



The Commonwealth of Massachusetts

Division of Marine Fisheries

251 Causeway Street, Suite 400, Boston, MA 02114

p: (617) 626-1520 | f: (617) 626-1509

www.mass.gov/marinefisheries



CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

BETHANY A. CARD
Secretary

RONALD S. AMIDON
Commissioner

DANIEL J. MCKIERNAN
Director

September 15, 2022
Marine Fisheries Advisory

Cape Cod Bay Hypoxia (low oxygen) Conditions Detected – Fishermen urged to report any unusual observations and to remove traps from the area if conditions worsen

Data collected by DMF, working with cooperating commercial lobster fishers and the Center for Coastal Studies, indicate that dissolved oxygen (DO) levels are decreasing at some locations in the southern half of Cape Cod Bay. Most recent data show levels near the seabed of < 4.0 mg/L in several locations (Figure 1); values less than 4.0 mg/L are considered mildly hypoxic, and values less than 2.0 mg/L are considered severely hypoxic and could result in mortalities of fish and shellfish that are unable to migrate from the low-oxygen areas.

No prolonged periods of severely hypoxic conditions have been detected yet this summer, but the trends of declining DO we've observed are concerning. Many mobile bottom dwelling animals like lobsters will move to avoid hypoxic conditions when they can, but will die if stuck in traps and exposed to hypoxia for more than a few hours. DMF urges those lobster fishermen working in or near the area to be on the lookout for signs of hypoxia, which includes unusual amounts of lethargic or dead lobsters, crabs, or finfish in the traps. DMF recommends fishermen check traps frequently, and possibly consider moving gear out of the affected region to prevent trapping lobsters or crabs in hypoxic conditions. DO conditions can change rapidly based on weather conditions (wind and waves) and it is difficult to predict exactly where or when hypoxic conditions will occur. We will continue to monitor the situation with the help of our partners at Center for Coastal Studies as well as members of the Cape Cod Bay Study Fleet. Visit www.mass.gov/capecodbaydo for a map of updated data from the Study Fleet. Please report unusual observations of lethargic or dead lobsters to Tracy Pugh at tracy.pugh@mass.gov.

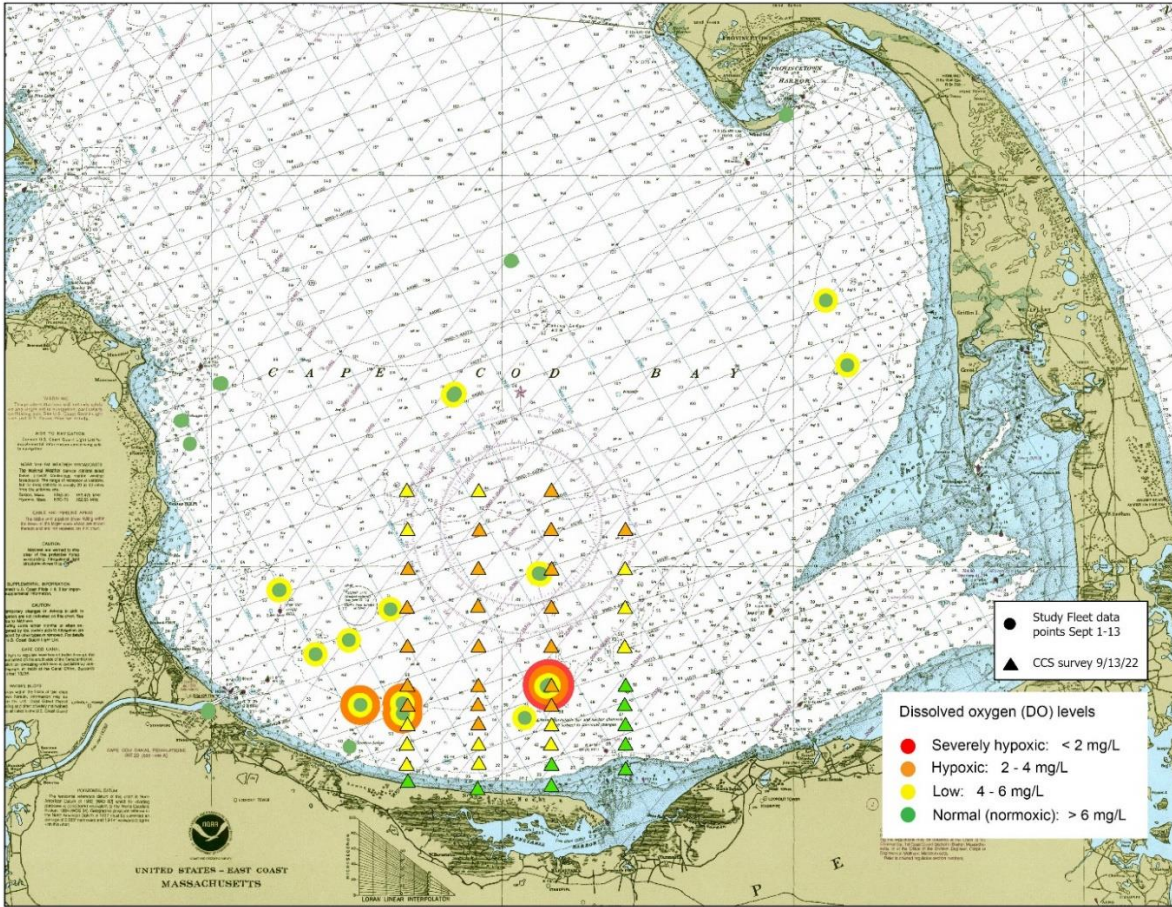


Figure 1. Dissolved oxygen levels at locations in southern Cape Cod Bay. Triangles are data points from a survey conducted by the Center for Coastal Studies on Sept 13, 2022. Circles represent multiple data points collected by the Cape Cod Bay Study Fleet from Sept 1 – 13, 2022. Values less than 4.0 mg/L (orange) are considered mildly hypoxic, and values less than 2.0 mg/L (red) are severely hypoxic.