

- 1. The Coastal Ecology Program at CCEHBR has been working in partnership with other parts of NOAA, EPA and various coastal states to conduct assessments of the status of ecological condition and potential stressor impacts at multiple spatial scales including coastal-ocean waters throughout various large marine ecosystems of the U.S., targeted estuaries, and NOAA managed areas such as our National Marine Sanctuaries and NERRS sites.
- 2. The various surveys are conducted using consistent methods and suites of indicators including multiple measures of basic habitat characteristics, stressor levels, biological condition and diversity (benthos and fish), and human dimensions (e.g., human-health risks, aesthetics). Thus, with the use of consistent methods and indicators, we can compare ecosystem condition from regional to national scales and can evaluate how our protected areas, such as NMSs and NERRS reserves are faring relative to surrounding non-managed waters. Also, these studies typically incorporate a probabilistic sampling design, which consists of large populations of randomly selected sampling sites (similar to approaches used in EPA's EMAP and NCA programs). Accordingly, the resulting data can be used to make estimates of the spatial extent of the region's health with respect to the various measured indicators and corresponding management thresholds, and to provide this information as a baseline for determining how environmental conditions may be changing with time.
- 3. Thus far such surveys have been completed in the following coastal-ocean regions as depicted in the map: (1) the U.S. west coast, from the Straits of Juan de Fuca, WA through the Southern CA Bight, inclusive of stations in all five NMSs along the west coast (June 2003); (2) the South Atlantic Bight from Cape Hatteras, NC to West Palm Beach, FL inclusive of GRNMS off the coast of GA (April 2004); (3) the mid-Atlantic Bight (MAB) from Cape Hatteras to Cape Cod, MA (May 2006); (4) shelf waters off southern Florida, from west Palm Beach in the Atlantic Ocean to Anclote Key in eastern Gulf of Mexico (May 2007) inclusive of stations in the FKNMS; NE Gulf of Mexico shelf from Tampa to the MS delta; and NW Gulf of Mexico shelf (August 2011).
- 4. Our plan is to have completed surveys in all of these offshore regions along the lower continental U.S. by 2012 (or soon thereafter), which will have covered 4 of the U.S. Large Marine Ecosystems (LMEs): CA Current, the NE U.S. Continental Shelf, the SE U.S. Continental Shelf, and Gulf of Mexico. Note by the color coding in the map that our sampling areas are consistent with various regional planning areas of the CMSP Interim Framework developed recently by the Interagency Ocean Policy Task Force.
- 5. Data provide baselines to support a variety of NOAA strategic goals and signature products including multi-agency National Coastal Condition Reports (NCCRs), Science for Coastal Ecosystem Management, Marine Biodiversity initiatives, Ecosystem-based Management (EAM) within various LMEs of the U.S., and Management Plans and Condition Reports for NOAA's NMSs and NERRS reserves.

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