

Assessment of Needs and Interests of Sea Grant Specialists to Work with their Local Military Installations



Sea Grant Coastal Resilience DoD Liaison

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INTRODUCTION AND BACKGROUND

The assessment of needs and interest was completed as one of the first tasks for the Sea Grant Coastal Resilience Department of Defense Liaison workplan, which was initiated on September 1, 2021.

The goals of the Coastal Resilience DoD Liaison program are to

- 1) Facilitate the transfer of information, tools and resources between NOAA/Sea Grant and military installations/defense communities.
- 2) Advance the sustainability of coastal communities, ecosystems and military readiness through engaging with the Sea Grant network of coastal resilience expertise especially in land use planning, conservation, stakeholder engagement and nature-based solutions.
- 3) Encourage greater collaborative coastal resilience projects between DoD facilities and coastal communities using Sea Grant research and outreach products.

The Program partners with the Southeastern Regional Partnership for Planning and Sustainability (SERPPAS) which provides a geographic focus in the states of North Carolina, South Carolina, Georgia, Florida, Alabama, and Mississippi. However, since the Readiness and Environmental Integration (REPI) program in the Office of the Assistant Secretary of Defense, another key partner, serves the entire United States and territories, the Liaison Program links to programs and projects across all coastal states.

The assessment was conducted to determine the baseline of existing engagement between military installations and faculty within the Sea Grant (SG) network, to understand the relationships between the SG network and defense communities, and to discern interest among the SG network in engaging with the military and defense communities. The focus of the project is coastal resilience, however, some other areas, such as K-12 education were mentioned as opportunities to connect with defense communities.

For more information about the Sea Grant Coastal Resilience DoD Liaison program see <https://gacoast.uga.edu/coastal-resilience-dod-liaison-program/>.

METHODS

The primary method of data collection was individual interviews, guided by a survey instrument. Some interviews were conducted simultaneously with a small group or pair, particularly when a participant was newer to a program and invited a colleague who had more knowledge of existing relationships between the program and the military. The survey instrument was developed and tested by the Coastal Resilience DoD Liaison using the program workplan as a guide. The questions were tested for clarity and comprehension with a Sea Grant Coastal Resilience Specialist with a social sciences research background. The revised survey instrument is included in the appendix. Questions focused on a SG professional's experience with military installation personnel and defense communities within their state (or county), their knowledge of the needs of the communities for coastal resilience, and opportunities that they saw to engage with the military installation. Interviews were semi-structured in that follow-up questions were asked, and information offered outside of the survey questions was collected where appropriate.

Participant descriptions

Participants were solicited from the Sea Grant Climate Network, based on their location in a state with a significant military presence on the coast and with an emphasis on the program within the SERPPAS region. Additional participants were suggested by previous interviewees in a snowball method. Twenty-eight individuals were interviewed from fourteen SG programs, with two specialists from each of four programs in the SERPPAS area and six specialists and agents from Florida due to their structure and division into county service areas. Six specialist/agents were interviewed in the MidAtlantic Region (Virginia north to New York), which also has a high density of coastal military installations, two specialists were interviewed in the Northeast and four from the Pacific region. Each interview took between 60 and 90 minutes and was conducted by the Liaison. Notes were taken during the interview and analyzed in a matrix to look for common themes and key takeaways.

Strengths and Limitations of Method

The investigative method chosen had several benefits in that interviews allowed the Liaison to introduce herself and the Program to key SG professionals in the network. This helped to establish relationships while allowing the Liaison to learn about the varied programs within the SG network. It was an inexpensive way to gather data useful to further development of the Liaison program and allowed in-depth discussion about the most useful parts of individual programs. A presentation about the preliminary findings to the Sea Grant Climate Network during a quarterly virtual meeting increased awareness of the Liaison program and generated an additional critical interview and several program inquiries.

The disadvantages of this approach are that only the Liaison is providing the design, data collection and analysis, which may be unintentionally biased, and is not a rigorous scientific approach.

KEY FINDINGS

Although most Sea Grant programs have elements of coastal resilience in their portfolio, each coastal resilience focus area and effort is a bit different in its structure and emphasis. In addition, SG programs are structured differently and therefore specialists and agents will emphasize different research, training or outreach efforts and engage with stakeholders or communities in a variety of ways. Research and outreach expertise within the network varies as do the resources and collaborators at host or consortium universities. The needs of communities being served can also be very different.

Of the 28 SG professionals interviewed, only two were directly involved in coastal community resilience planning and conservation programs sponsored by Department of Defense. One of these was a SG specialist that is involved in a REPI Challenge proposal and other REPI funded projects. The other SG specialist is co-leading in Military Installation Resilience Review, a community-based resilience planning project funded by the Office of Local Defense Community Cooperation. A third SG professional had close ties to the local installation, good relationships with their natural resources professionals and worked with them on wildlife and aquaculture projects, not directly associated with coastal resilience or funded by DoD programs. Other individuals reported on a variety of relationships with military installations and personnel including social relationships and associations through community projects or networks, typically involving local or regional government. A few SG professionals had relationships with researchers involved in projects on military installations and one had previous work experience that involved work on military bases. Most of the participants expressed interest in working with the military installation and defense communities, some had reached out, while other had not. The most common reason for not reaching out to military installations as part of their community engagement was that there were other opportunities that were more apparent or easier to get started. Two of the participants indicated that military and defense communities were outside their geographic reach or target audience.

The three SG professionals that were involved with military installation projects were asked how they became involved. The REPI-involved participant responded that the Community Planning Liaison Officer at the installation, who had reached out to him was very pro-active and involved in many local community resilience networks, especially after the area was heavily impacted by a hurricane. This SG specialist and his university colleagues were engaged as the military saw the need to build transportation and energy resilience. The SG/university became the REPI Challenge project lead instead of the state department of natural resources to allow flexibility to work outside of state lands.

Defense Community Needs

When asked about the coastal resilience needs of the defense communities within their state or county, SG professionals listed needs that are also common to most coastal communities within their region. Coastal resilience needs included:

- Resilience planning
- Greater access to data/science such as local tide gauges, measurements of groundwater change, other data needs especially in rural communities
- Flooding- coastal and inland, sea level rise
- Severe weather, hurricanes, storm surge
- Transportation- access to base, access to Port
- Public health septic system and water quality/stormwater concerns
- Information needs, better understanding of salt marsh and seagrass areas and their value
- Funding, leadership, and capacity to write and administer grants
- Shoreline and beach erosion
- Equity and social justice- “those with resources and political weight get their needs met”
- Superfund sites that might be disturbed by flooding/ storm surge
- Integrated natural resources management for salt marshes, salt pond, wetlands recovery

SG professionals identified the need in coastal defense communities for communication between the installations and the community so that the community understands the actions the installation is making to become more resilient. In addition, participants observed that having installation personnel involved in coastal resilience networks or communities of practice can make establishing collaborations easier.

Barriers to involvement

Survey participants identified several barriers to working with military installations. One category of these barriers was navigating a system with which many of the survey participants were unfamiliar. These barriers included knowing who to contact and how to contact the right person, understanding the command structure, how to identify common interests and the right language to use when talking with potential partners. Some SG professionals had experienced push back from potential partners regarding the need to plan for sea level rise. Others understood that their installation was working on resilience independently and did not have a need to partner or were not interested in community projects. Several participants mentioned that access to the base restricted their involvement. Frequent changes of commanders and making sure that activities are properly sanctioned by commanders were also mentioned as barriers.

When asked about overcoming barriers, those participants who were working with installations said that creating relationships with key installation personnel was critical to their success. Good communication, trusted working relationships and good management of the command relationship through appropriate points of contact is essential to long lasting and effective partnerships.

Resources

Survey participants were asked about resources they would recommend to defense communities vulnerable to coastal or other climate hazards. Among the suggested SG resources were:

- Community plans, particularly those that engage the community equitably and use localized scientific data
- Training programs, particularly mentioned landscape professionals training for building and maintaining green infrastructure, shoreline contractors training for building living shorelines, and master naturalist training
- Communications tools, such as historical imagery to understand shoreline changes, demonstration projects for living shorelines, best practices for risk communication
- Shore-friendly program to engage with communities.
- Best practices for engagement and research standards for working with communities
- Legal and fiscal liabilities associated with sea level rise
- Hurricane preparedness materials
- Flooding studies, maps showing increasing water levels and real-time water sensor networks that show when a road floods and at what level

SG professionals were also asked what they needed for better engagement with local installations and defense communities. Communications and best practices guidance were a clear theme among all the responses received. Responses included needs for:

- Communication pathways and appropriate points of contact
- Examples of successful partnerships
- Best practices for engaging and communicating with defense community audiences
- Opportunities to make contacts with military families
- More people with expertise, connections to military service resilience specialists
- Information about how the base works with the community, especially in areas of emergency management, preparedness, sheltering
- Better understanding of base priorities for resilience and planning
- Better modeling, especially at the local scale, cost-benefits of NBS

- Funding for community projects- especially for small communities and those that don't require a match from the community
- Support from the top down for projects
- Access to the base for research

Potential Opportunities

SG professionals that participated in the survey were asked to consider their military installation or defense community opportunities and suggest potential projects that they would be interested in pursuing based on their portfolio of skills and experiences and considering the needs that they had previously identified. Many of these answers overlapped with previous responses concerning the needs of the communities, or the recommended resources. Several participants identified specific research projects related to their area of expertise and the unique opportunity that a base might offer to act as a reference site or location to position instruments such as tide gauges. Several SG specialists that lead or engaged with networks or communities of practices saw significant opportunities to engage with base personnel there. Others SG professionals would like to work with military families on education and community engagement projects including growing oysters on piers, living shorelines, native plants, lionfish removal and marine restoration.

SG professionals also saw opportunities to work with military installations on joint vulnerability assessments to align resilience planning across the community, joint logistics for disaster recovery, and joint ecological restoration projects, particularly those in areas on installations that are ecologically connected to those outside the installation. Nature-based solution projects were of interest to many of the SG professionals including living shorelines, beach nourishment, and stormwater projects, especially those that restored natural systems or were at the interface of urban and natural systems.

Finally, the participants were asked about their preferred way to receive information and communications about opportunities to connect with military installations and defense communities. Several mentioned website portals, such as the National Sea Grant website, but most preferred direct assistance and communications from the Liaison, "not more webinars and reports."

CONCLUSION AND RECOMMENDATIONS

Based on the above interview responses and suggestions from the participants, the following list of recommendations were developed to encourage relationships and collaborations between SG professionals, military installations and defense communities.

- 1. Develop a best practices guidance for outreach and communication with military installations in coastal/climate resilience engagement and coordination.**
 - The primary audience for the guidance will be Sea Grant professionals but written so that others such as those working in conservation and restoration NGOs, community-based groups or others with an interest in working with a military installation on coastal resilience projects for defense communities would find it useful.
 - The guidance should focus on defense community coastal/climate resilience planning and implementation and may not be able to address all of the identified needs, such as research.
- 2. Identify project examples for military/community coordination on coastal resilience planning and implementation.**
 - Given the few project examples now existing within the SG network, using examples of similar coordination, such as those by The Nature Conservancy, North Carolina Coastal Federation or others should be illustrative.
 - Hosting a forum, such as the Sea Grant/ SERPPAS workshop, to encourage the development of project ideas that could be funded by REPI or OLDCC would move forward potential projects that could then serve as demonstrations for others
 - Invite Sea Grant specialists and agents to SERPPAS Coastal Resilience and Regional Adaptation Working Group meetings that highlight project examples
- 3. Communication pathways and building relationships are the key to successful collaborations between Sea Grant professionals and military installations.**
 - Best practices guidance will focus on communications and outreach to military installations.
 - Additional opportunities to build relationship may include workshop and invitations for co-presentations at conferences.
- 4. Sea Grant specialists and agents are eager and poised to partner where military installations are interested in coastal/climate resilience planning and implementation projects with defense communities.**
- 5. Direct assistance from a Liaison is the preferred method of communication and information distribution within the Sea Grant network for the Coastal Resilience DoD Liaison Program.**

A similar assessment would be useful to solicit the coastal resilience needs, interests and knowledge gaps for key military installation personnel who interface with natural resources and community programs. Understanding the needs, goals and interests of partners inside and outside the military fences is critically important to fostering collaborative programs.

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APPENDIX 1: SURVEY QUESTIONS

Appendix 1: Survey Questions

Coastal Resilience and military communities

Who:

Role in Coastal Resilience:

Do you work with military communities, those on a base or in nearby cities or towns?

If yes, how did you get involved?

If no, why not?

What are the biggest coastal resilience needs for military communities?

What are the barriers to working with these communities?

How have you tackled or overcome the barriers?

What practices or resources would you recommend for coastal resilience work with the communities you work with?

What resources would you like to have?

Informational?

Capacity?

What kinds of projects would you like to pursue with military communities?

How do you think information about working with military communities would be best communicated or distributed?

Anything else you would like to add?

Anyone else I should talk with?