

## **A Proposal for Building Legal Capacity within Delaware Sea Grant**

### **FINAL REPORT**

In December 2018, the Delaware Sea Grant College Program received funds from the National Sea Grant Law Center to explore the potential for building legal capacity within our program. We achieved three objectives through this work:

1. Gained understanding regarding the type of legal research that is being conducted by the National Sea Grant Law Center, how this research is extended to stakeholders, models for organizational structure, and potential funding mechanisms.
2. In partnership with Maryland Sea Grant, learned the mechanisms by which Virginia Sea Grant has supported a successful state-based Sea Grant legal program, the state and regional issues that are being addressed, and opportunities for potential future collaboration.
3. In partnership with the Widener University Delaware Law School, developed a framework and strategy to extend legal research to the broader community, and performed a state-wide needs assessment within Delaware to identify topics of concern and relevant stakeholders.

This final report provides a comprehensive overview of the work performed under these objectives and describes a path forward for the continued expansion of legal capacity within Delaware Sea Grant.

### **Background**

The Delaware Sea Grant College Program was established in 1976 to promote the wise use, conservation, and management of Delaware's coastal resources through high-quality research, education, and extension. Our program provides scientific information and hands-on guidance to stakeholders, including the public, industry, and government, on issues related to our coast and our coastal communities.

Much of the extension work is performed by our Marine Advisory Service, which includes staff with expertise in diverse fields, such as coastal hazards, economic development, social justice, fisheries, coastal ecology, and water quality. Our team has provided one-on-one consultations, prepared and delivered workshops and trainings, and provided balanced written assessments and white papers regarding a diverse array of coastal issues. Throughout these efforts, our team has strived to serve as an unbiased, honest broker of information to support community and stakeholder needs.

With the assistance of the Widener University Delaware Law School, Delaware Sea Grant has used funding from the National Sea Grant Law Center to explore the potential to expand our program and provide legal analysis on coastal issues. Funds were used to: (1) explore existing models within the Sea Grant legal network, including within Virginia Sea Grant, (2) develop a framework for adding legal capacity to Delaware Sea Grant, and (3) to perform state-wide needs

assessment within Delaware. The following sections of this report summarize these steps and describe the path forward for our program.

## **1. Existing Models within the Sea Grant Legal Network**

Representatives from Delaware Sea Grant and the Widener University Delaware Law School traveled to the National Sea Grant Law Center at the University of Mississippi to learn about different models for organizational structure within the Sea Grant legal network. Delaware Sea Grant also visited the Virginia Coastal Policy Center at the College of William & Mary Law School to gain further insight into the development of a successful state-based program. Finally, informal discussions with the Delaware Sea Grant Marine Advisory Service, the Delaware Sea Grant Advisory Council, faculty and staff within the School of Marine Science and Policy at the University of Delaware, and faculty at the Delaware Law School added additional perspective.

Lessons learned from these efforts consisted of the following:

1. The easiest path to establishing legal capacity within a Sea Grant program is through incremental growth, beginning with a successful partnership with an existing law school. A partnership with a law school provides access to legal expertise without the need to procure sufficient funds to hire new staff, and serves as a gateway to a robust database of legal precedents and case law, which is necessary to provide legal analysis to stakeholders.
2. If a partnership between a Sea Grant program and law school is to be successful, common goals and objectives must be identified and achieved.
3. Sea Grant staff that are interfacing with the stakeholders do not need to have a legal background, but must have some knowledge of coastal law and policy to successfully guide discussions and identify relevant stakeholder questions.

These lessons helped inform discussions between Delaware Sea Grant and project partners regarding a potential framework that Delaware Sea Grant may use to expand our program and provide legal analysis on coastal issues.

## **2. Framework for Building Legal Capacity within Delaware Sea Grant**

Due to the proximity of the Widener University Delaware Law School to the University of Delaware, which administers the Delaware Sea Grant College Program, and the focus and expertise of its Environmental and Natural Resources Law Clinic, the Delaware Law School is a logical partner for Delaware Sea Grant, and was an active participant in this project.

The Delaware Law School is the only law school in Delaware and houses the Environmental and Natural Resources Law Clinic, which was founded in 1989 and is the fourth oldest environmental law school clinic in the country. The primary mission of the Clinic is to provide law students with the opportunity to learn how to practice law by assisting in the representation of clients in a variety of environmental law contexts. Over the thirty years of its existence, the Clinic has represented more than 300 individuals, local organizations, and national entities and provided more than 250,000 hours of pro bono legal services. It is the only organization in

Delaware that provides public interest environmental legal representation on a pro bono basis. In addition to litigation and advocacy, the Clinic has also assisted in educational efforts involving environmental law, and has published *Assessing the Legal Toolbox for Sea Level Rise Adaptation in Delaware* (2014) and *A Citizen's Guide to Environmental Advocacy in Delaware* (2019).

Through the site visits and subsequent planning sessions, Delaware Sea Grant and the Environmental and Natural Resources Law Clinic were able to identify common goals and objectives that would address the planning efforts of both programs. Principles of *Strategic Doing*, which is a process intended to focus efforts and create an actionable plan, were used to develop an incremental strategy for growing a partnership between the programs, which is described below.

### ***Step 1: Preliminary Stakeholder Support***

The Marine Advisory Service is the outward facing arm of Delaware Sea Grant, and has developed meaningful connections with government, businesses, academic institutions, and communities throughout Delaware. Given these relationships, Delaware Sea Grant can assist the Environmental and Natural Resources Law Clinic by relaying legal questions from stakeholders to the Clinic. This will be of benefit to the Clinic by providing interesting and challenging work for its students. Having Delaware Sea Grant serve as an intermediary will also diversify the type of legal work being performed by the Clinic. In turn, by addressing legal questions from coastal stakeholders, with which Delaware Sea Grant was previously unable to assist, the Clinic can help Delaware Sea Grant achieve its goal of translating science and policy into applications that have positive impacts for Delaware's coastal communities. Initially, questions brought to the Clinic by Delaware Sea Grant will be addressed in a one-off fashion, where the schedule, deliverable, and necessary financial support, if any, will be determined separately for each opportunity.

### ***Step 2: Incremental Growth***

If the volume of questions being brought to the Clinic by Delaware Sea Grant reaches a certain threshold, which will be determined by both programs, this one-off relationship will evolve into a more standardized, contractual relationship. Under this agreement, Delaware Sea Grant will commit to bringing a certain number of questions to the Clinic each semester, which will be addressed in exchange for a specified level of support.

### ***Step 3: Legal Fellowship***

If, over the course of this evolving relationship, the volume of legal questions being raised by Delaware stakeholders exceeds the existing capacity of the Environmental and Natural Resources Law Clinic, Delaware Sea Grant and the Clinic will pursue jointly supporting a legal fellow. Law fellowships are similar to other post-graduate fellowships in that they provide opportunities for recent graduates to gain additional supervised experience for an extended period, typically one to two years, prior to entering the professional workforce. Expanding the Environmental and Natural Resources Law Clinic to include a legal fellow is a goal of the Delaware Law School. While the dynamics of a potential fellowship will be determined at a later date, Delaware Sea Grant can likely help the Delaware Law School achieve this goal by providing connections to the Sea Grant legal network, stakeholder engagement opportunities, and/or funding.

### ***Potential Obstacles and Challenges***

Delaware Sea Grant and the Widener University Delaware Law School are cognizant that potential challenges may arise as this relationship develops and evolves, many of which are likely unforeseen at this time. Challenges that we anticipate include balancing Sea Grant's non-advocacy mission with the Clinic's other work, which often includes representation, and expanding the expertise of the Delaware Sea Grant Marine Advisory Service to include a cursory understanding of coastal law. The former will be addressed on a case-by-case basis by carefully differentiating between projects, and clearly delineating the roles and responsibilities of each organization. The latter issue is important, because without some knowledge of coastal law and policy, Delaware Sea Grant staff that are interfacing with the stakeholders will likely be unable to successfully guide discussions and identify relevant legal questions. This lack of knowledge, which was confirmed through discussions with the Marine Advisory Service staff, is anticipated to be addressed under a separate project in 2020, which is described later in this report.

### **3. Coastal Delaware Legal Needs Assessment**

Under the umbrella of this working agreement, Delaware Sea Grant and the Environmental and Natural Resources Law Clinic collaborated to solicit feedback from Delaware stakeholders regarding potential legal needs. A written survey was developed that consisted of a series of focused questions regarding topics of potential interest and the desired format for subsequent legal analysis. The survey was anonymous, but distinguished between responses based on stakeholder group (i.e., municipalities, non-profit organizations). The survey was distributed with a cover letter and return envelope to 67 Delaware municipalities, which included both local and county governments, and ten non-profit organizations. Both the survey and cover letter are included as an attachment to this report.

The total response rate was approximately 17%. Results did not vary substantially between stakeholder groups. The most pressing need for legal analysis was related to issues associated with water quality, followed by sea level rise adaptation and resiliency planning, and coastal hazards. Unfortunately, these responses were not expanded upon (e.g., respondents did not take the opportunity to identify specific issues associated with water quality with which they needed legal support). Respondents preferred legal analysis be provided in the form of a white paper.

### ***Findings***

In a general sense, the legal needs survey demonstrated the following:

1. Within Delaware, there is interest in legal information on select coastal issues. More than 50% of survey respondents expressed the need for legal analysis on matters associated with water quality, sea level rise and resiliency planning, coastal hazards and risk assessment, and coastal community sustainability.
2. There is a desire for general legal information regarding these topics, rather than individual consultations. White papers were the overwhelming preference for the format of legal analysis. Individual legal consultations were consistently the least requested format.

Collectively, these data suggest that a targeted program of making legal information available to municipal and non-profit stakeholders would be of value in Delaware.

### *Additional Analysis*

To augment the legal needs survey, Delaware Sea Grant collaborated with the Gerard J. Mangone Center for Marine Policy at the University of Delaware. This effort resulted in the evaluation of existing data, such as state and regional plans regarding climate change, to further characterize issues and needs. In light of survey responses, the evaluation focused on potential legal questions associated with the two most pressing topics identified in the survey: (1) water quality and (2) sea level rise adaptation and resiliency planning. The following sections summarize this analysis.

#### *Water Quality*

The term water quality refers to the physical, chemical and biological properties of water “in respect to its suitability for a designated use (Daniels et al., n.d.)” Water pollution may be caused by point and/or nonpoint source pollutants. A point source pollutant “enters water resources directly through a pipe, ditch, or other conveyance (Ribaud et al., 1999, p. iv).” A nonpoint source pollutant enters the water diffusely. In Delaware, non-point source pollutants are the primary cause of water quality issues. For example, fertilizer runoff and leaching septic systems may degrade surface waters (Division of Watershed Stewardship, 2019; Delaware’s Chesapeake Interagency Workgroup, 2012). Water quality in the state is regulated under a suite of federal, state and local laws, regulations, and ordinances.

Poor water quality can also have a negative effect on local economies. According to research conducted by the University of Delaware’s Water Resources Center, state watersheds and waterways support “(1) over \$6 billion in annual economic activity from water quality, flood control, water supply, fishing and wildlife viewing, recreation, agriculture, ports, forests, and parks, (2) ecosystem goods and services of \$6.7 billion per year (2010 dollars) with a net present value (NPV) of \$216.6 billion, (3) over 70,000 direct and indirect jobs with over \$2 billion in wages (Delaware Department of Natural Resources and Environmental Control, 2019, p. 5).” Because water quality encompasses a broad range of issues that include nutrient loading, surface and groundwater contamination, septic systems and degradation of aquatic habitats, the legal concerns for the different stakeholders will vary. Example questions these stakeholders may have regarding water quality include the following:

*What are the legal obligations individuals must comply with under the Delaware Nutrient Management Law?*

The Delaware Nutrient Management Law was enacted in part to regulate activities resulting in the generation and application of nutrients in order to protect ground and surface waters in the state. Under this law, individuals are required to be certified by the Nutrient Management Program if they (Delaware Department of Agriculture, n.d.):

- Apply nutrients to 10 acres or greater,
- Operate an animal feeding operation of 8 Animal Units or greater,

- Apply nutrients to lands as a component of a commercial or agriculture business in exchange for a fee or service charge, or
- Advise or consult with persons as part of the development of a Nutrient Management Plan.

To maintain their certification, individuals are required to complete approved continuing education courses before the certification expires. Individuals who have an animal feeding operation of 8 animal units or greater and do not spread nutrients on 10 or more acres have to prepare an animal waste management plan (Shober & Riggi, 2013).

*What are the legal requirements for the installation, operation and maintenance of standard septic systems installed on residential properties?*

Under 7 Delaware Administration Code 7101, homeowners are required to obtain approval from the Department of Natural Resources and Environmental Control (DNREC) - Division of Water before installing a standard septic system. DNREC requires specific licensed professionals work with homeowners during each step of the approval process.

Step 1. Site Evaluation: The homeowner must hire a licensed Class D soil scientist to evaluate the property. The soil scientist prepares and submits a site evaluation report to DNREC for their approval. Based on this information, the soil scientist determines the type of septic system that can be used on the property.

Step 2. System Design: The homeowner must hire a licensed designer to design and obtain a permit for the proposed septic system. The type of licensed designer will differ depending on the type of proposed septic system. For example, if a gravity-based system is proposed a Class B designer must be hired.

Step 3. Installation: The homeowner must hire a licensed Class E system contractor to install the septic system.

Upon installation, the homeowner is responsible for the operation and maintenance of the septic system. DNREC requires septic systems be pumped every 3 years by a licensed Class F liquid waste hauler. Homeowners should keep a copy of documents showing the system has been pumped in the event DNREC requests this information. If a homeowner thinks there are issues with their septic systems, they should contact a licensed Class E system contractor or licensed Class H system inspector. Individuals who need financial assistance to install a septic system may be eligible for DNREC's Septic System Loan Program.

*What are some of the potential permits and requirements local governments should be aware of during the planning phase for green infrastructure projects?*

The permits associated with green infrastructure projects differ based on the project purpose and location. If a project is being used to address stormwater issues, local governments need to comply with the Sediment and Stormwater Programs requirements

relating to “plan review, construction inspection, and maintenance inspection for their geographic boundaries (de Mooy, et al., 2016, p. 8)”. If a project occurs within a tidal wetland, tidal or non-tidal waters of the state, authorization from DNREC-Wetlands and Subaqueous Land Section is required. Additional permitting from the U.S. Corps of Engineers maybe required under Section 401 and Section 404 of the Clean Water Act. Local ordinances and codes should be reviewed to check for setback requirements and if native plants can be used in vegetative buffers (de Mooy et al., 2016). Please note that the Delaware Sea Grant Marine Advisory Service can help local governments with the design, implementation and permitting requirements associated with green infrastructure projects.

### *Sea Level Rise Adaptation*

The low-lying coastline of Delaware is highly susceptible to the effects of sea level rise. These effects include saltwater intrusion into agriculture lands and wells, damage to public infrastructure like roads, increase in coastal erosion, and nuisance flooding during storm events (Callahan et al., 2017). Because Delaware’s local economy is tied to the coastline, it is important that local governments protect their communities from being negatively impacted by sea level rise. However, the adaptation measures used by local governments can result in litigation from property owners, businesses and other individuals or groups. Similarly, if a local government decides not to address sea level rise, they risk being sued for not protecting public trust lands (Environmental Law Institute, 2017).

Many of the adaptation measures used to minimize the effects of sea level rise may affect private property rights and public trust lands. Therefore, local governments and private property owners need to understand certain overarching legal principles (Table 1). Regardless of the adaptation strategy used, local governments need to comply with federal, state and local laws, regulations, and ordinances.

**Table 1. Overarching Legal Principles**

<b>Legal Principle</b>	<b>Definition</b>
Public Trust Doctrine	Principle that certain areas are protected for public use such as commerce and recreation. For coastal states, this includes all navigable waters and land that occurs below the mean high tide.
Takings Clause	Under the 5 <sup>th</sup> Amendment, governments cannot “take” private property without just compensation to the property owner.
Eminent Domain	The power for a government to take private property for public use.
Non-conforming Uses	When a property is zoned for one use but due to subsequent zoning changes that use is no longer allowed.

Source: Cornell Law School, 2019

Table 2 summarizes potential adaptation strategies local governments can use to address sea level rise and legal issues that may occur. Many of these strategies may also be used by private property owners and the legal issues may be the same.



**Table 2. Potential Adaptation Measures**

<b>Adaptation Measure</b>	<b>Description</b>	<b>Potential Legal Issue(s)</b>
Zoning Restrictions	Zoning is used to identify permitted uses, such as commercial or residential, in an area. Local governments can use zoning restrictions to limit or prohibit construction in areas susceptible to sea level rise	Takings Clause, Non-conforming Uses
Building Restrictions	Building restrictions limit the extent to which a property owner can rebuild after a natural event like flooding. Local governments can restrict redevelopment in vulnerable areas after a flood event.	Takings Clause
Setbacks and Buffers	Used to protect natural areas by requiring development be set back from a specific location or leave areas undeveloped. Local governments can require setbacks from coastal areas and require natural buffers, like dune systems, be left in place.	Takings Clause, Non-conforming Uses
Conservation Easements	Mechanism used by governments to restrict development on land while allowing the land to stay in private ownership. Local governments can acquire conservation easements on vulnerable properties.	Must be voluntary under the Uniform Conservation Easement Law, Who oversees the easement, Compliance with additional state and federal laws depending on the use of the easement
Rolling Easements	Type of conservation easement that allows for changes in the property boundary due to inland migration overtime. Local governments can use rolling easements to limit armoring while still allowing for development in upland areas.	Eminent Domain, Type of rolling easement
Transferable Development Credits	Mechanism used to limit development in one area and transfer the development rights to another area. Local governments can limit development within vulnerable areas and allow developers to transfer their development rights to less vulnerable areas.	Fair evaluation of the land by the local government, Need to have the designated “value” in reality
Hard Armoring	Installation of engineered structure like seawalls and revetments to protect coastal areas. Local governments can limit hard armoring in sensitive areas.	Takings Clause, Understanding the permitting process, Public opposition
Soft Armoring	Installation of engineered projects that mimic nature, like beach nourishment, wetland restoration and living shorelines. Local governments can require soft armoring to protect vulnerable areas.	Takings Clause, Understanding the permitting process, Public opposition

Source: Environmental Law Institute, 2017; Kristl, 2014; Grannis, 2011

### **Path Forward**

This report lays out a framework of incremental growth that Delaware Sea Grant, in collaboration with the Widener University Delaware Law School, can use to expand our program

and provide legal analysis to our coastal stakeholders. As noted earlier in this report, the first step in doing so is to expand the expertise of the Delaware Sea Grant Marine Advisory Service to include a basic understanding of coastal law. This will enable Delaware Sea Grant staff that routinely interface with stakeholders to expand upon the broad results of the legal needs assessment and identify specific legal questions that our stakeholders are struggling to address. To provide this legal knowledge to our staff, Delaware Sea Grant anticipates partnering with the Environmental and Natural Resources Law Clinic to host an internal workshop. The workshop will focus on providing an overview of pertinent law and policy issues within the area of expertise of each staff member. We anticipate providing the workshop in early spring of 2020, further exploring stakeholder needs over the spring and early summer, and identifying a specific project to pursue in partnership with the Environmental and Natural Resources Law Clinic during the fall 2020 semester.

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