

US Department of Commerce

Gulf of Mexico Habitat Mapping and Water Quality Monitoring Network

This 5-year mapping and monitoring program will lay the foundation for an integrated network to establish baselines and measure impacts. The network will leverage the breadth of current state, federal, or other regional programs to acquire existing and new habitat and water quality data, ensure quality assurance/quality control, and enhance data sharing and preservation. The network will establish consistent baselines that will effectively detect and track changes at the project level and landscape scale arising from planned activities (conservation, restoration), extreme weather events (storms, cold snaps), climate change/sea level rise, and accidents (ship groundings, oil spills). The monitoring network will be designed in accordance with adaptive management principles to insure strong connections with restoration decision-making and maximize opportunities for learning.

The basic approach to building the Gulf habitat and water quality monitoring network is to: (1) adopt, or construct as needed, a comprehensive inventory of existing habitat and water quality observations and monitoring programs in the Gulf; (2) evaluate the suitability/applicability of each program and its existing and prospective data; (3) coordinate and integrate appropriate existing observations and monitoring systems to form a regional monitoring network with an integrated data management structure; (4) identify information gaps; and (5) strategically supplement and refine observations and monitoring systems to fill the acknowledged gaps with available capabilities and capacity of all the regional partners. Although this proposal is being led by NOAA and USGS, both of whom bring existing resources, capacities, and expertise, the monitoring network will employ a collaborative organizational structure that will incorporate all restoration partners through the development of a monitoring Community of Practice (CoP). Requested funding amount: \$21,401,000.