes

Observation and Next Steps

- **Melissa:** There are a number of folks working on various things independent or with one or two other folks in the SAGE or other research networks that have a broad linkage to things that are related to grey-green cultural infrastructure. However, there is a need to think through strategic research projects for an understanding of policy flexibilities and near term core benefits and some of the policy flexibilities and associated barriers.
- **Proposed projects:**
 - Five core questions that really need to be addressed (For coastal protection) and write a short commentary piece?
 - Decision-support with a larger network and design and link into existing support structures so it is a value-added piece to something that already exists instead of something just for this grant project that is not as sustainable
 - Potential need for thinking through green infrastructure indicators
 - Worthwhile to revisit the idea of networks and thinking about meaningful engagement
 - How to develop aspects of decision-support that will have utility in communities and existing structures in NE and Caribbean?
- **Elizabeth:** Are there people at the Corps that we should be coordinating with or talking to?
 - **Kim:** Yes, some are interested in being engaged that can either be identified or brought into talk. There are different parts of the Corps working on different aspects than this with different values
 - Will be putting out a section in an Appendix on natural and nature-based features and planned to publish as standalone technical piece in the next few months
- **Roger:** Risk and vulnerability assessment through UNEP
- **Kim:** Barriers to Climate Change Adaptation; barriers are similar and have to do with local capacities
- **Roger:** Operational aspects of setting up green infrastructure
 - Hybrid projects feedback to practical implementation issues and future research questions with NSF on the procedural aspects for adaptation.
 - Hybrid of use with application with more fundamental science research