

FY 2014 NWPG Measure Definitions Gulf of Mexico

Measure Code: GM-435

Measure Language: Improve the overall health of coastal waters of the Gulf of Mexico on the "good/fair/poor" scale of the National Coastal Condition Report



Type of Measure: Target measure; Annually reported

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Measure Definition

Terms and phrases: Section 305(b) of the Clean Water Act requires that EPA report periodically on the condition of the nation's coastal waters. As part of this process, coastal states provide valuable information about the condition of their coastal resources to EPA. EPA, NOAA, DOI, and USDA have agreed to participate in a multi-agency effort to assess the condition of the nation's coastal resources using consistent monitoring surveys. The results of these assessments are compiled into a *National Coastal Condition Report* (NCCR). The first report was published in 2001 with data from 1990 to 1996. The second was published in 2005 with data from 1997 to 2000. The third was published in 2008 with data from 2001 and 2002. Three types of data are presented: Coastal Monitoring Data from EPA's Environmental Monitoring and Assessment Program (EMAP) and National Coastal Assessment (NCA) data, NOAA and FWS, Offshore Fisheries Data from NOAA, and Assessment and Advisory Data from states or other regulatory agencies.

Methodology for computation of results: The rating is based on five indicators of ecological condition: water quality index, sediment quality index, benthic index, coastal habitat index, and fish tissue contaminants index. Rating scores are on a 5 point system where a score of less than 2.0 is rated poor; 2.0 to less than 2.3 is rated fair to poor; 2.3 to 3.7 is rated fair; greater than 3.7 to 4.0 is rated good to fair; and greater than 4.0 is rated good.

Units: National Coastal Condition Report Scale

Universe: 5 on the NCCR scale.

Baseline: The baseline from NCCR I in FY 2004 was 2.4.

Measure Code: GM-SP38

Measure Language: Restore water and habitat quality to meet water quality standards in impaired segments in 13 priority areas.

Type of Measure: Target measure; Cumulatively reported

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Measure Definition

Terms and phrases: There are 94 coastal watersheds at the 8-digit hydrologic unit code (HUC) scale on the Gulf Coast. The five Gulf States identified 13 priority coastal areas to receive targeted technical and financial assistance for projects that restore impaired water quality. Those 13 areas include 30 of the 94 coastal watersheds and within those 30 watersheds the Gulf States have identified 755 specific water segments that are not meeting State water quality standards.

Methodology for computation of results: States provide a 303(d) report every two years to EPA which lists the status of the impaired segments for the state as required in the Clean Water Report 305(b) report. There are 3 data sources that are used to determine which of the impaired segments have been de-listed from the previous reports: Surf Your Watershed, Watershed Assessment Tracking and Environmental Results Expert Query Tool, and State Decision Documents.

Units: The number of impaired segments that were previously listed as not meeting water quality standards for a particular pollutant but are de-listed from the current 303(d) report and meeting water quality standards.

Universe: 812 impaired segments.

Baseline: 38 impaired segments (FY 2007)

Measure Code: GM-SP39

Measure Language: Restore, enhance, or protect a cumulative number of acres of important coastal and marine habitats.

Type of Measure: Target measure; Cumulatively reported

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Measure Definition

Terms and phrases: *Coastal habitat* includes marshes, wetlands, tidal flats, oyster beds, seagrasses, mangroves, dunes and maritime forest ridge areas.

Methodology for computation of results: The Gulf of Mexico Program achieves this target by cooperatively funding restoration projects with federal and state partners. QA/QC procedures include but are not limited to aerial photography, groundtruthing, transect growth monitoring, and digital topographic data. Site visits are conducted to provide verification of acreage restored. Data are subject to a second verification following the completion of the project.

Units: Acres of coastal and marine habitats.

Universe: 3,769,370 acres of coastal and marine habitats.

Baseline: 18,660 acres of coastal and marine habitats (FY 2007).

Measure Code: GM-SP40.N11

Measure Language: Reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxia zone in the Gulf of Mexico, as measured by the 5-year running average of the size of the zone.

Type of Measure: Indicator Measure

Measure Contact: Lael Butler, EPA Gulf of Mexico Program Office

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Measure Definition

Terms and phrases: The *hypoxia zone* in the Gulf of Mexico is an area where seasonal oxygen levels drop too low to support most life in bottom and near-bottom waters. This hypoxic area is primarily caused by high nutrient levels which stimulate an overgrowth of algae that sinks and decomposes. The decomposition process in turn depletes dissolved oxygen in the water. The hypoxic zone is of particular concern because it threatens valuable commercial and recreational Gulf fisheries.

Methodology for computation of results: Essential components of the environmental monitoring program in the Gulf of Mexico include efforts to document the temporal and spatial extent of shelf hypoxia, and to collect basic hydrographic, chemical, and biological data related to the development of hypoxia over seasonal cycles.

Units: Square kilometers

Universe: n/a: Due to the fluctuating size of the hypoxia zone which is the second largest in the world. Population of the Gulf coastal areas predicted to increase by 10% in 2015.

Baseline: 14,128 km² (FY 2005).