

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; cumulative measure

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

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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: The total number of acres of coastal and marine habitats in the Gulf of Mexico.

Baseline: acres of coastal and marine habitats (FY 2007) restored, enhanced, or protected at a point in time (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: Long-term measure (no annual targets) with annual reporting

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: Not applicable. 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: the size of the hypoxia zone, 14,128 km², in FY 2005.

Measure Code: GM-01

Measure Language: Improve and/or restore water and habitat quality to meet water quality standards in watersheds throughout the five Gulf States and the Mississippi River Basin.

Type of Measure: Annual

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

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Measure Definition:

- Terms and phrases: water quality, habitat quality, watersheds, Gulf States, Mississippi River Basin
- Methodology for computation of results: A watershed is counted as having an improvement when there is a five percent or more positive change in at least one water quality parameter. A 12-digit HUC watershed will be used to calculate the targets for reporting. Water quality parameters appropriate to the 12-digit HUC watershed scale include, but are not limited to: dissolved oxygen, temperature, pH, turbidity, total suspended solids, salinity, chlorophyll, flow, oil/grease, floatables, nutrients and invasive species.

Units: Number of HUC 12 Watersheds

Universe: Any 12-digit HUC located within the five Gulf States and the entire MS River Basin (44,148)

Baseline: n/a

Measure Code: GM-02

Measure Language: Promote and support environmental education and outreach to the inhabitants of the Gulf of Mexico watershed.

Type of Measure: Annual

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

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Measure Definition:

- Terms and phrases: environmental education, environmental outreach, Gulf of Mexico, watershed
- Methodology for computation of results: Any person reached via print media, radio, kiosks, webpages, classroom training, experiential in-the-field events, social media; and conferences, workshops or forums.

Units: number of individuals reached

Universe: Individuals who interact (live, work or visits) within the Gulf of Mexico watershed.

Baseline: n/a

Measure Code: GM-03

Measure Language: Support the assessment, development and implementation of programs, projects and tools which strengthen community resilience.

Type of Measure: Annual

Measure Definition:

- Terms and phrases: community, resilience, resilient programs/projects/tools
- Methodology for computation of results: A community is counted when they implement smart growth practices, develop and apply a resilience index; or implement a resilience practice.

Units: Number of communities

Universe: Any community spanning from coastal to inland areas which implement proven resilience measures or tools.

Baseline: n/a