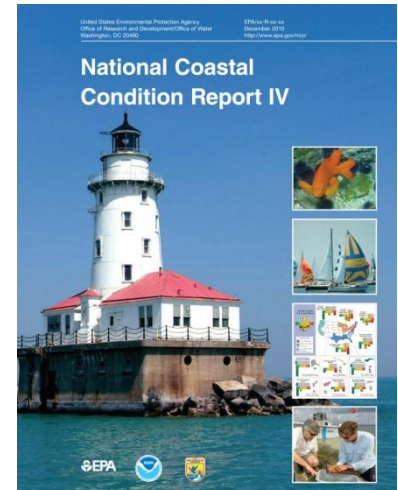


# The National Coastal Condition Report IV

## What is the National Coastal Condition Report IV?

The National Coastal Condition Report IV (NCCR IV) is the fourth in a series of environmental assessments of U.S. coastal waters and the Great Lakes. The report includes assessments of all the Nation's coastal waters in the contiguous 48 states and Puerto Rico, south-eastern Alaska, Hawaii, the U.S. Virgin Islands, Guam, and American Samoa. The NCCR IV presents four main types of data: (1) coastal monitoring data, (2) coastal ocean/ offshore monitoring data, (3) offshore fisheries data, and (4) beach assessment and fish advisory data. The NCCR IV relies heavily on coastal monitoring data from EPA's National Coastal Assessment (NCA) to assess coastal condition by evaluating five indices of condition—water quality, sediment quality, benthic community condition, coastal habitat loss, and fish tissue contaminants.

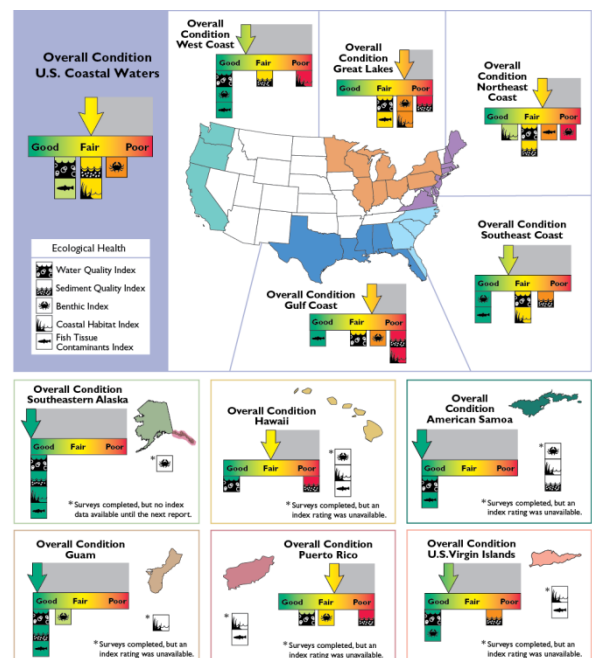


## Uses of the National Coastal Condition Reports

The NCCRs are designed to help us better understand the condition of the nation's coastal waters, whether that condition is getting better or worse, and how different regions compare. The NCCR reports, however, cannot represent all individual coastal and estuarine systems of the U.S. and are based on a limited number of ecological indices and component indicators for which nationally consistent data sets are available to support estimates of ecological condition. The assessments provided in this report, and more importantly, the underlying data used to develop the assessments, provide important insights into the historical coastal conditions at state, regional, and national scales. For example, the National Coastal Assessment data have been used to provide insight into the conditions in the estuaries of Louisiana and Mississippi prior to Hurricane Katrina. These data sets are also useful, along with data collected by others, in helping us to understand conditions in Gulf of Mexico estuaries prior to the Deepwater Horizon incident and after the BP Oil Spill. However, the methodology and data used in this report were not specifically designed to assess the condition of the Gulf from the perspective of oil spills as an ecological stressor. This report does not include, for example, data on certain oil-spill-related related contaminants such as alkylated PAHs or volatile organic compounds. Nor does this report include data on dispersant compounds, or on all indicators of oil spill-related exposure that might be required in an environmental assessment of ecological conditions associated with oil as a stressor.

## Background

The National Coastal Condition Reports represent collaboration among EPA, the National Oceanographic Atmospheric Administration, U.S. Fish and Wildlife Service, and coastal state agencies. The first National Coastal Condition Report (NCCR I), published in 2001, reported that the Nation's coastal resources were in fair condition. The NCCR I used available data from 1990 to 1996 to characterize approximately 70% of the Nation's coastal resources. The second National Coastal Condition Report (NCCR II) was based on data from 1997 to 2000 representative of 100% of coastal area in the contiguous 48 states and Puerto Rico, and showed that the Nation's coastal waters continued to be in fair condition. The third National Coastal Condition Report (NCCR III) assessed condition of the Nation's coastal waters, including Alaska and Hawaii, based primarily on NCA data collected in 2001 and 2002, and indicated that the condition remained fair. For the first time, NCCR III also included an analysis of temporal changes in condition from 1990 to 2002, presented for the Nation's coastal waters and by region. This fourth NCCR presents an assessment of coastal water condition based on data collected from 2003 to 2006, and for the first time includes the U.S. Virgin Islands, Guam, and American Samoa. Temporal changes from 1990 to 2006 are presented nationally and regionally.



## 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 indices of ecological health. For each of these five key indices, a score of good, fair, or poor was assigned to each coastal region of the U.S. These ratings were then averaged 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 indices 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, 56% of assessed resources are in good condition, 35% are in fair condition, and 6% are in poor condition.
- 14% of coastal 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.
- 13% of coastal waters are impaired for fishing, based on the risk-based non-cancer 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 condition throughout the United States are coastal habitat condition, sediment quality, and benthic condition. The indicators that generally show the best conditions are the individual components of water quality—dissolved oxygen and nitrogen.

### U.S. Index Rating Scores for the NCCR I (1990–1995), NCCR II (1996–2000), NCCR III (2001–2002) and NCCR IV (2003–2006) National Coastal Condition Assessments

Category	NCCR I	NCCR II	NCCR III <sup>a</sup>	NCCR III <sup>b</sup>	NCCR IV <sup>c</sup>	NCCR IV <sup>d</sup>
Water Quality Index	1.5	3.2	3.8	3.2	3.6	3.2
Sediment Quality Index	2.3	2.1	2.8	1.6	2.6	1.8
Coastal Habitat Index	1.6	1.7	1.7	1.7	2.6	1.7
Benthic Index	1.5	2.0	2.1	2.1	2.4	2.4
Fish Tissue Contaminants Index	3.1	2.7	3.7	2.9	4.0	3.7
Overall Condition	2.0	2.3	2.8	2.3	3.0	2.5

Rating scores are based on a 5-point system, where a score of less than 2.0 is rated poor; 2.0 to less than 2.4 is rated fair to poor; 2.4 to less than 3.7 is rated fair; 3.7 to 4.0 is rated good to fair; and greater than 4.0 is rated good.

<sup>a</sup> NCCR III scores including Alaska and Hawaii (except for coastal habitat index). <sup>b</sup> NCCR III scores excluding Alaska and Hawaii.

<sup>c</sup> NCCR IV scores including Alaska, Hawaii, Guam, American Samoa, and U.S. Virgin Islands. <sup>d</sup> NCCR IV scores excluding Alaska, Hawaii, Guam, American Samoa, and U.S. Virgin Islands.

### Expected Impact

Coastal waters provide both environmental and economic value, however, these waters are vulnerable to pollution from a variety of 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. EPA will release the draft NCCR IV in 2011 for public comment and peer review. The 60-day Federal Register review will seek public input concerning the information in the report, the availability of additional data, and the appropriateness of conclusions drawn from the information presented. Simultaneous technical and external peer reviews and agency policy review will be conducted to assess scientific relevance and credibility and to address potential policy implications of this report.

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