



## Sustainability Assessment & Strategic Planning

Woods Hole Group has been in the business of providing clients with sustainable and resilient solutions to the most challenging problems since our incorporation in 1986. Our Team includes sustainability planners, environmental scientists, coastal modelers and engineers, and risk assessors. We are passionate about helping organizations navigate the benefits, challenges and complexities of sustainability planning, assessment and management. From the development of customized sustainability plans, to benchmarking and monitoring sustainability metrics, to assessing vulnerabilities in a changing climate, the Team provides innovative solutions ensuring our clients meet their sustainability objectives.

### Areas of Expertise

#### Climate Change Vulnerability Assessment

*Assessing and managing ecological risks in a changing world*

Natural resources provide a host of ecosystem services, and are increasingly threatened by climate change, among other emerging stressors. Our Sustainability Team adapts tested frameworks and develops innovative tools to characterize, protect, and sustain natural systems. In partnership with in-house experts in coastal modeling and engineering, we help landowners and natural resource managers understand the vulnerability of their properties to sea level rise and storm surge, and to changes in precipitation and temperature. Considering the client's management goals, we evaluate risk and craft adaptation plans that enhance resiliency in natural systems. Results are used by clients to prioritize assets at risk, and to take action to minimize future damage.

#### Greenhouse Gas Assessment

*You can't manage what you don't measure*

Whether to improve operational efficiencies, satisfy supply chain compliance requests, meet regulatory reporting requirements, or as part of an Environmental Impact Assessment, our Sustainability Team helps organizations benchmark and track the greenhouse gas impacts of current and proposed activities. We are well-versed in standard methodologies, including the Greenhouse Gas Protocol and ISO 14064. We can create customized carbon calculators and dashboards to monitor Scope 1, 2 and 3 greenhouse gas emissions, facilitate annual sustainability reporting, and compare project alternatives.

#### Land Use Planning and Sustainable Design

*Planning and design with nature in mind*

Green and hybrid infrastructure designs in the built environment that recognize and work with the natural world achieve sustainability and resilience. Our Sustainability Team uses the principles of biophilic design, biomimicry, industrial ecology, and landscape ecology to optimize material flows and ecological flows in developed systems. We also leverage our climate change vulnerability expertise to advise developers and planners on the strategic use and protection of land for an uncertain future.



- **Coastal Sciences, Engineering & Planning**
- **Oceanography & Measurement Systems**
- **Applied Ecology & Sustainability**



**Woods Hole Group, Inc.**  
81 Technology Park Drive  
East Falmouth, MA 02536  
Tel: 508.540.8080  
Fax: 508.540.1001  
Web: [www.woodsholegroup.com](http://www.woodsholegroup.com)

**Houston Office**  
12705 South Kirkwood Road  
Suite 100  
Stafford, TX 77477  
Tel: 281.565.1240

**Delaware Office**  
100 Carlson Way, Suite 9  
Capital City Business Park  
Dover, DE 19901-2365  
Tel: 302.734.1434  
Fax: 302.659.3004

**Have a question? Feel free to contact  
one our experts for help:**

**Joseph Famely**  
Environmental Scientist /  
Project Manager  
[jfamely@whgrp.com](mailto:jfamely@whgrp.com)

**Theodore Wickwire**  
Senior Environmental Scientist /  
Team Leader  
[twickwire@whgrp.com](mailto:twickwire@whgrp.com)

## Sustainability Planning

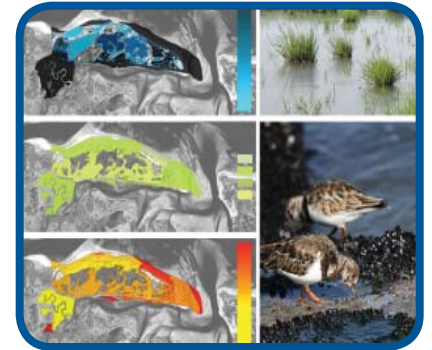
*Transparency drives positive change*

Understanding and communicating economic, environmental, and social performance helps organizations identify risks and opportunities, set goals, and continuously improve. Our Sustainability Team helps organizations prepare sustainability reports following established frameworks, including the Global Reporting Initiative and the Carbon Disclosure Project, or customize a report to your organization's needs. We help clients implement strategic sustainability programs and plan for future climate change impacts.

## Impact Investment Verification

*Triple bottom line due diligence*

With recent growth in sustainable, responsible, and impact investing, investment managers increasingly need verifiable evidence that projects are performing as intended – yielding environmental, social, and financial returns. Our Sustainability Team provides comprehensive reviews of investment portfolios, evaluating each project on a customized suite of sustainability metrics (e.g. materiality, carbon intensity, water efficiency). We can then develop informed strategies for monitoring and continuous improvement on these metrics to maximize value and performance.



## Featured Projects

*Coastal Vulnerability Assessment and Adaptation Prioritization  
(Trustees of Reservations):*

Conducted sea level rise and storm surge vulnerability assessments at 42 coastal properties and calculated mission-driven risk indices to inform the prioritization of resiliency projects to protect vulnerable infrastructure, cultural resources and priority habitats.

*Seagrass Restoration Optimization Strategies in a Changing Climate – Southern New England and New York (The Nature Conservancy):*

Evaluated interactive effects of multiple stressors, including nutrients and climate change, on eelgrass populations in 30 estuaries in MA, RI, CT, and NY. Conveyed strategies to optimize eelgrass preservation and restoration investments.

*Greenhouse Gas Assessment of Development Alternatives for a New York State Environmental Impact Statement (Hudson River Valley Resorts, LLC):*

Built a custom greenhouse gas calculator to support the alternatives analysis for a green resort development project's EIS. Evaluated the greenhouse gas impacts from Scope 1, 2 and 3 emissions (construction and operation) associated with various development alternatives, which informed the developer's selection of a preferred alternative and mitigation actions.

*Yale Community Carbon Fund Calculator (Yale Office of Sustainability):*

Developed a web-based carbon calculator to inventory greenhouse gas emissions associated with University commuting, travel, and events. Users quantify their impacts and can donate to an internal offset program funding energy efficiency projects in local low-income communities.

*Sustainability Program Implementation (Curtis Packaging):*

Facilitated a high-end packaging manufacturer's sustainability reporting under GRI and CDP, and developed a dashboard to track performance based on environmental, social, and financial metrics.