

2023-2026



COMMUNICATIONS & ENGAGEMENT STRATEGY

A strategy for the NOAA RESTORE Science Program to support the sustainability of the Gulf of Mexico ecosystem through training, storytelling, relationship building, and other collaborative activities.



PREPARED BY:
HANNAH BROWN
MIRANDA MADRID



noaarestorescience@noaa.gov



restoreactscienceprogram.noaa.gov

Table of Contents

- Purpose.....2**
- Methods2**
- Communications and Engagement Objectives.....3**
- Target Audiences and Partnerships3**
- Audience and Partner Needs5**
- Communications Approach6**
- Coordination and Engagement.....8**
- Capacity Building.....9**
- Evaluation10**
- Glossary.....12**
- References.....13**

Purpose

The purpose of the National Oceanic and Atmospheric Administration (NOAA) RESTORE Science Program's Communications and Engagement Strategy is to support the program in contributing to the sustainability of the Gulf of Mexico (Gulf) ecosystem through training, storytelling, relationship building, and other collaborative activities in a manner that is consistent with the program's [mission](#) and long-term outcomes. This strategy details our high-level vision for our communications and engagement activities, while the specific communications activities and metrics are detailed in a separate communications plan that is developed each year.

Methods

In 2022, staff from the NOAA RESTORE Science Program (Science Program) conducted four analyses to inform the development of this communications and engagement (*see Appendix for definitions*) strategy. A summary of the methodology used for each analysis is included below. Detailed findings from these analyses informed the development of the strategy and have been cited throughout this document.

- **Interviews:** Informal interviews were conducted with 35 communicators, current and potential partners, and other relevant professionals to gather information about ongoing communications initiatives in the Gulf of Mexico. Discussions included ideas for communications needs and opportunities within the Gulf science and management community as well as specifically for the Science Program.
- **Strategy Analysis:** Strategies and plans for both communications (n = 20), which included engagement activities, and diversity, equity, inclusion, and accessibility (DEIA) initiatives (n = 31) were collected from organizations that share similar missions, audiences, and goals. Materials were examined for relevant strategies, actions, and ideas.
- **Applicants and Reviewers Analysis:** Applicants and reviewers for the Science Program's previous funding competitions (2015, 2017, 2019, and 2021) were analyzed by geographic location and institution type. This information was analyzed to identify trends in who applied, who received funding, and who participated in the review process.
- **Communication Channel Trends:** User trends were assessed for the Science Program's primary communications channels. Website engagement data were gathered from

Google Analytics from the period of January 1, 2019 to October 4, 2022. Email information was gathered from email bulletin reports from October 13, 2021 to October 4, 2022.

Communications and Engagement Objectives

1. Communicate with diverse audiences about scientific research and resource management decisions to promote the sustainability of the Gulf of Mexico ecosystem.
2. Inspire environmental stewardship through a place-based appreciation for the ecosystem and its importance to people.
3. Seek feedback and guidance from end users, community partners, and representatives of local, state, and federal organizations in the Gulf to ensure that the Science Program's activities are inclusive, equitable, relevant to decision makers, and of high scientific quality.
4. Coordinate activities between organizations in the Gulf of Mexico that support shared missions, goals, and outcomes.
5. Provide opportunities to build capacity among the Science Program's funded project teams, the wider Gulf community, and its own staff to carry out work related to applied ecosystem science.
6. Increase awareness of the Science Program's activities among NOAA leadership and coordinate with NOAA staff on collaborative projects and communications.

Target Audiences and Partnerships

The Science Program targets a variety of audiences through communications and engagement activities. In some cases, audiences may also serve as potential partners for the Science Program to collaborate directly on activities that support Gulf sustainability. When building partnerships, the Science Program considers the following factors: potential conflicts of interest, the value of the activity for the partner, how the partnership furthers communications

and engagement objectives, the time commitment of each activity, and the program's capacity to support the partnership.

- **Researchers:** For past funding competitions, researchers have been the most engaged audience for both application submission (average 62.8 percent academic researchers) and participation in reviewing proposals. Researchers are often affiliated with academic organizations, though some are reached through state and federal organizations.
- **Resource Managers:** The Science Program also targets resource managers for communications around funding competitions. Resource managers are typically reached via state, federal, and local organizations and nonprofits.
- **Fishing Communities:** The Science Program's legislative mandate clearly calls for the program to support the sustainability of the Gulf's fish and fisheries. To align with this effort, the program works to build relationships with commercial and recreational fishing communities and regulatory groups in the Gulf.
- **Diverse and Underserved Communities:** The Science Program works to identify gaps in who is engaging with the program's communications and works to build relationships with diverse and underserved communities (*see Appendix for definitions related to DEIA*) in the Gulf region. For example, as of 2023, the program has yet to have applicants from Indigenous communities submit proposals to funding competitions. The Science Program is working to better connect with potentially interested Indigenous communities.
- **Gulf of Mexico Residents and Curious Members of the Public:** The Science Program produces communications materials that are targeted toward individuals who are residents of the Gulf region or are interested in the research and activities supported by the program.
- **Congressional representatives and offices:** Through rollout plans done in partnership with NOAA's Office of Legislative and Intergovernmental Affairs, the Science Program relays updates on ongoing funding opportunities, awards, and other activities to relevant Congressional representatives and their offices.
- **Early Career Research and Resource Management Professionals:** In recent years, the Science Program has used co-production, or collaborative science, as a cornerstone of

its funding competitions. The program works to communicate the benefits and best practices of co-production to students and early career researchers in the Gulf region.

- **NOAA Leadership and Staff:** The Science Program regularly communicates with NOAA leadership and staff on program activities, funding competitions, awards, and the impacts of funded projects. The program also engages NOAA staff for their expertise and guidance. The Science Program amplifies NOAA's work and connects funding within NOAA to partners and audiences.

Audience and Partner Needs

The Science Program aims to keep the needs of audiences and partners in mind when planning and conducting all communications activities. A few key needs and approaches identified by target audiences are outlined below, however this list is likely to expand as audience and partner needs evolve.

- **Hearing from Audiences and Identifying Barriers:** Approaching audiences and partners for feedback and specific information about their needs is key for effective communications and engagement because their perceptions may be different from those of the Science Program. The Science Program prioritizes hearing from underserved groups as well as those who are actively involved in program activities. Opportunities to hear and/or identify concerns can occur through listening sessions, one-on-one conversations, surveys, needs assessments, and attendance at partner events such as the Historically Black Colleges and Universities (HBCU) Climate Change Consortium and the NOAA Educational Partnership Program with Minority Serving Institutions Conference. The program makes sure to follow up with individuals and groups who have shared feedback to communicate how information is or will be used.
- **Language Choice and Translation:** The Science Program considers how language choice may exclude or oppress those with differing ability, race or ethnicity, sexual orientation, gender, age, occupation, education, language, religion, or experience level. The needs of audiences are considered for all messaging, and, in some cases, it is necessary to translate materials into languages other than English. In the Gulf region, Vietnamese, Haitian and Louisiana Creole, and Spanish may be especially relevant. Closed captioning is made available during online events, and sign language interpretation may also be important for in-person events where closed captioning services are not available. The

Science Program, in general, avoids jargon and crafts communications at an accessible reading level.

- **Making Information and Opportunities Accessible:** Ensuring that materials are available for audiences to access and in the appropriate format is an ongoing focus of the Science Program's communications. All materials follow accessibility (*see Appendix for definition*) standards (*see [NOAA guidelines for Section 508 compliance](#)*). Beyond meeting compliance requirements, Science Program staff work to connect materials with appropriate audiences and make documents easily accessible on the Science Program website as well as in other public and online forums.

Communications Approach

The Science Program's communications are designed to promote the sustainability of the Gulf ecosystem and to inspire environmental stewardship through a place-based appreciation for the ecosystem and its importance for human communities.

- **Meet People Where They Are:** Communications initiatives cannot rely solely on the distribution of information to connect with audiences. Instead, scientific information must be framed in a way that considers audiences' cultural cognition, or the impact of group values on what individuals believe (Kahan, 2010). Two methods are recommended to most effectively reach people: 1) messages need to avoid threatening individual values and communicate in a way that reinforces the commitments they have already established, and 2) information should be shared by a diverse group of experts so that audiences have options in spokespeople to consider credible. To better appeal to individual sensibilities and motivations, scientific communication strives to make information personally relevant to audiences. For example, connecting broader findings to specific local consequences and shifts can help communicate impacts to local communities (DeLorme et al., 2018). The values and thought systems of target audiences are considered and incorporated into communications when possible. For example, local knowledge was specifically named in the instructions for the research and development plans in the Science Program's request for proposals for actionable science research.
- **Reciprocity is Key to Relationship Building:** Communications initiatives aim to nurture an interactive dialogue among audiences, which serves to share power, strengthen social relationships (Borrini et al., 2007), and express the Science Program's interest in

receiving feedback from its audiences. For example, social media accounts that solicit feedback and promote interaction can help build public trust and support scientific literacy (Lee et al., 2018). Whenever possible, the Science Program's communications incorporate two-way channels where applicants, partners, and other interested parties can engage and participate. Examples of communications that prioritize interaction and discourse include interactive maps and graphics on the Science Program's website, photo contests to email subscribers, and resources/tools developed in concert with audience feedback.

- **Supporting the Sustainability of the Gulf of Mexico is a Shared Value:** Sense of place – the emotional bond that people have with a specific location – can influence individuals' environmental behavior and decision making (van Putten et al., 2018). Even when a person is not directly connected to a specific location, such as living there or visiting frequently, they can still experience attachment and meaning linked to a location, especially for iconic areas (e.g., feeling grief for threatened coral populations in the Great Barrier Reef) (Masterson et al., 2019). The Science Program's communications acknowledge the differing values of target audiences. While a connection to the Gulf is a shared value for the Science Program's target audiences, communications are also crafted with the recognition that no two communities in the Gulf are alike, and messages may need to be tailored to speak directly to audiences from different regions or viewpoints.
- **Communications Have a Clear Purpose and Message:** The Science Program's communications are crafted with a specific goal in mind, which may include priorities such as ensuring target audiences are aware of an upcoming conference, featuring the personal stories of researchers involved in funded projects, and sharing program-level accomplishments and impacts. For example, narrative storytelling can be used as a tool to increase comprehension, interest, and engagement in target audiences (Dahlstrom, 2014). All communications are edited for readability, relevance, and accessibility before distributing. The Science Program aims to clearly communicate its purpose, objectives, and activities on the website and in select presentations to ensure that new audiences become familiar with the program's mission.

Coordination and Engagement

Relationship building and listening to partner and audience feedback are key to the Science Program's approach to coordination and engagement. To accomplish the objectives outlined above, the Science Program prioritizes building and maintaining relationships with target audiences and partners and takes a long-term engagement approach that is consistent and flexible.

- **Power Dynamics and Trust:** Although there are uneven power dynamics between potentially funded organizations and funders, the Science Program works to be available to its audiences and partners. This means listening to their needs. Especially with newly engaged groups, conversations may be informal as shared activities and goals are developed. Approaching these groups with a listening and learning mindset puts the Science Program in a position to gain trust as the program, its partners, and audiences envision what mutually beneficial activities look like.
- **Modeling Collaboration:** The Science Program plans engagement activities with consideration to the venue and frequency preferences of its partners and audiences, including at in-person conferences and meetings, virtually, or where the other person is most comfortable. The program aims to be a model of how to develop and maintain meaningful relationships for its project teams.
- **Coordinating Deepwater Horizon Funders:** The Science Program is one of several science and restoration programs in the Gulf region that was established as a consequence of the Deepwater Horizon oil spill. The program serves as the chair for this Coordination Forum. Within this forum, the various programs address shared issues, promote joint activities, and facilitate synthesis of research results. The Coordination Forum collectively and iteratively develops a funding calendar that the Science Program hosts on its website.
- **NOAA:** The Science Program coordinates and engages with NOAA and its leadership in several ways. At conferences and meetings, staff promote the program and NOAA's work at exhibition booths. The program coordinates rollouts about Science Program announcements to make NOAA leadership and relevant parties aware of funding competitions and subsequent awards. In addition, the Science Program engages NOAA staff to serve as subject matter experts, who provide guidance and technical expertise to its funded projects.

Capacity Building

To support the sustainability of the Gulf of Mexico, the Science Program is dedicated to building the capacity of its funded project teams, the wider Gulf community, and its own staff to carry out work related to applied ecosystem science. The Science Program recognizes that increasing capacity of the Gulf region involves being in partnership with and learning from others. And to effectively engage with its target audiences and partners, the program may need to take additional steps to ensure all parties have meaningful opportunities to participate in its activities. Seeking feedback and guidance from its audiences and partners is the first step to understanding their capacity challenges, removing barriers, and delivering appropriate training and resources.

- **Funded Projects:** The Science Program engages with research and management communities to help inform priorities for its funding competitions. Once awards are made, the program works closely with project teams, especially on the transfer of their research findings and products to end users and other partners. Therefore, it is key that the program focuses on examining the capacity of its funded project teams. The Science Program provides opportunities for these individuals to network and share their successes and lessons learned. Because the Science Program asks these communities to work closely together and apply their work to resource management needs, the program can offer workshops that emphasize communications and engagement best practices. Within project teams, the program strives to connect with graduate students, postdoctoral researchers, and early career professionals.
- **Gulf Community (Audience and Partners):** The researchers, resource managers, and other end users in the Gulf region, beyond those already involved with the program's funded projects, represent a community of potential partners. Working together with the wider Gulf community to support the sustainability of the ecosystem takes many forms. The program contributes to workforce development and mentorship by supporting programs that expand access to coastal management and NOAA careers for underserved groups. For example, the program participates annually as a host office in the Science Policy Fellowship through the National Academies of Sciences Gulf Research Program. The program is also committed to delivering accessible workshops, resources, and connections to those interested in Science Program funding opportunities. The program coordinates with several partner organizations across the Gulf and promotes learning and sharing about capacity building opportunities.

- **Internal:** The Science Program is focused on external and internal capacity building efforts in parallel, specifically Science Program staff's capacity to engage and communicate with diverse and underserved audiences who conduct applied ecosystem science. Organizations that conduct internal DEIA work first, or even simultaneously, are often more successful at meeting their DEIA goals because they better understand the need for and are willing to do the long-term, resource-intensive work of outreach (*see Appendix for definition*) and engagement with diverse audiences (Skeo 2019). Internal capacity building activities may include encouraging staff to participate in implicit bias training, commitments to DEIA learning, racial equity training, training around mental health considerations, and professional development opportunities such as training to support communications and administration of research competitions.
- **NOAA and Federal Staff:** Internal capacity building of the Science Program may be extended to staff from NOAA and other federal programs as well as those who advise the program, including reviewers, executive oversight board, and technical monitors.

Evaluation

The Science Program's performance management plan, which was established in 2016, describes the outcome- and output-based performance metrics the program uses to assess progress towards its expected outcomes. The Communication and Engagement Strategy builds onto this approach by assessing the Program's external communications, external engagement, and internal communications with the three categories described below. Performance metrics for communications and engagement will be reassessed for inclusion in the evaluation plan every three years when the Science Program renews its communications and engagement strategy.

- **Reach and Engagement:** Short-term communications goals and implementation plans will be defined annually and updated as needed in the Science Program's communications and engagement plan. Because tracking the success of all communications can be difficult as messages are broadcast widely, communications drive users to the Science Program website, which allows web engagement to be used as a primary metric of success. As the Science Program's communications strategy develops, metrics will be divided into output measures (e.g., number of materials distributed, number of users, etc.) and outcome measures (e.g., changes in awareness, user satisfaction, etc.). The Science Program tracks communication metrics and assesses how people use the communications information annually. This annual assessment will

work to evaluate the program's overall impact on society and the environment through its communications and engagement activities. As the program forms deeper relationships with its target audiences and partners, it will learn and track the most effective channels and trusted messengers for disseminating information.

- **Diversity and Inclusion:** Engagement activities prioritize the inclusion of diverse communities across the Gulf region, including target audiences from a variety of backgrounds and professional sectors. To effectively target new audiences, the Science Program must continue to identify gaps in previous engagement efforts. When possible, the voluntary collection of demographic information can help to elucidate these gaps and be used to develop new engagement goals in the next year's communications plan. When considering the collection of demographic variables, it is important to consider what the data will be used to inform and whether the data are essential to guide future strategies and plans. It is a best practice to ask respondents to self-report demographic data rather than using information that is skimmed without user knowledge during web use, with consideration to reliability and validity. The Science Program will tailor funding competitions with diversity and inclusion principles in mind, with the goal of ensuring that the entire review process equitably represents the perspectives of applicants from a variety of backgrounds. One way to ensure that diversity is considered is to evaluate applicants' institutional affiliation as a way of assessing our outreach efforts. Progress made in reaching diversity and inclusion goals can be publicized to other groups with similar goals and to audiences overall.
- **Coordination and Collaboration:** To help increase engagement activities and impact overall, the Science Program will develop mutually beneficial partnerships with organizations with similar missions. For example, the Gulf Sea Grant programs may provide connections and information from their on-the-ground extension network that can help guide messaging and engagement. The Science Program will be careful not to be extractive or overly burdensome in their expectations and requests in such partnerships and may provide support to partner programs as the team's capacity allows. When tracking coordination and collaboration, metrics will focus on enduring relationships as well as new partnerships. Opportunities for students and recent graduates may be tracked as well to show capacity building for individuals in the early stages of their careers.

Glossary

- Accessibility: The design, construction, development, and maintenance of facilities, information and communication technology, programs, and services so that all people, including people with disabilities, can fully and independently use them.*
- Communications: The transmission and exchange of information by speaking, writing, or using another medium, such as digital communication via websites and social media.
- Diversity: The mixture of the unique attributes that shape an individual's identity which help NOAA accomplish its goals. Diversity refers to institutional affiliation (e.g., academic, government, nonprofit, private enterprise, etc.), demographic diversity (e.g., race, gender, sexual orientation), experiential diversity (e.g., affinities, hobbies, and abilities), and cognitive diversity (e.g., sensory processing and problem solving).**
- Engagement: Activities that work to build and support meaningful participatory relationships.
- Equity: The consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities.*, **
- Inclusion: A culture that values the unique attributes of all team members and an environment that is respectful, collaborative, supportive, and one that allows for equal access. Inclusion requires active and intentional engagement on the part of everyone and provides a feeling of belonging.***
- Outreach: Activities that seek to connect program ideas to efforts of other organizations, groups, or audiences.
- Underserved: Populations of people sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life. Examples of underserved communities include - Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.**

*[Executive Order 14035](#)

**[Executive Order 13985](#)

***[NOAA Diversity and Inclusion Strategic Plan 2020-2024](#)

References

Borrini, G., Jaireth, H., Farvar, M. T., Pimbert, M., & Kothari, A. (2007). *Sharing power: learning-by-doing in co-management of natural resources throughout the world*. Earthscan.

Dahlstrom, M. F. (2014). Using narratives and storytelling to communicate science with nonexpert audiences. *Proceedings of the National Academy of Sciences*, *111*(Supplement 4), 13614-13620.

DeLorme, D. E., Stephens, S. H., & Hagen, S. C. (2018). Transdisciplinary sea level rise risk communication and outreach strategies from stakeholder focus groups. *Journal of Environmental Studies and Sciences*, *8*(1), 13-21.

Kahan, D. (2010). Fixing the communications failure. *Nature*, *463*(7279), 296-297.

Lee, N. M., VanDyke, M. S., & Cummins, R. G. (2018). A missed opportunity?: NOAA's use of social media to communicate climate science. *Environmental Communication*, *12*(2), 274-283.

Masterson, V. A., Enqvist, J. P., Stedman, R. C., & Tengö, M. (2019). Sense of place in social-ecological systems: From theory to empirics. *Sustainability Science*, *14*(3), 555-564.

Skeo. (2019). DEIJ in Action: A Diversity, Equity, Inclusion, and Justice Guide for the Chesapeake Bay Watershed. 62 pp. Accessed August 4, 2022.

van Putten, I. E., Plagányi, É. E., Booth, K., Cvitanovic, C., Kelly, R., Punt, A. E., & Richards, S. A. (2018). A framework for incorporating sense of place into the management of marine systems. *Ecology and Society*, *23*(4).



Photo courtesy Michael Polito



noaarestorescience@noaa.gov



restoreactscienceprogram.noaa.gov



RESTORE
SCIENCE PROGRAM