# **Habitat Facts**

Coastal and marine habitats provide a wide range of valuable services to the nation. These include providing jobs and income from fisheries, recreation, and tourism and protecting coastal communities from storms, floods and other hazards. Many of these habitats and services have been lost or degraded or are threatened by human activities and climate change. NOAA's mission is to protect and restore these valuable habitats for current and future generations.

## The Value of Healthy Habitats

- Estuaries provide habitat for more than 75 percent of America's commercial fish catch, and for 80 to 90 percent of the recreational fish catch.<sup>1</sup> Fisheries contribute over \$70 billion to the Gross Domestic Product (GDP).<sup>2</sup>
- Nationwide, commercial and recreational fishing, boating, tourism and other coastal industries provide more than 28 million jobs.<sup>1</sup>
- Together, coastal watershed counties, contribute to over \$4.5 trillion, or one-half of the nation's GDP.<sup>3</sup>
- Over 180 million people visit beaches and other coastal habitats every year; and coastal recreation and tourism generate \$8 billion to \$12 billion annually.<sup>1</sup>
- U.S. coastal wetlands reduce the damaging effects of hurricanes and other storms on coastal communities, providing more than \$23 billion in annual storm protection services in areas most vulnerable to hurricane and tropical storm surges.<sup>4</sup>

#### **Threats and Pressures to Habitat**

- At current rates of coastal development, more than one-quarter of the nation's coastal lands will be altered by 2025.<sup>5</sup>
- More than 60 percent of our coastal rivers and bays are moderately to severely degraded by nutrient runoff.<sup>6</sup>
- More than 13,000 beaches were closed or under pollution advisories in 2001, an increase of 20 percent from the previous year.<sup>7</sup>
- In the U.S., a sea level rise of one foot could eliminate 17–43% of today's wetlands.<sup>8</sup>
- More than 75,000 large dams and over 2.5 million total barriers block migratory fish access to 600,000 miles of rivers and streams in the US.<sup>9</sup>

# **Habitat Status and Trends**

- Since early colonization the U.S. has lost over 50 percent (over 110 million acres) of its wetlands.<sup>10</sup>
- Coastal wetlands continue to disappear at higher rates than inland areas. Between 1998 and 2004 the Great Lakes, Atlantic Ocean and Gulf of Mexico have lost over 59,000 acres of coastal wetlands annually.<sup>11</sup>
- The estimated annual monetary loss of coastal wetland services is \$14.9 trillion<sup>12</sup>
- Recent trends in seagrass habitat indicate a loss of more than 50 percent in Tampa Bay, 76 percent in the Mississippi Sound and 90 percent in Galveston Bay.



#### **NOAA Habitat Response**

## Restoration

- Since 1996 nearly 2,000 restoration projects have restored over 60,000 acres of habitat.
- More than 2,600 stream miles have been opened for fish passage through 2008.
- Since 2005 an estimated \$50 million has been provided to support nearly 800 coastal fisheries habitat restoration projects in the United States.

#### **Protection**

- Since 2006, NMFS, has protected over 684,000 square miles of sea floor from impacts of bottom trawling, an area larger than the state of Alaska.
- 3,000 permit actions are reviewed annually to minimize adverse impacts on Essential Fish Habitat.
- At the end of 2008, 189 natural resource damage assessment cases had been settled generating more than \$440 million to protect or restore thousands of acres of habitat and return valuable resources and services to the public.

#### **Stewardship**

- Since 1996 over 165,000 volunteers have been involved in habitat restoration.
- The NOAA Chesapeake Bay Office's Bay Watershed Education and Training (B-WET) Program reaches and estimated 14,500 students and 3,300 teachers annually.
- Since 1996, 22 national and regional partnership agreements have been created to assist with communitybased restoration.



#### References:

- 1- National Coastal Condition Report II (2005) EPA
- 2- Fisheries Economics of the U.S. 2006
- 3- U.S. Commission on Ocean Policy, 2004. An Ocean Blueprint for the 21st Century.
- 4- Costanza, R., O. Perez-Maqueo, M. Luisa Martines, P. Sutton, S. Anderson, K. Mulder. 2008. The Value of Coastal Wetlands for Hurricane Protection. Ambio Vol 37 No. 4 pg. 241-248
- 5- Beach, D. 2002. Coastal Sprawl: The Effects of Urban Design on Aquatic Ecosystems in the U.S., Pew Ocean Commission, Arlington, VA
- 6- Boesch, D.F., R.H. Burroughs, J.E. Baker, R.P. Mason, C.L. Rowe, and R.L. Siefert. 2001.

  Marine Pollution in the United States. Prepared for the Pew Oceans Commission. Arlington, VA.
- 7- Pew Oceans Commission, 2003. America's Living Oceans Charting a Course for Sea Change.
- 8- Science Museum of the National Academy of Sciences, 2008.
- 9- US Army Corps of Engineers National Inventory of Dams; National Research Council; National Park Service.
- 10- Fretwell, J.D., J.S. Williams and P.J. Redman. National Water Summary on Wetland Resources, USGS Water-Supply Paper 2425. Washington, DC: U.S. Geological Survey, 1996. (As cited by the U.S. Commission on Ocean Policy on September 20, 2004, An Ocean Blueprint for the 21st Century).
- 11- Stedman, S. and T.E. Dahl. 2008. Status and trends of wetlands in the coastal watersheds of the Eastern United States 1998 to 2004. National Oceanic and Atmospheric Administration, National Marine Fisheries Service and U.S. Department of the Interior, Fish and Wildlife Service. (32 pages)
- 12- Economic Statistics for NOAA 2008.
- 13- Bookman, C.A., T.J. Culliton, and M.A. Warren. Trends in U.S. Coastal Regions, 1970-1998.

  Addendum to Trends and Future Challenges for U.S. National Ocean and Coastal Policy.

  Silver Spring MD: NOAA, 1999.