NOAA RELEASES FIRST EVER DETAILED MAPS OF CORAL REEFS IN THE NORTHWESTERN HAWAIIAN ISLANDS

An atlas is now available from NOAA, the National Oceanic and Atmospheric Administration, providing baseline information about the locations and distributions of the shallow-water seabed features of the Northwestern Hawaiian Islands (NWHI). The Atlas of the Shallow-Water Benthic Habitats of the Northwestern Hawaiian Islands - Draft supports research, management, and conservation of critical resources in the NWHI region. NOAA is an agency of the Department of Commerce.

Developed through a partnership between NOAA National Ocean Service (NOAA Oceans and Coasts), NOAA National Marine Fisheries Service, the State of Hawaii’s Department of Land and Natural Resources, the University of Hawaii, the U.S. Fish and Wildlife Service, and Analytical Laboratories of Hawaii, the atlas depicts shallow-water seabed features in the NWHI with unprecedented detail. The maps also provide baseline information when assessments are performed to evaluate whether or not changes, such as increases or decreases in reef cover, impacts of marine debris, and the effects of global warming, are taking place in the area.

The atlas is considered to be in draft form because confirming the accuracy of the maps is extremely difficult. As more information about the coral reef ecosystems in the NWHI is collected, the maps will be revised and updated.

In the atlas, shallow-water refers to water generally less than 30 m (98 ft) deep. Approximately 2,360 sq. km (911 sq. miles) of coral reef ecosystems were mapped, representing about 68 percent of the estimated 3,493 sq. km (1,349 sq. miles) of shallow-water coral reef ecosystems in the NWHI. An even bigger area of coral reef ecosystems may be found in water greater that 30 m (98 ft) deep. Other mapping activities and technologies will be used in coming years to characterize the seabed associated with these deeper water areas in the NWHI.

In addition to the printed atlas, a set of two CD-ROMs is available. These CD-ROMs contain the digital, high-resolution, detailed benthic habitat maps; aggregated habitat cover maps; and detailed estimated depth maps. These maps can be incorporated into a computerized GIS or other software for further use and analysis. The CD-ROMs also contain documentation on how the maps were generated, and other information related to mapping the benthic habitats of the NWHI.
The atlas was produced in response to a mandate from the U.S. Coral Reef Task Force to develop shallow-water coral reef ecosystem maps for all U.S. waters by 2007. The primary funding source for the development of this product was the NOAA Coral Reef Conservation Program. The products generated from this and other coral reef mapping efforts are used to support NOAA, other federal, state, territory, and local activities, including NOAA’s National Marine Sanctuary Programs’ endeavor to designate NWHI as a National Marine Sanctuary and research for the National Coral Reef Monitoring Program.

The effort to map U.S. coral reef ecosystems is led by the Biogeography Program in NOAA Oceans and Coasts National Centers for Coastal Ocean Science. The Biogeography Program develops information through research, monitoring, and assessment on the distribution and ecology of living marine resources and their associated habitats for improved ecosystem management.

The Northwestern Hawaiian Islands (NWHI) are a series of islands, atolls, shallow water banks, and seamounts that start with Nihoa Island, which is 250 km (155 miles) west-northwest of Kauai, and stretch 1,920 km (1,193 miles) west-northwest to Kure Atoll. The NWHI make up the western portion of the Hawaiian Archipelago, which includes the islands of Hawai‘i and O‘ahu. The diverse, expansive and pristine shallow-water coral reef ecosystems of the NWHI are unique. This ecosystem hosts a distinctive array of marine mammals, fish, sea turtles, birds, and invertebrates, including species that are endemic, rare, threatened, and endangered.

NOAA National Ocean Service (NOAA Oceans and Coasts) is dedicated to exploring, understanding, conserving and restoring the nation's coasts and oceans. NOAA Ocean and Coasts balances environmental protection with economic prosperity in fulfilling its mission of promoting safe navigation, supporting coastal communities, sustaining coastal habitats, and mitigating coastal hazards.

The Commerce Department’s National Oceanic and Atmospheric Administration (NOAA) is dedicated to enhancing economic security and national safety through the prediction and research of weather and climate-related events and providing environmental stewardship of our nation’s coastal and marine resources.

On the Internet:
NOAA - http://www.noaa.gov
NOAA Oceans and Coasts - http://www.nos.noaa.gov
Mapping Implementation Plan - http://biogeo.nos.noaa.gov/MIP