Session 015: Lessons Learned from Implementing Oil Spill Science Outreach and Education Programs: Reflections 10 Years After a Major Oil Spill

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Session Overview

The Deepwater Horizon oil spill provided an unprecedented opportunity to engage a variety of audiences in oil spill science. To provide target audiences and communities with answers and resources, many outreach and education initiatives were created or expanded to share scientific discoveries from research focused on understanding the impacts of the spill and the Gulf of Mexico ecosystem more broadly.

The focus of this session was to present lessons learned and best practices from a variety of these education and outreach efforts. During the first part of the session, presenters shared highlights and lessons learned from several of the Gulf of Mexico Research Initiative (GoMRI)-funded consortia outreach programs. Recommendations from the consortia outreach coordinators that were published in a 2018 article in the ASLO Limnology and Oceanography Bulletin were also discussed. The second part of the session featured presentations that shared examples of engagement strategies and programs, including the Gulf of Mexico Sea Grant Oil Spill Science Outreach Program, the Consortium for Resilient Gulf Community’s Gulf Coast Disaster Resilience and Preparedness Survey Project, and the proposed Gulf of Mexico Community Health Observing System.

Session Highlights

- GoMRI’s investment in supporting education and outreach activities, whether it was at the program level, through external partnerships, or through the funded research consortia and individual projects, was a highly successful and valuable part of the program. Prioritizing sharing GoMRI research discoveries through multiple approaches serves as a legacy of the program.
- There are a multitude of audiences that can benefit from oil spill science outreach, and those efforts should be customized for the specific audiences. Building relationships with target audiences creates trust.

Lesson Learned:

- Clearly identify audiences and the most effective ways to reach them. This also includes where to meet them. Space and location are important to enhance participation. Joining a regularly occurring meeting or extending personal invitations can also encourage participation. Appropriate communication with audiences is also critical; community partners can provide insight on strategies for engagement.
- All members of the research team are essential to the activity or program’s success. Capitalize on team member’s unique skills or interests related to outreach. Invite others to participate and collaborate on activities. Communication within the team, across the institution, across other institutions, within the community, etc., is essential! Leverage whenever possible.
- Utilize diverse technology tools to share materials and information.
- When developing lesson plans, connect the curriculum scope to active research; this provides a logical sequence/structure and access to experts who can inform lesson plan development.
Furthermore, ensure lessons plans align with teaching standards, are prototype tested, and affordable for educators.

- When developing new outreach tools, such as the RECOVER Virtual Lab, ensure the activity is relatable, isn’t too long (less is more), involves early career researchers, and includes assessment.
- Quality science content (such as GoMRI website stories) thrives with support from top level leadership and focus. Communicating and building relationships with scientists is essential, as is genuinely caring about the quality of the science outreach.
- If conducting surveys or evaluation, return to the community with research results.
- There are many ways to assess and evaluate activities or programs, which can increase their success; ensure the metrics that are being collected are appropriate for defining success. Include flexibility to adjust activities if the metrics indicate something isn’t working.
- Outreach professionals provide unique expertise; include them in implementation of activities or programs, if possible, and during proposal or activity development.
- Defining a strategic plan, even an informal one, can significantly increase chances of success. Ensure budgets align with the strategic plan and remember that activities and platforms that are free to use, like social media, still require personnel time (and therefore money) to manage.