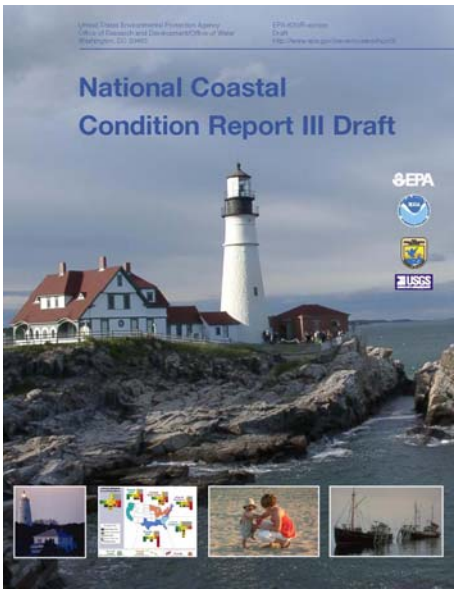
The National Coastal Condition Report III

What Is the National Coastal Condition Report III?



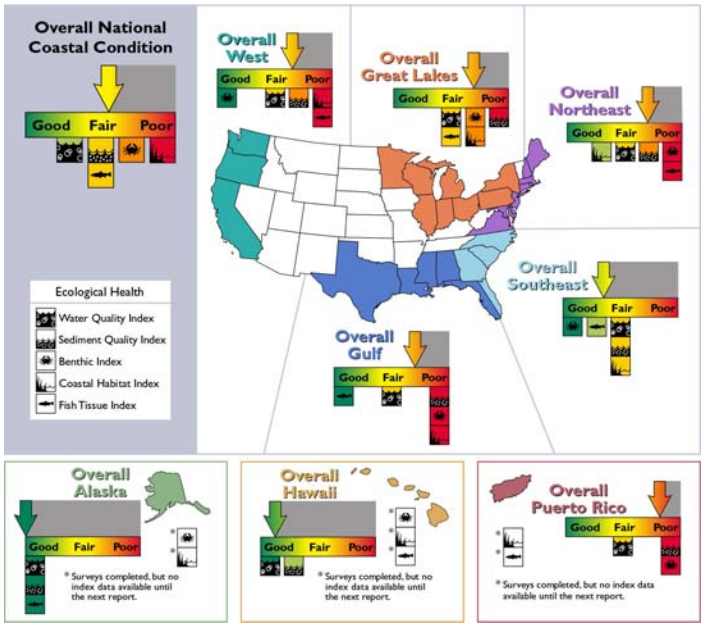
The National Coastal Condition Report III (NCCR III) is the third in a series of environmental assessments of U.S. coastal waters and the Great Lakes. The report includes assessments of all the nation's estuaries in the contiguous 48 states and Puerto Rico, south-central Alaska, and Hawaii. The NCCR III presents three main types of data: (1) coastal monitoring data, (2) offshore fisheries data, and (3) assessment and advisory data. The NCCR III relies heavily on coastal monitoring data from EPA's National Coastal Assessment (NCA) to assess coastal condition by evaluating five indicators of condition—water quality, sediment quality, benthic community condition, coastal habitat loss, and fish tissue contaminants—in each region of the U.S. (Northeast Coast, Southeast Coast, Gulf Coast, West Coast, Great Lakes, Alaska, Hawaii, and Puerto Rico).

Background

The National Coastal Condition Reports represent collaboration among EPA (OW and ORD), NOAA, USGS, USFWS, and coastal state agencies. The first National Coastal Condition Report (NCCR I), published in 2001, reported that the nation's estuarine resources were in fair condition. The NCCR I used available data from 1990 to 1996 to characterize approximately 70% of the nation's estuarine resources. The second National Coastal Condition Report (NCCR II) was based on available data from 1997 to 2000. These data were representative of 100% of estuarine acreage in the conterminous 48 states and Puerto Rico, and showed that the nation's coastal waters continued to be in fair condition. This third National Coastal Condition Report assesses condition of the nation's coastal waters, including Alaska and Hawaii, based primarily on NCA data collected in 2001 and 2002. The condition of the nation's coastal waters continues to be fair. An analysis of temporal changes in estuarine condition from 1990 to 2002 is presented for the nation's coastal waters and by region.

What Is the Overall Condition of the Nation's Coastal Waters?

The overall condition of the nation's coastal waters is fair, using the five key indicators of ecological health mentioned below. For each of these five key indicators, we assigned a score of good, fair, or poor to each coastal region of the U.S. We then averaged these ratings to create overall regional and national scores illustrated in the map below, using "traffic light" color scoring.



Summary of the Findings

- Overall condition of the nation's coastal waters is fair. This rating is based on five indicators of ecological condition: water quality index (including dissolved oxygen, chlorophyll a, nitrogen, phosphorus, and water clarity), sediment quality index (including sediment toxicity, sediment contaminants, and sediment total organic carbon [TOC]), benthic index, coastal habitat index, and a fish tissue contaminants index.
- For water quality, 57% of assessed resources are in good condition, whereas 6% are in poor condition, and 34% are fair condition.
- 17% of estuarine waters are impaired based on the water clarity data presented in this report. Water clarity is important for the health of submerged aquatic vegetation and valued for aesthetics and recreation.
- 18% of estuarine waters are impaired for fishing, based on the risk-based noncancer guidelines for moderate consumption. Suitability of waters for fishing is measured using the fish tissue contaminants index in this report.
- The indicators that show the poorest conditions throughout the United States are coastal habitat condition, sediment quality, and benthic condition. The indicators that generally show the best condition are the individual components of water quality—dissolved oxygen and dissolved inorganic nitrogen (DIN).
- Comparison of the condition scores shows that overall condition in U.S. coastal waters has improved slightly since the 1990s. Although the overall condition of U.S. coastal waters is rated as fair in all three reports, the score increased from 2.0 to 2.3 from NCCRI to NCCRII and increased to 2.8 in NCCRIII with the addition of Alaska and Hawaii (2.3 not including AK and HI).

Comparison of Scores for Indicators of Condition by Region from three NCCRs.

	Gulf Coast			Southeast Coast			Northeast Coast			S. Central Alaska[3]	Hawaii[3]	West Coast[2]			Great Lakes[2]			Puerto Rico[2]		United States[4]			
INDEX	v1	v2	v3	v1	v2	v3	v1	v2	v3	v3	v3	v1	v2	v3	v1	v2	v3	v2	v3	v1	v2	v3[a]	v3[b]
Water Quality	1	3	3	4	4	3	1	2	4	5	5	1	3	3	1	3	3	3	3	1.5	3.2	3.3	3.9
Sediment Quality	3	3	1	4	4	3	2	1	2	5	4	2	2	2	1	1	1	1	1	2.3	2.1	1.6	2.8
Coastal Habitat	1	1	1	2	3	3	3	4	4	--	--	1	1	1	1	2	2	--	--	1.6	1.7	1.7	1.7
Benthic	1	2	1	3	3	5	1	1	1	--	--	3	3	5	1	2	2	1	1	1.5	2.0	2.1	2.1
Fish Tissue Contaminants	3	3	5	5	5	4	2	1	1	5	--	3	1	1	3	3	3	--	--	3.1	2.7	2.9	3.4
Overall	**1.8**	**2.4**	**2.2**	**3.6**	**3.8**	**3.6**	**1.8**	**1.8**	**2.4**	**5.0**	**4.5**	**2.0**	**2.0**	**2.4**	**1.4**	**2.2**	**2.2**	**1.7**	**1.7**	**2.0**	**2.3**	**2.3**	**2.8**

Expected Impact

Coastal waters are valuable from both an environmental and economic perspective. These waters are vulnerable to pollution from diverse sources. EPA expects that this report on the condition of coastal waters will support more informed decisions concerning protection of this resource and will increase public awareness about the extent and seriousness of pollution in these waters.

Visit EPA's website at http://www.epa.gov/owow/oceans/nccr/ to access the NCCR III.