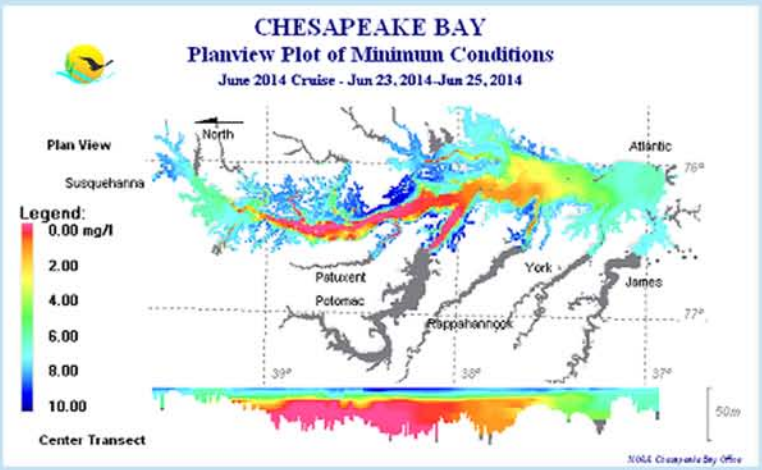
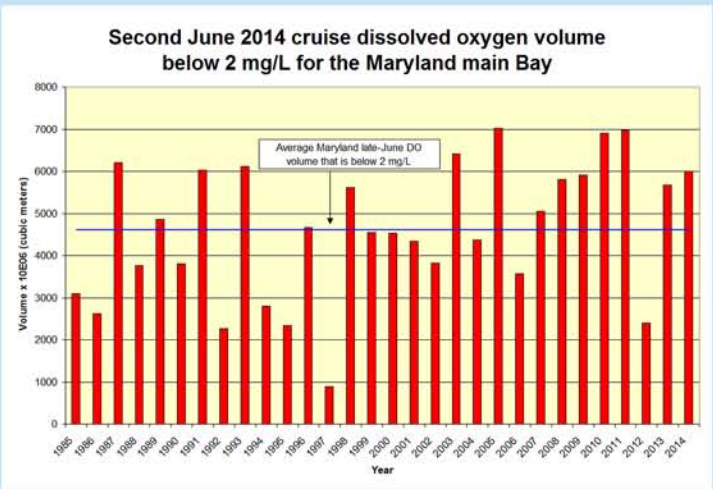
Maryland Department of Natural Resources 2014 Chesapeake Bay Hypoxia Report - Late June Update

Crabs, fish, oysters and other creatures in the Chesapeake Bay need oxygen to survive. Scientists and natural resource managers study the volume and duration of Bay hypoxia (less than 2 mg/L oxygen) to determine possible impacts to Bay life. This area of hypoxia is often termed "The Dead Zone" in media reports.

Each year from June through September, Maryland DNR computes these volumes from data collected by Maryland and Virginia. Data collection is funded by these states and their partner, the EPA Chesapeake Bay Program.





The 'plan view' in the above map shows the lowest oxygen value that occurs in the water column at that point, which is usually towards the bottom waters. The 'center transect' shows the vertical variation in oxygen along the main channel of the Bay. The oranges and reds are indicative of hypoxic zones.

This year, the late June 2014 sampling shows that hypoxic volume in Maryland's portion of the Bay is larger than the 1985 to 2013 late June average. It is the 8th largest MD late-June hypoxic zone in the past 30 years and has increased in size since early June. This result was predicted (http://1.usa.gov/1qK7DaC) by a team of NOAA, USGS and university scientists due to a 20% increase in Baywide 2014 vs 2013 Spring nitrogen loading to the Bay, caused by higher water flows. Dead zones are influenced by nutrient loads, as well as meterological conditions.

Through numerous best management practices, Maryland is diligently working to reduce nutrient and sediment pollution. Maryland has defined goals for reducing this pollution, as set forth in the US EPA's Total Maximum Daily Load (TMDL) process. The EPA Chesapeake Bay Program just announced that Maryland has reached its 2013 TMDL pollution reduction milestones for nutrients and sediment. For more information on Maryland's pollution reduction progress, view this recent press release: http://1.usa.gov/V2NxNU

For more information:

- *Eyes on the Bay* (www.eyesonthebay.net) - Chesapeake and Coastal Bays water quality results, and past hypoxia reports
- *Baystat* (http://baystat.maryland.gov) Maryland's action and progress towards Chesapeake restoration

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