MARCO MID-ATLANTIC OCEAN DATA PORTAL

RESOURCES FOR OCEAN PLANNING

PORTAL USE EXAMPLE: UNDERSTANDING THE IMPACTS OF ACIDIFICATION

Project Details

The chemistry of our oceans is changing, as growing levels of carbon dioxide continue to dissolve into seawater, increasing its acidity and lowering its pH. While the impacts of ocean acidification (OA) are still being researched by scientists worldwide, evidence shows it can be harmful for marine organisms such as scallops, flounder and oysters, which struggle to build and maintain shells and skeletons in more acidic waters.

To build a better understanding of the issue in the region, the Mid-Atlantic Coastal Acidification Network (MACAN) is working with state and federal agencies to develop a robust network that monitors for changes to the chemistry of offshore, coastal and estuarine waters. In 2017, MACAN collaborated with the Portal team to create a group of maps showing thousands of sites where water sampling for measures of OA is currently being conducted or has been conducted in the Mid-Atlantic. The maps are helping to determine areas where monitoring gaps may exist, including places that the Portal's data shows to be important habitats for species that may be most vulnerable to OA.

There are currently seven acidification monitoring locations maps available in the Portal's Oceanography theme. The maps will continue to be updated as additional information about monitoring sites emerges. USER

Mid-Atlantic Coastal Acidification Network

LOCATION

New York, New Jersey, Delaware, Maryland, Virginia







Map: All current and past ocean acidification monitoring locations in the Mid-Atlantic. Top right: Shellfish and mollusks are among the organisms believed to be most vulnerable to ocean acidification.