



MINDING THE GAP:
ANALYSIS OF ARGUMENTS MADE IN THE MEDIA FOR AND AGAINST
CLOSING THE BREACH ON FIRE ISLAND NATIONAL SEASHORE

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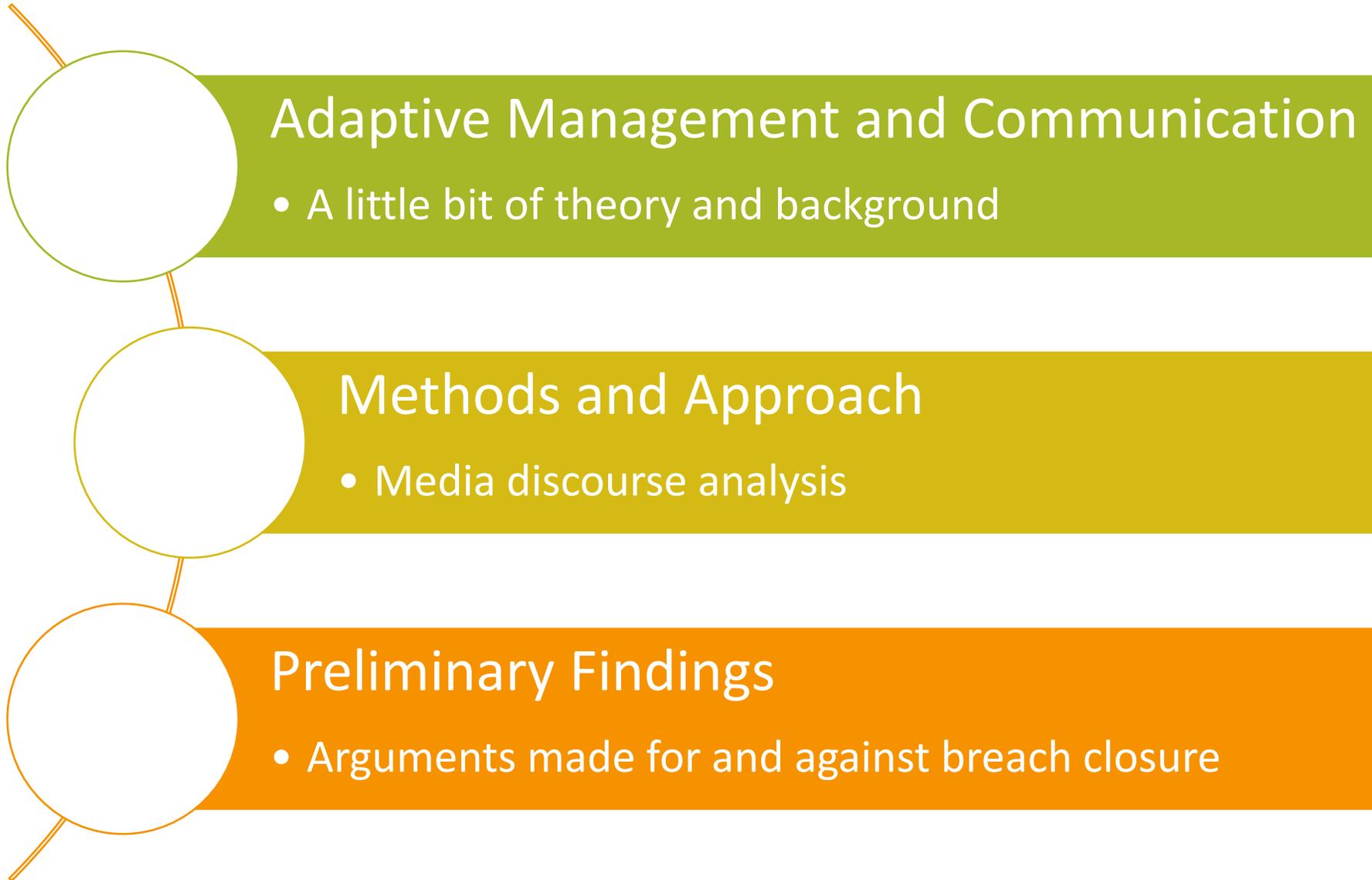


Social Coast Forum 2/10/2016

OTIS PIKE BREACH

- Fire Island National Seashore
- Hurricane Sandy (October 29, 2012) resulted in three breaches on Fire Island.
 - Two were filled in within 2 months of the storm.
 - One breach, located in the Otis Pike High Dune Wilderness Area, remains open and has been the subject of intense debate about what course of action to take.

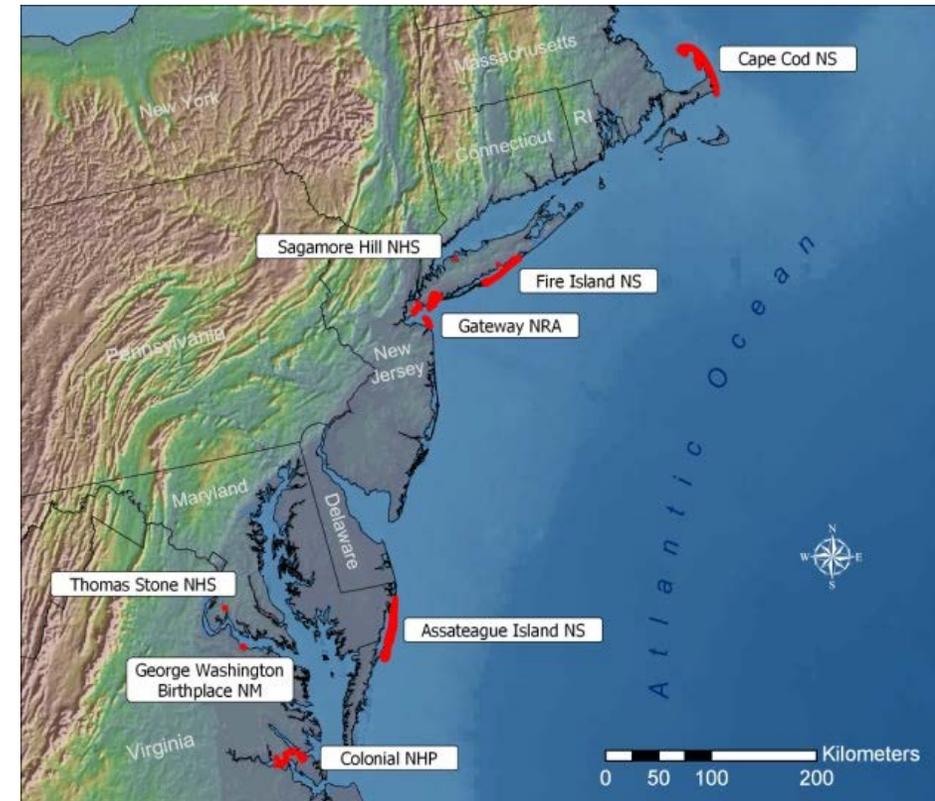




SCIENCE COMMUNICATION AND COASTAL RESILIENCY:

Building Social-Ecological Resilience through Communication Research and Outreach in Northeast Coastal and Barrier Network Parks Post-Hurricane Sandy

- Northeast Coastal and Barrier Network.
 - One of 32 National Park Service Inventory & Monitoring Networks
 - Facilitates collaboration, information sharing, and economies of scale in natural resource monitoring.
- Focus is on three parks that were hard hit by Hurricane Sandy in October 2012:
 - Fire Island National Seashore
 - Gateway National Recreation Area
 - Assateague Island National Seashore
- Larger Cooperative Agreement between the Coastal Barrier Network and URI Environmental Data Center.



National Park Service Commitment to Civic Engagement (Director's Order 75A)

- **Institutionalize a civic engagement philosophy** and vision that will help ensure the relevance of NPS resources and programs to people, as well as ensure NPS responsiveness to diverse public viewpoints, values, and concerns.
- Provide a framework for successfully **engaging the public in our work and activities** to instill a sense of ownership in the NPS mission and provide valuable information from a variety of sources within and outside the Service.
- Provide guidance and direction on reasonable and effective means to **involve the public in decisions** at the park and program level.





Communication

- Public Engagement
- Informing Policy
- Manager Learning
- Scientific Understanding

Adaptive Management

Resilience

Models for Public Understanding of Science (Gross 1994)

Deficit Model

- Problem of public understanding is public ignorance
- Information Delivery Problem: Public just needs more information to make the right decision
- One-way flow of information
- Assumes a passive public that explicitly trusts in science
- “Facts will speak for themselves”



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Contextual Model

- Considering the audience
- Many factors influence decisions, values
- Existing understanding of systems
- Interaction between science and public
- Two-way flow of information
- Active public whose trust must be gained
- Joint creation of science and local knowledge

FORMS OF PUBLIC INVOLVEMENT

PUBLIC RELATIONS

- Building public support

PUBLIC EDUCATION

- Disseminating information

PUBLIC INPUT

- Collecting information

PUBLIC INTERACTION

- Two-way communication

PUBLIC PARTNERSHIP

- Securing advice and consent

Passive



Active

SCIENCE COMMUNICATION RESEARCH

Jørgensen, Dolly, and Brigitta Renöfält. "Damned if you do, dammed if you don't: debates on dam removal in the Swedish media." *Ecology and Society* 18.1 (2013): 18.



- Examine ways proponents and opponents of four contentious dam removal projects in Sweden frame the services provided by two contrasting ecosystems--an existing dam and the potential stream without a dam
- Media discourse analysis: 41 newspaper articles, comments on those articles
- Findings: **“(P)ublic opposition is not based on knowledge deficiency**, where more information will lead to better ecological decision-making, as is sometimes argued in dam removal science; it is instead a case **of different understandings and valuation of the environment and the functions it provides.”**

SCIENCE COMMUNICATION RESEARCH

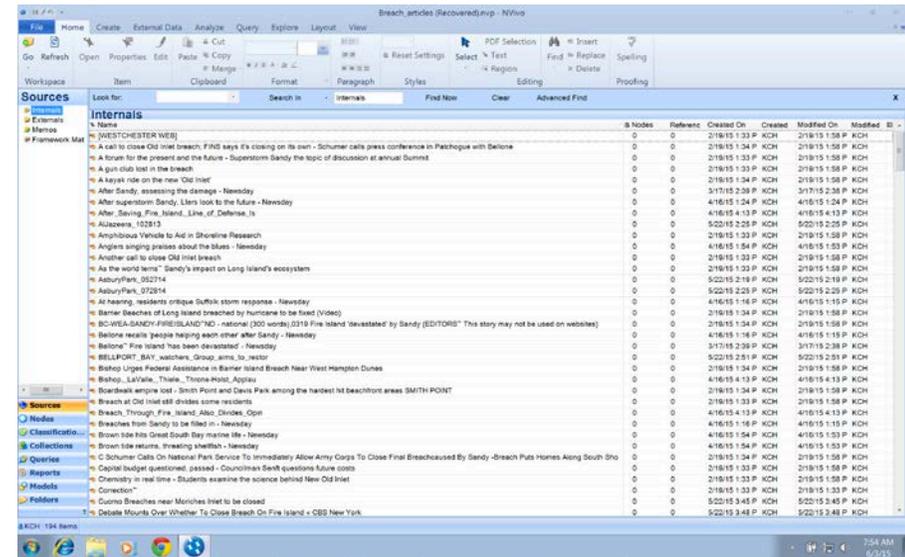


Newsday (March 14, 2013)

- RESEARCH QUESTIONS
 - What arguments do supporters and opponents of the breach mobilize?
 - What sorts of ecosystem services and disservices do they represent?
- METHODS
 - Media Discourse Analysis
 - Staff and Key Informant Interviews

SCIENCE COMMUNICATION RESEARCH

- DEVELOPED DATABASE
 - 194 articles
 - Local, regional, and international sources
- DEVELOPED CODE
 - Develop code
 - Deductive and Inductive
 - Pro, Con, Neutral
 - Ecosystem Services: Supporting, Provisioning, Regulating, Cultural
 - Themes
- ANALYSIS
 - Across scales (local, regional, international)
 - Using an ecosystem services framework informative?
 - [Who is making which arguments?]
 - [Through time]



PRELIMINARY FINDINGS

- DEVELOPED DATABASE
 - 136 articles actually coded
- CODING
 - Categories
 - Against Closing (29): Ecosystem Services (11); Economic; More Pressing Issues; Nature Take its Course; Process
 - For Closing (15): Ecosystem Services (6); Economic; Non-Game Ecosystem Changes; Process
 - Neutral (36): Ecosystem Services (17); Nature Take its Course; Non-Game Ecosystem Changes; Process
- ANALYSIS
 - Main arguments
 - Across scales (local, regional, international)
 - Ecosystem services framework
 - Interesting themes



PRELIMINARY FINDINGS

- Passionate arguments

A conservationist developer, he championed the creation of the Fire Island National Seashore, fought the Shoreham nuclear plant and rallied for the end of the Long Island Lighting Co.

Last month, at the age of 88, Barbash stood on stage and implored officials to close the Fire Island breach.

PRELIMINARY FINDINGS

- Most Common Arguments: percent of articles that employed these arguments

	Water Quality Improvements	Flooding
Against Closing	0.38	0.24
For Closing	<0.01	0.46
Neutral	0.14	0.17

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Some politicians...have been calling for The Old Inlet to be closed, blaming it for the repeated flooding of various South Shore communities.

...(E)nvironmental groups, baymen, scientists, anglers, local residents and local officials, some of whom have been flooded out themselves, spoke out in favor of leaving the breach alone, presenting the data to show that the breach is in no way contributing to flooding, while noting the dramatic improvements in water clarity, oxygen and nitrogen levels, and a return of wildlife.

PRELIMINARY FINDINGS

- Scale and Ecosystem Services
 - Different Ecosystem Services Employed at Different Scales
 - Transportation (Emergency Access) only discusses in local papers
 - Nuanced Discussion of Flooding in Local to Regional Papers
 - Breach may relieve flooding
 - Support development of coastal wetlands



PRELIMINARY FINDINGS

- Nature Take Its Course

"At the end of the day, the breach will be closed," he said. "The question is whether we let nature take its course or if we do it mechanically." (Soller)

"The park service has this ideological view that they should just let the natural process go," Schumer said at a news conference. "I'll take this to whatever level I have to, to get this done."

"Let nature take its course — I don't think that's good planning," she said. "That's not public policy. Public policy is you have to figure out what to do."



Photos: nps.gov

PRELIMINARY FINDINGS

- Debate about the use of science in decision making
 - Burden of Proof

A community of coastal scientists from Maine to Miami have advocated to keep the breach open...“...inlets should be allowed to remain open wherever possible. Doing so reduces the long-term vulnerability of the barrier island system. Inlets should only be closed in cases where there is a clear need for a barrier island or where the inlet is causing immediate and demonstrable harm.” ...**closing inlets in natural areas “should require a very, very high burden of proof that the inlet is causing harm.”**



PRELIMINARY FINDINGS

- Debate about the use of science in decision making
 - Burden of Proof

“There are people here today who will say this breach isn’t the cause of the flooding; there are others who will say it is—I’m **not concerned with that debate**,” Suffolk County Executive Steve Bellone said at Shorefront Park in Patchogue. “We want that breach to be closed now.”

“We’re not interested in having some sort of academic discussion at this point,” Mr. Bellone said. “...**This is not an academic debate to people whose lives are being affected everyday.**”



PRELIMINARY FINDINGS

- Debate about the use of science in decision making
 - Scientific Consensus

Long Island coastal geologist Aram Terchunian spoke with Will James for a November 2013 article in The Atlantic: **"It's a giant hole ... What do you think is going to happen?** You're going to get a storm surge, water's going to come flooding in through the inlet, and it's going to fill up the Great South Bay. It's not rocket science."



PRELIMINARY FINDINGS

- Debate about the use of science in decision making
 - Scientific vs. Social Significance

Stony Brook University professor Charles Flagg stated that about 8 percent of the water in the Great South Bay moves in and out via the breach. We should note that **8 percent is a significant flow**, especially given the small size to soak up seawater during flood tides. Leave the breach open.



PRELIMINARY FINDINGS

- Debate about the use of science in decision making
 - General Reliance on Science

There has been outspoken opposition in the scientific community against closing the breach. **Those who have stood up in the name of science are being derided as being insensitive and out of touch**, as ignoring the needs of the flooding victims.



PRELIMINARY FINDINGS

- Debate about the use of science in decision making
 - General Reliance on Science

The Bellport Village Waterfront Commission has unanimously agreed to the following:

- The welfare of Bellport Village is directly related to the condition of Bellport Bay.
- The waters are becoming stagnant due to inadequate water turnover, resulting from poor flushing action...
- ...after **reviewing the scientific information presented**, the existing guidelines for the Pike Wilderness Area in Fire Island National Seashore, the opinions expressed at the open meeting, and a physical inspection of the breach, recommend the village strongly support no action be taken to interfere with the natural changes at Old Inlet.
- We further support...all efforts to keep the original intention of the Pike Wilderness Area to remain a wilderness beach by allowing the natural evolution of this breach.

CONCLUSIONS

- Research
 - Contribute understanding environmental communication in urban wilderness and coastal systems
 - Help managers prepare for the next event
 - Media analysis with Ecosystem Services
 - Relatively quick
 - No OMB approval
 - Be prepared for the kinds of arguments people will make
 - Alert to use of Deficit Model
 - Adaptive Management Framework
 - Supports learning



Photos: nps.gov

Funding Source:

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