Our coasts are at risk. SAGE offers a solution.

What is SAGE?

SAGE, the Systems Approach to Geomorphic Engineering, is a community of practice dedicated to protecting our coastlines. Coastal areas are home to more than half of the U.S. population, rich in natural resources, and vital to our economy. Increasingly, shorelines are subject to intense storms, floods, loss of habitat, and sea-level rise.

SAGE promotes the use of both green (natural and nature-based) and gray (hard, structural engineering) approaches to make our coasts more resilient. Our systems approach addresses large areas of shoreline to foster thriving communities and flourishing natural ecosystems.

Who is involved?

SAGE is a collaborative effort among federal and state agencies, non-governmental organizations, academic institutions, and both private business and engineering firms. Initially envisioned by the U.S. Army Corps of Engineers, National Oceanic & Atmospheric Administration and Federal Emergency Management Agency, participation continues to grow.

Here are just a few examples of the many partners who are already participating:

American Society of Civil Engineers Virginia Institute of Marine Science States of Maryland, Rhode Island, New York, and California The Nature Conservancy The Water Institute of the Gulf University of Rhode Island Coastal States Organization For a complete list, please visit www.SAGEcoast.org.

Goals & Principles

- Understand impacts on people and nature along coastline
- Advance landscape-scale solutions to coastal resiliency
- Protect and enhance natural coastal features when appropriate
- Collaborate with both public and private sectors
- Develop innovative techniques and solutions to adapt coasts
- Share science, tools and demos to inform best practices
- Apply lessons learned both domestically and internationally



Resilient Shorelines. Thriving Communities.

Why SAGE?

Communities are looking for more effective and affordable approaches to coastal protection. Shared understanding calls for a change in existing coastal management due to increasing development and population, threats to natural habitat, projections for stronger and more frequent coastal storms, rising sea levels, and growing fiscal constraints at all levels of government. We need affordable, integrated solutions that still meet the objectives of building community and ecosystem resilience. The collaborative approach of SAGE provides the answer.

What Is The Focus Of SAGE?

The focus of SAGE is to provide science, policy, and management resources regarding coastal resiliency. The community of practice will help to: share what we know about utilizing natural systems to protect against coastal hazards; identify what more we need to learn about greener techniques; and promote innovative, hybrid approaches that combine green with gray solutions. Ultimately, the objective is to offer an economical option to sustain a healthy environment and create a resilient shoreline.

How Will SAGE Be Funded?

While SAGE is a community of practice and not a grant-making organization, it can provide a forum to leverage resources for coastal projects that incorporate hybrid approaches. Partner organizations have committed to providing in-kind support to develop the community of practice.

How Can I Become Involved?

SAGE is always seeking the opportunity for interested parties to share expertise and views in a forum designed to explore collective knowledge about hybrid coastal engineering and softer approaches to coastal protection. To learn more, visit www.SAGEcoast.org or e-mail Charley Chesnutt at Charles.B.Chesnutt@usace.army.mil.















O Photography by Kara Reeve