

GOMA Federal Working Group Call Notes

5-31-12

Welcome

Todd welcomes the group, and introduces the speakers. One of goals for these FWG calls is to start to crosswalk federal activities and goals with goals of the Priority Issue Teams. Today we'll hear from EPA's Office of Research and Development, and from the GOMA Habitat Conservation and Restoration Team.

Sustainability Research Supporting Gulf of Mexico Ecosystem Restoration

Steve Jordan, EPA's Office of Research & Development

Sustainability is a guiding principle for all research programs. Also a focus on integrated, transdisciplinary research. Three research programs: 1) Air, climate, and energy – supports the administration of the Clean Air Act, 2) Safe and Sustainable Water Resources, and 3) Chemical Safety for Sustainability. New "Sustainable and Healthy Communities" umbrella over all three.

EPA's role has traditionally been in regulation. Also a substantial role in protection and restoration of the environment. But now there's a growing interest in non-regulatory efforts. More holistic look, fits with the sustainability principle.

Within sustainability research, pilot project in Tampa Bay region. Goal is to quantify ecosystem services in the Tampa Bay watershed. Want to quantify the ecosystem service values, and to project how those values might change under scenarios of population growth and climate change. Working on production functions (e.g. what are quantitative predictions for wetlands removing nitrogen from waters.) Looking across the watershed including urban environments.

Interested in not just monetary values, but also values in terms of human well-being. (Have a national project to develop a model for human well-being.)

Ultimately will have an interactive website where people can explore how different variables influence outcomes / values.

Want to expand the Tampa Bay work to other communities in the Gulf. Also working in Puerto Rico. End goal is to help communities plan for sustainability. Goals include mapping ecosystem services, bringing in stakeholders to identify values, and decision-support tools.

Water Resources Research Program

Lot of work on nutrients. Working on national numeric nutrient criteria. Thorny problem. Working with FL for couple years now on this. More recently using optics and remote sensing to assess coastal water quality. Goal to put together smart phone apps for this information.

Also look at nutrient discharge from MS River. That work nearing conclusion – next year or two. Two major models under development. One on GoMex water quality dissolved oxygen model, and other is an ecosystem model. Both in partnership with Naval Research Lab.

Have worked on some valuation work – pilot in Barataria Terrebonne – looking at method for getting at multiple ecosystem services.

Tables in presentation crosswalk research program efforts with Gulf Coast Ecosystem Restoration Task Force (GCERTF), and with GOMA. Looking at the GOMA crosswalk, are connections to a number of the Priority Issues. Gulf Ecology Division has produced a number of documents related to GOMA topics.

Q&A / Discussion

Susan Rees would be interested in collaboration on efforts to expand Tampa work to other parts of the Gulf. MsCIP program may have done useful legwork for the MS region. Steve will follow up and put her in touch with project lead Mark Russell. MsCIP will also be presented on a future FWG call.

Troy Pierce asks if have information on value of barrier islands? Steve refers him to David Yoskowitz at Harte Research Institute – he's done some work on barrier islands in TX (Mustang Island) and has looked at what's available Gulf-wide.

Susan mentions that the SeaGrant programs have funded projects on ecosystem services that should be producing year 1 reports soon. Look at fringing wetlands, oyster reefs, seagrass, etc. – not so much at barrier islands. Idea is to get benefits to use in future restoration projects.

NPS may have done some work as well.

NPS is partner in MsCIP project. Restoring barrier islands in MS. But work isn't based on ecosystem services – it's focused on restoring ecological function of islands and on providing storm mitigation benefits.

Alyssa with USGS is staff to the GCERTF. Met with folks at EPA ORD today, and talked about the conceptual model related to well-being and some of the other research mentioned and how that might contribute to next steps for the Task Force.

GOMA Habitat Restoration & Conservation Team Update

Mike Smith, Gulf of Mexico Foundation, GOMA HCRT

Gulf of Mexico Foundation coordinates the HCRT. Team has implemented projects under the Governor's Action Plan.

Starting with expanded partnerships, started work in 2010 to understand frameworks and policies on both sides of the border (U.S. and Mexico.) Team felt an approach that would be useful in Mexico was to go through the university system, so part of plan was to have a meeting of academics. Had this meeting and leveraged a meeting of the Large Marine Ecosystem group.

Also under expanded partnerships, engaged land trusts in effort to examine how to increase conservation on private lands. Did a survey/assessment of land trusts and other organizations involved in conservation and developed recommendations. A regional group of land trusts has also been formed and is quite active – they'll be at the GOMA All Hands meeting in June in TX.

Under policy changes, engaged Environmental Law Institute to look at legal and institutional framework on both sides of the border. Partnered with a Mexico legal NGO to engaged key stakeholders who deal with these policies every day to identify concerns and possible solutions, and developed recommendations. ELI also looked at U.S. federal and state frameworks and laws. Same approach of engaging stakeholders and developing recommendations.

SLR work started in 2009. Engaged TNC to do SLR modeling and assessment. TNC ran the SLAMM model for 3 sites in TX and MS. There's an online map viewer for seeing the results, as well as results from other sites around the Gulf. TNC put together conservation analysis reports at state and regional levels. Also ran ADCIRC to get a handle on surge impacts. There's a portal for all of these data. Can also send Mike a hard drive if you want all the data. Finally, there's an online decision-support tool that's been developed by TNC for guiding conservation and restoration.

Also applied SLAMM to 5 different sites in National Wildlife Refuges. USFWS has a list of 26 sites they wanted to model – using data availability criteria, HCRT selected 5 sites. Those reports are also available on their website.

Regional Sediment Management Planning work

First developed a technical document laying out the issues. Team disseminated results further by commissioning a special issue of Journal of Coastal Research – coming out this fall. Also did a collection of case studies that look at lessons learned re: applying regional sediment management principles. Team looked at MS' sediment management plan. Was being implemented and then Katrina came along. Team thought plan could use an update – team successfully updated this plan and it is being used. Also developing a plan for Galveston Bay – today Mike received the final product, which will be edited and published.

The Regional Dredge Team was an initiative the Team came up with. Developed guidelines and a charter to take a regional approach, and that has been supported by the GOMA AMT.

Took outputs of SLAMM modeling for Galveston Bay and asked Dave Yoskowitz and Cristina Carollo from HRI to assess the value of marsh habitat behind the islands based on several SLR scenarios.

Three projects in process – restoring critical coastal habitats.

Heather Young, Drew Puffer, and Jerry Booze are federal members of the HCRT.

Q&A/Discussion

Steve Jordan mentions that one of the slides he showed was about a valuation study of a marsh restoration project in LA – might be interesting to compare with Galveston results? Mike indicated would love to see it. Steve will share.

When does the HCRT team meet in Corpus? June 21st (Thursday.)

Note: There will not be a FWG call in June since many of us will be attending the GOMA All Hands meeting the week of June 18.