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.

Our partners include:

U.S. Army Corps of Engineers
National Oceanic & Atmospheric Administration
Federal Emergency Management Agency
American Society of Civil Engineers
Center for Coastal Resources Management, Virginia Institute of Marine Science
The Nature Conservancy
The Conservation Fund
The Water Institute of the Gulf
University of Rhode Island
Coastal States Organization
…and more.

Goals & Principles

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

www.ccrm.vims.edu/sage

RESILIENT SHORELINES
SAGE
THRIVING COMMUNITIES

SYSTEMS APPROACH TO GEOMORPHIC ENGINEERING

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?

SAGE has a diverse funding strategy. SAGE will promote and implement new, or adjust current, policy mechanisms, regulations and administrative processes; develop better information on the effectiveness and benefit of investment in system-wide solutions; and find new financial partners. 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.

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.ccrm.vims.edu/sage/ or e-mail Charley Chesnutt at Charles.B.Chesnutt@usace.army.mil

RESILIENT SHORELINES SAGE THRIVING COMMUNITIES
SYSTEMS APPROACH TO GEOMORPHIC ENGINEERING

NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

US Army Corps of Engineers®

Developed with support and funding from SAGE, NOAA and USACE.
October 2014

www.ccrm.vims.edu/sage