



# National Shoreline Management Study

## Eroding U.S. Shorelines - A Call for Resilience Planning

The congressionally-authorized National Shoreline Management Study (NSMS) is the first undertaking in nearly a half-century to document the physical, economic, environmental, and social impacts of shoreline change across each region of the U.S. Under the leadership of the *Institute for Water Resources* of the U.S. Army Corps of Engineers, NSMS provides coastal scientists, government policymakers, and stakeholders with information about the coastal regions most in need of resilience planning.

### National Overview

Continual erosion of the U.S. shoreline presents a considerable financial and safety risk to coastal infrastructure, economies, and populations. Individual regions face unique challenges and require solutions reflective of that. Federal leadership is critical to facilitate and support regional and local efforts to identify shoreline management issues and develop shoreline management plans as a basis for action. **Resilience planning to address potential future risks allows for a fundamental shift away from costly and near-sighted disaster-driven responses.**

As facilitators with technical expertise, **the U.S. Army Corps of Engineers and other Federal agencies can assist states and local governments to form regional collaborations** that involve key stakeholder groups, as well as academia and the private sector. The lessons learned from NSMS show that tackling the dual problems of shoreline erosion and sediment buildup in channels and inlets is best done regionally and proactively. **Similarly, it is through such alliances that existing funding efficiencies can be achieved and alternative sources of funding pursued.**

National Totals	Shoreline Counties	% of U.S. Total
<b>Population</b>	119.32 million	37 %
<b>GDP</b>	\$6,843.3 billion	43 %
<b>Employment</b>	51.19 million	38 %

Source: National Oceans Economic Program (NOEP) National Report 2016

### Pacific Northwest (AK, WA, OR)

The general trend along the Northern Pacific coastline is one of retreat determined by the interaction of physical forces and the underlying geology. Storm activity is the primary driver of shoreline change throughout the region. Strong storms and the associated wave, wind, and sea-level conditions contribute to discrete periods of erosion and accretion.

These changes are taking place in a coastal environment with diverse habitats, including wetlands, estuaries, mudflats, permafrost, sandy beaches, and dunes. These areas provide important habitat to a variety of plant and animal life.

**Coastal changes among the Northwest Pacific coastline have potentially large social and economic impacts.** Commercial fishing, navigation, and mineral extraction are keys to the economies of the Pacific Northwest and Alaska. Shoreline-adjacent counties represent 88, 79, and 43 percent of GDP in Alaska, Washington, and Oregon respectively.

North Pacific Totals	Shoreline Counties	% of U.S. Total
<b>Population</b>	6.91m	2.2 %
<b>GDP</b>	\$481.7bn	3.0 %
<b>Employment</b>	3.2m	2.3 %

Source: National Oceans Economic Program (NOEP) National Report 2016