

Candidate Recommendation

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Big Idea: When and how do governments make coastal issues a priority? How to we make science available that is timely, relevant, and actionable to support policy?

Who: social scientists, natural scientists, local institutions and leaders, industry, citizens (plus state and federal partners as relevant)

What: evaluate and connect the role of science/scientific knowledge to both individual and government decisions, stakeholder input and local community involvement

When: ongoing; begin with a small number of issues (can range in spatial scale and scope) and bring in case studies to provide points of comparison and generate ideas for pathways forward; initial funding would help coordinate participants and carry issue through lifecycle (identification, connection, implementation, and evaluation and sharing).

How: pre-proposal process identifies “great ideas” via hub; hub connects researchers and stakeholders together in structured decision-making process to develop full proposal/plan; hub supports effort through lifecycle. Those pre-proposals not “green lit” will still have access to resources, case studies, and potential connections to other areas navigating similar issues. Implementation of approved projects is tracked, evaluated and stored as resource in hub.

What is your specific* recommendation?

(* Don't be abstract, general, or try to do too much in your recommendations. Try to be specific, actionable, stand alone)

A Lifecycle Hub (aka the Hub) - Connecting Research and Communities to Address Coastal Adaptation. *Hub will ensure that projects are multi-disciplinary and “wicked” problems by setting a vision*

The Hub serves as a mechanism for local group/government/team to apply for coastal science to effect policy change. Communities identify areas they need assistance in planning/research to address coastal adaptation & resilience issues. Hub could serve to connect scientists/researchers with coastal need/priorities. Could also be used to pair communities/gov'ts (e.g., planning assistance).

Matches could happen using an app - individuals sign up with their expertise/interest and when a request comes in, the Hub app serves to bring a potential group together to work on a specific opportunity.

The Hub can support/facilitate discussions and build networks for participating researchers and communities (defined to include all potential stakeholders) and fund science initiatives

identified as needed to address issue.

Once an issue is “green-lit” stakeholder-science group then develops a proposal together.
The Hub will connect participants to potential funding/resources to implement recommendations.

Hub will also identify case studies where governments (and communities) at different levels and in different geographic locations successfully address coastal challenges. Identify where/what science was shared/applied to influence these decisions. Identify if there were extreme events or long-term triggers (“tipping points”). Also, examples where an issue was less successfully tackled (e.g., example mentioned by Liz/Staten Is) or has not been a priority. These case studies will be shared via a web portal.

Answering potential concerns:

Self-selection into program. Could somewhat be addressed by researchers identifying an area where they see a science need and could apply, but would have to do so demonstrating connections to stakeholders. The communities who participate would also have to meet certain criteria for ensuring broader participation within those communities and perhaps other communities who would benefit

Incentives. What will bring people to the table? 1. Hub serves as a dynamic resource, 2. \$\$

Why is it valuable? Who does it impact? How? How will the world be better? Who are the stakeholders and who will you partner with to make it stronger?

Research value:

- Identifying/carrying out opportunities for research into coastal issues
- Research into who participates in the program/hub, both on the researcher side and on the community side (what are the characteristics of participants)
- Research into whether participation influences the role of scientific research in decision making and problem definition for participating communities
- Provides a forum and coordinates diverse researchers to help merge multiple perspectives required to solve this complicated problem
- Supports broader Growing Convergence Research challenge of NSF’s 10 big ideas
- Identifying future science needs relevant to (local) communities
- Could result in shared data repository that could be applied to tackle similar problems elsewhere or inform future efforts more broadly

Practical/community value

- Participating communities gain research/evidence-based information about the problems they face
- Communities learn about potential solutions applied in other places which could provide local guidance
- Communities gain assistance finding resources to help implement solutions/recommendations

Stakeholders/partners:

- Local communities (businesses, homeowners, civic groups, etc)
- Government (Federal, State, Local, Municipal)
- Scientific researchers (including social/behavioral scientists, healthcare (relevant to water quality, human health))
- Cultural experts
- Non-profit organizations
- Industry

What's the reasoning or supporting evidence behind it?

Evidence based, fact based, Takes into context current research (hasn't already been tried and failed). How will you validate success? How is it grounded in existing scholarship? Why do this now, above all the other things we could do?

Evidence based, fact-based approach: Communities (“those on the ground”) facing coastal adaptation issues are the ones that better understand the problem they have and are best position to address it, thus, by providing solutions and knowledge researchers are having a direct impact in that “community.”

Taking into context current research: By reviewing case studies and providing summaries/lessons learned, the Hub will avoid redundancy in its funding efforts.

Evaluating success: Social scientists will evaluate the success of whether/how the participants took into account the scientific evidence (bright spots/landmines exercise)

Grounded in existing scholarship: The approach takes into account adaptive management, where the Hub can modify its approach and share lessons learned as projects are implemented.

Why this above all other things? The recommendation promotes increased participation, diversity in approach. Allows room for innovation & efficiency.

Components of the approach have been vetted and employed elsewhere. LTER provides the start of a framework to show that a similar structure has been successful; coastal issues are identified and grants can be applied for that bring together researchers to address need. Structured decision-making approach connects researchers with decision-makers at the outset to define decision problem, objectives, management actions, consequences and tradeoffs that might come from information researchers provide. Existing research in public policy on the role of evidence- or science-based policy learning.