

# BIOGEOGRAPHY BRANCH

CENTER FOR COASTAL MONITORING AND ASSESSMENT

## MISSION

To develop products on the distribution and ecology of living marine resources and their associated habitats for improved ecosystem-based management



## WHO WE ARE

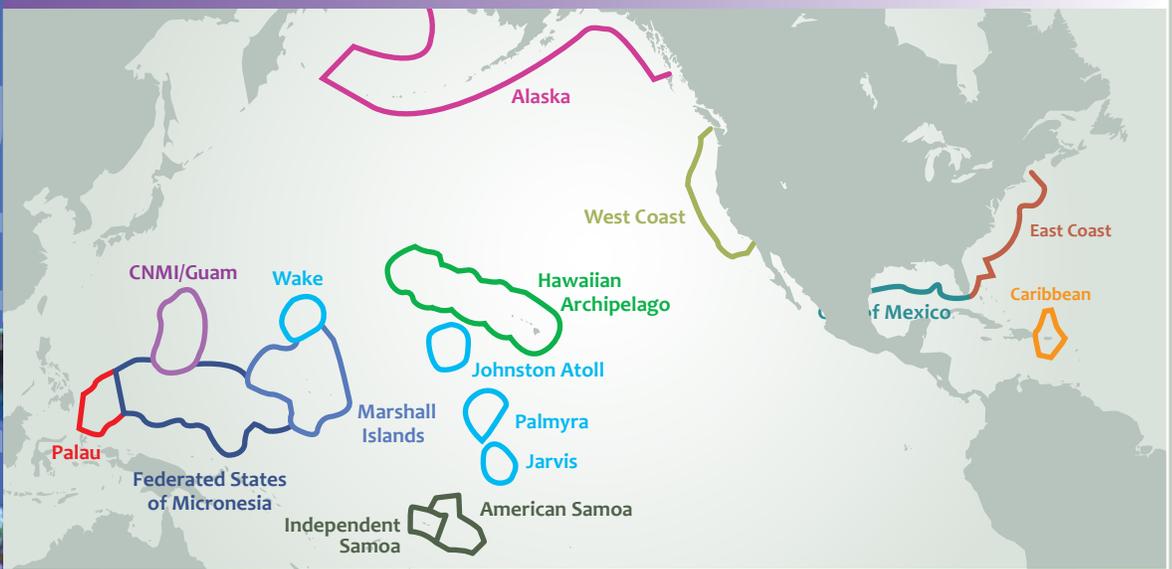
For 20 years, NOAA's Biogeography Branch has been a leader in defining the relationships and distributions of animals within coastal and ocean environments.

Maps, assessments, and other products developed by the Branch provide managers, scientists and communities with up-to-date information to conserve the nation's marine resources.

## MAJOR ACTIVITIES

- Coastal and Marine Spatial Planning
- Predictive modeling of animal distributions
- Ecological characterizations
- Seafloor characterization and habitat mapping
- Marine protected area monitoring
- Reef fish ecology studies
- Development of decision support software tools and survey methods

## WHERE WE WORK



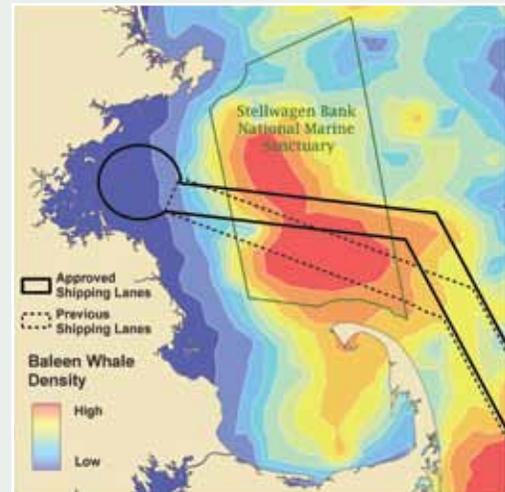
April 2010



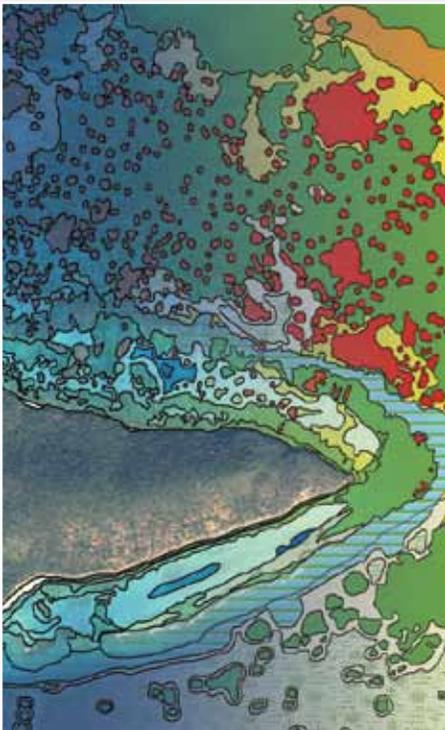
<http://ccma.nos.noaa.gov/about/biogeography>

## EXAMPLE OUTCOMES

- Analyses of ship traffic and presence of whales in Gulf of Maine supported moving the shipping lanes to reduce boat strikes on whales
- Monitoring of animals, plants, contaminants, nutrients and sediments in Puerto Rico helps managers to understand impacts of restoration
- National Assessments (e.g., State of the Reef reports) provide report cards on ecosystem condition
- Presented an ecological review of the Nation's largest marine national monument (Hawaii's Papahānaumokuākea MNM) in support of its UNESCO World Heritage Site bid
- Worked with the President's Council on Environmental Quality to develop Marine National Monuments for Marianas Trench, Rose Atoll, and Pacific Remote Islands



The Biogeography Branch provided a map on baleen whale sightings and ship traffic density to the Stellwagen Bank National Marine Sanctuary. The data and analysis were used in marine spatial planning to justify a shift in the shipping lanes (dashed to solid black lines) to avoid whale strikes.



## PARTNERSHIPS

To ensure products meet the needs of the management community, close collaborations are formed with the decision makers and data providers in government, private sector, non-government organizations, and academia.

## STAFF CAPABILITIES

The Biogeography Branch offers a broad, yet specialized skill set. Staff include: marine and fishery biologists, ecologists, statisticians, GIS specialists, oceanographers, physical scientists, database developers, scientific divers, a science writer/editor, and a social scientist. The Branch is part of NOAA's National Ocean Service, National Centers for Coastal Ocean Science, Center for Coastal Monitoring and Assessment located at NOAA Headquarters in Silver Spring, MD.

This map of seafloor habitat shows areas of coral reef, seagrass, mangrove, sand and more. Using remotely sensed data, the Branch develops habitat maps that are used by scientists and managers of coastal and marine resources.

## MORE INFORMATION

For a list and description of BioGeography projects and related products, visit: <http://ccma.nos.noaa.gov/about/biogeography>

## CONTACT

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