



## HEALTHY BEACHES ARE VITAL TO OUR WAY OF LIFE

People in the United States highly prize the thousands of miles of sandy beaches along our nation's coasts. Our beaches – a precious national resource – help define the physical, economic, environmental, and social fabric of our nation.

Many of us choose to live near a beach. The population in counties along U.S. coasts more than doubled from 1960 to 2000. By 2006, more than one half of all Americans lived in coastal counties, which make up just 17 percent of land in the 48 contiguous states. People are still moving to the coast, which sees 3,600 new residents daily.<sup>1</sup>

**Development continues near our nation's beaches.** Over the last three decades, Americans have built 19 million homes in coastal areas, and people are still building – at the rate of 1,500 homes a day.<sup>1,2</sup> New roads, bridges, and sewers are being constructed to support these increasing populations.

Travelers from diverse economic, ethnic, and racial populations inside and outside the United States choose the beach over any other American tourist attraction.<sup>3</sup>

Each year, our coasts are the preferred vacation destination for an estimated 180 million people, who spend billions of dollars and support more than 2 million jobs.<sup>2</sup> As long as our beaches are healthy, they will continue to lure national and international travelers.



Local, regional, and national economies thrive on the prosperity of American beaches. Coastal watersheds generated a remarkable \$6 trillion in

2003 – more than half of the nation's economy.<sup>1</sup> The tourism industry is now the nation's largest employer and fastest growing economic sector. Shipping and commercial fishing industries also contribute significantly to coastal regions and the nation.

Clean oceans and wide beaches are crucial elements of our environment. Beaches sustain animals, fish, sea turtles, birds, plants, and other wildlife as well as many rare, threatened, and endangered species.



Florida's 800 miles of sandy beaches, which contribute more than \$15 billion annually to the state's economy, are its greatest economic asset.<sup>4</sup>

Healthy beaches not only are important to our quality of life but also protect people and property along the coast from hurricanes and coastal storms

A beach's size, shape, and sand volume help determine how well the beach can protect a developed area during a storm. All the various elements of a beach, such as bluffs, dunes, berms, and offshore sand bars – even the width and slope of the beach itself – offer a level of natural protection against hurricanes and coastal storms by absorbing and dissipating the energy of breaking waves, either seaward or on the beach itself.

## DYNAMIC AND DIVERSE, COASTAL BEACHES FUNCTION AS A SYSTEM

For thousands of years, the forces of wind, water, storms, sea level changes, and other natural processes have moved the sediments that shape and reshape our coastlines and beaches

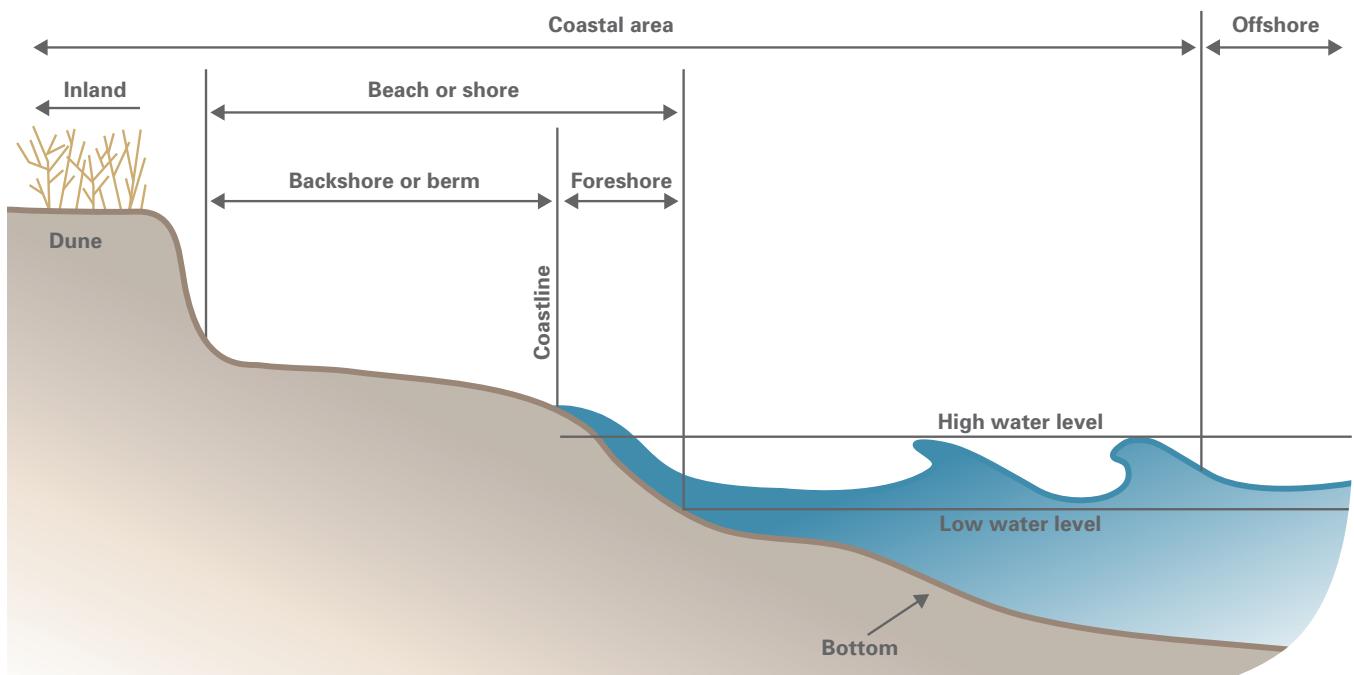
These sediments, which range from fine, white sand to coarse gravel and cobblestones, continuously build up, or accrete, only to drift away, or erode, again and again over time in complex and sometimes unpredictable ways. Wind, tides, currents, and waves constantly keep sediment on the move to build up and wear down natural features such as bluffs, dunes, beaches, sand bars, and inlets. Under normal conditions, wind shapes the dry beach and its dunes while tides, currents, and waves shape the "wet" part of the beach.



Dunes like this provide protection to people, property, and infrastructure, such as roads, along the coast.



Wind, currents, tides, and waves move sediment continuously.



Coastal beaches function as a system. The beach not only includes the dunes and berm, or the dry part of the beach, but also the wet part of the beach that slopes underwater.