



Public Engagement for Large-scale Ecosystem Restoration Efforts:

Can every stakeholder be heard?
NCER 2018

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DWH Restoration Funding at a Glance

- Natural Resource Damage Assessment: **\$8.1 Billion**
- RESTORE Act: **\$5.3 Billion**
- National Fish and Wildlife Foundation GEBF: **\$2.5 Billion**
- National Academy of Sciences: **\$500 Million**
- North American Wetlands Conservation Fund: **\$100 Million**



New York Times July 2, 2015

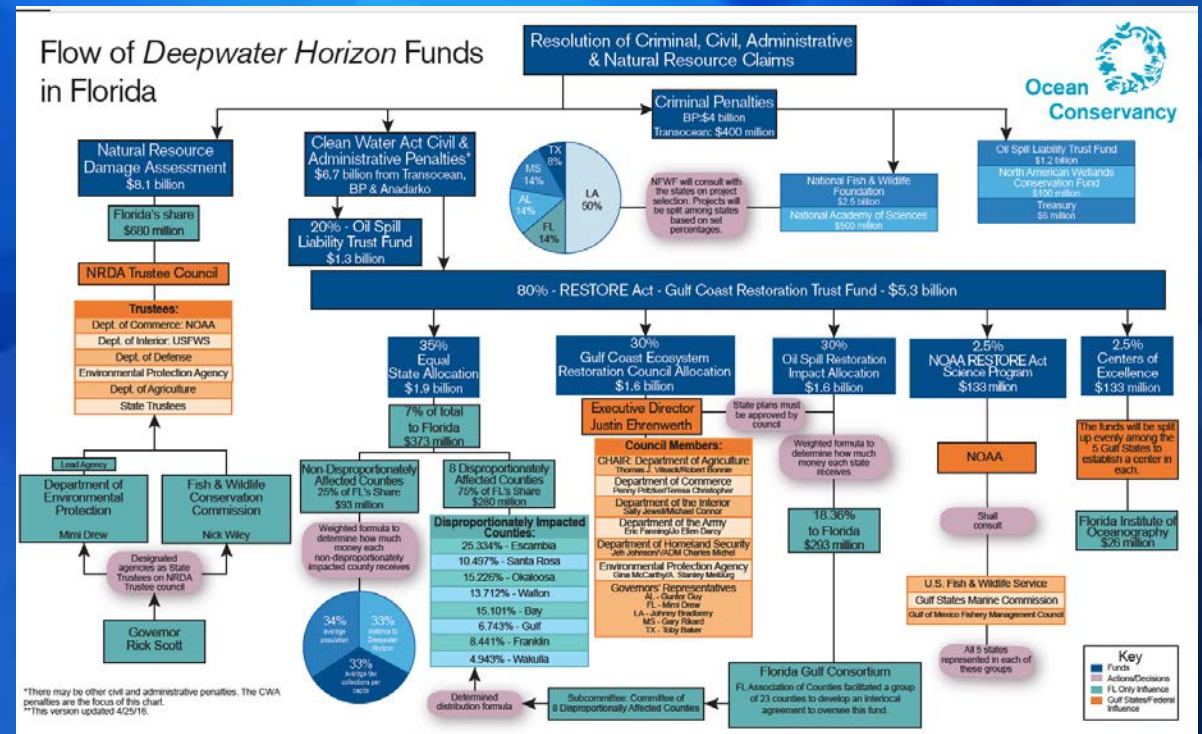
Restoration Relationship Status: It's Complicated!

A complex network of restoration processes exists to help the Gulf of Mexico region recover from the impacts of the *Deepwater Horizon* oil spill, as well as decades of degradation. The main purposes and coverage of the key processes described above are summarized in Table 4.

Table 4. Summary information about the six key Gulf restoration and recovery processes

	Lead	Purpose	Geographic Coverage	Money Committed	Timing
OSLTF	National Pollution Funds Center, U.S. Coast Guard	Fund federal agencies to administer OPA, respond to future oil spills, and support R&D	United States	\$1.495 billion (additional funds expected)	Currently scheduled to receive funds from 2012–2018
NAWCF	U.S. Fish and Wildlife Service, Department of the Interior	Benefit migratory birds and other wildlife and habitat impacted by the spill	United States, Canada, and Mexico	\$100 million (additional funds possible)	Funding grants in FY 2014–2019
NFWF	National Fish and Wildlife Foundation	Restore and protect natural resources in the Gulf	Focus on natural resources in the Gulf of Mexico	\$2.544 billion (additional funds possible)	Currently scheduled to receive funds from 2013–2018
NAS	National Academy of Sciences	Fund 30-year scientific program that focuses on human health and environmental protection	Benefit the Gulf of Mexico and/or the outer continental shelf	\$500 million (additional funds possible)	Currently scheduled to receive funds from 2013–2018
RTF	Varies with the process, but includes the 5 Gulf States, including some coastal political subdivisions, and 7 federal agencies ⁵⁴	Varies with the process, but generally restoration and protection of the natural resources, ecosystems, and economies of the Gulf Coast ⁵⁵	Varies with the process, but generally the Gulf Coast region (the Gulf State coastal zones plus 25 miles inland and all federal waters in the Gulf) ⁵⁶	\$800 million (additional funds expected)	Currently scheduled to receive funds from 2013–2015
NRDA	Federal and state trustees	Restore natural resources impacted by the spill to the condition they would have been in had the spill not occurred	Focus on natural resources impacted by the oil spill	\$1 billion in early restoration (additional funds expected)	Unclear (in progress)

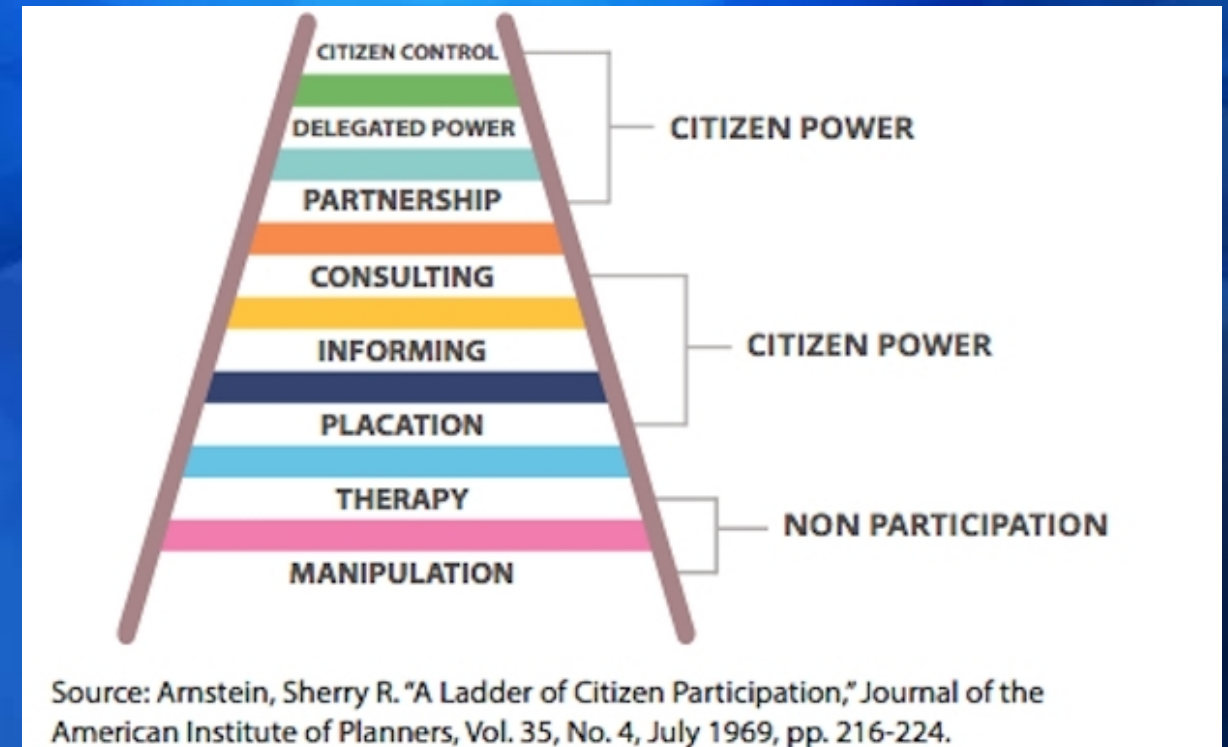
Environmental Law Institute



Ocean Conservancy

Public Engagement Matters, and...

- There is no set formula for how to do it in meaningful ways.
- As the geographic size and ecosystem diversity of the program area increase, incorporating public input becomes more difficult, as restoration needs bump up against funding realities.



Public Engagement in Gulf Restoration

Challenges

- Large Geography
- Varied stakeholder groups
- Complex, Multiple Processes
- Meeting Fatigue
- Expectations re: what can be accomplished with available funding
- How is the public gauging success?

Opportunity

- Unprecedented opportunity for restoration
- Funding for many project types
- Opportunity to translate projects into concrete outcomes for environment, economy, communities.

How can we innovate?

How do we move from:

“I want you to do this project...”



NOAA

to

“I want projects that...”

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What defines restoration success?

- Success of a project or program can (hopefully!) be measured objectively via monitoring parameters (e.g. increase in desired vegetative cover and compositions).
- Less qualitative measures of success may also be utilized by members of the public, e.g. an increased in perceived recreational value or aesthetics.



NOAA

Jähnig et al., 2011

Jähnig, S. C., et al. "River Restoration Success: a Question of Perception." *Ecological Applications*, vol. 21, no. 6, 2011, pp. 2007–2015., doi:10.1890/10-0618.1.

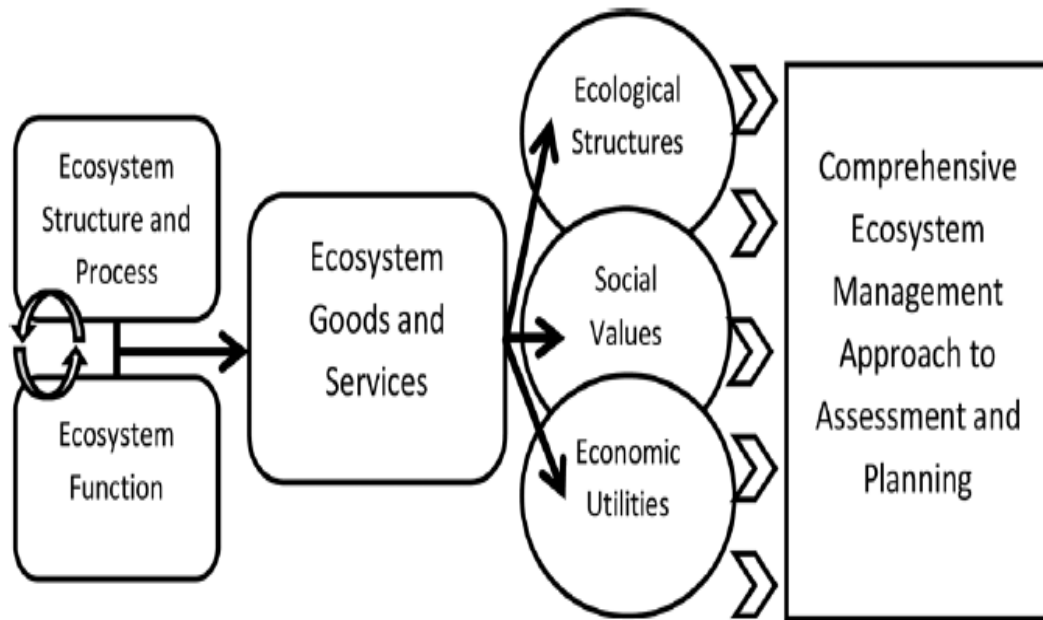
What does success look like?

- Understanding how the public views success and incorporating those measures into restoration planning is one way to increase the ability for the public to see their input and values reflected in decision-making.



Photo by MicDesign

Social Values of Ecosystems



Comprehensive Ecosystem Management from Cole et al., 2015

Social values = the perceived attributes of a given place or ecosystem. Humans are active participants in the ecosystem, and their thinking, feeling and acting within that system leads them to attribute meaning and ascribe value onto specific places and landscapes (Brown and Brabyn 2012, Cole et al., 2015).

Zachary Cole, Stephen Holland & Holly Donohoe (2015) A Social Values Typology for Comprehensive Assessment of Coastal Zone Ecosystem Services, Society & Natural Resources, 28:12, 1290-1307.

Social Values for Coastal Ecosystems

- Access
- Aesthetic
- Biodiversity
- Cultural
- Economic
- Future
- Historic
- Identity/Symbolic
- Intrinsic
- Learning
- Life-sustaining
- Recreation
- Spiritual/Novel experience
- Subsistence
- Therapeutic
- Natural

Cole et al., 2015

Thinking about Social Values in Restoration decision-making...

- How to gather input?
- How to contextualize social values in a specific place?
- How to derive the relationship between a particular project type and a given social value(s)?

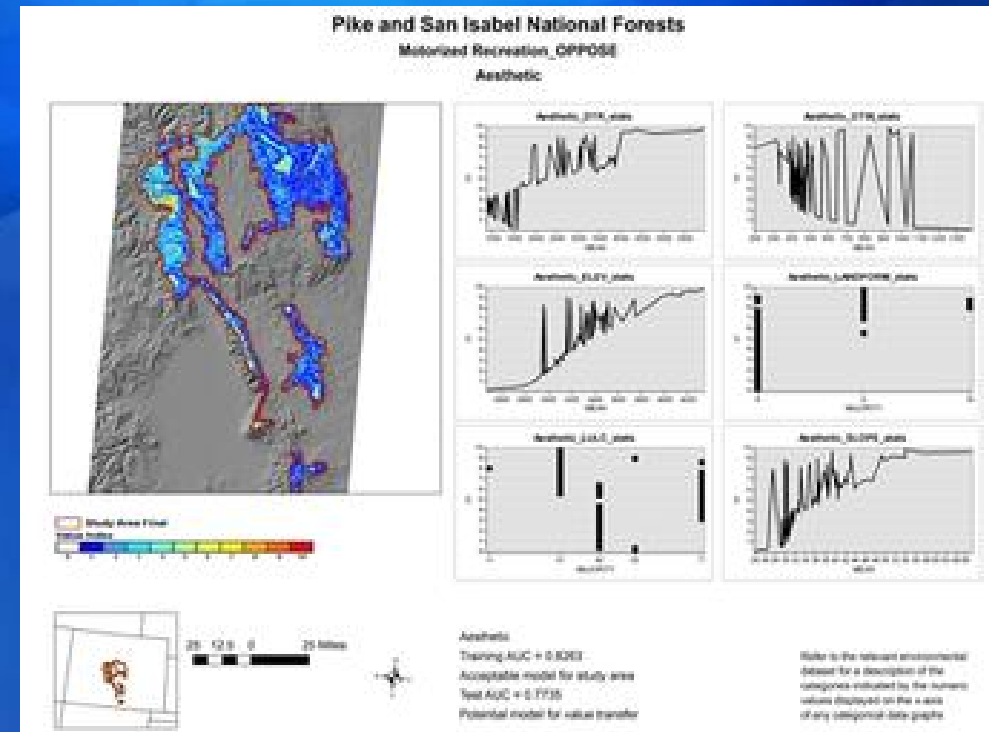


The Nature Conservancy

Can you make values assessments quantitative?

Mapping Social Values

- Finite funding resources make prioritization paramount. Understanding both how—and where—people assess possible tradeoffs among ecosystem services and the underlying social values associated with those benefits could be one way to help restoration decision-makers prioritize projects.
- SoLVES tool (Social Values for Ecosystem Services) is a tool to map, assess and quantify the perceived social values of ecosystem services.



Source: usgs.gov

Does it really matter?

- “Integrating spatially explicit information about social values and development preferences with biological data produced prioritizations that differed spatially from the solution based on only biological data.” *Whitehead et al., (2014)*



Whitehead, Amy & Kujala, Heini & Ives, Christopher & Gordon, Ascelin & Lentini, Pia & Nicholson, Emily & A. Wintle, Brendan & Raymond, Christopher. (2014). Integrating Biological and Social Values When Prioritizing Places for Biodiversity Conservation. Conservation Biology. 28. 992-1003. 10.1111/cobi.12257.

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Summary

- Restoration decision-making requires thoughtful prioritization, both in terms of selecting projects that will restore/enhance/conserves ecosystem form and function and in terms of implementing projects that the public will feel reflects their input.
- Including social values as part of the project decision-making process is one possible method to gather consistent input across large ecosystems and create a cohesive narrative around how restoration contributes to healthier natural and human communities.

Thank you! Questions?



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