

NOAA FUNDED RESEARCH ASSISTS FLORIDA'S BROWARD COUNTY IN PROTECTING CORALS DURING BEACH RESTORATION PROJECT

FOR IMMEDIATE RELEASE - August 25, 2005
National Oceanic and Atmospheric Administration (NOAA)
Release no. NOAA05-R481

Contact: Ben Sherman, NOAA Public Affairs
(301) 713-3066; (202) 253-5256 (Cell)

NOAA FUNDED RESEARCH ASSISTS FLORIDA'S BROWARD COUNTY IN PROTECTING CORALS DURING BEACH RESTORATION PROJECT

A high-resolution technique aimed at measuring the stress level of coral organisms is being employed for the first time in a major beach restoration project in Broward County, Fla. The approach is based on a coral stress level scale developed by researchers at the NOAA sponsored National Coral Reef Institute (NCRI) at Nova Southeastern University Oceanographic Center in Ft. Lauderdale, Fla.

NOAA is working with Broward County Florida to protect coral reef ecosystems against potential impacts of dredging as the county undertakes a beach restoration project. This involves movement of sand on the beaches between Port Everglades and the Miami/Dade/Broward County line from local offshore sources located adjacent to coral reef and hard bottom communities. The new stress measurement technique allows for identification of sub-lethal stress, providing managers with early diagnosis before damage becomes irreversible.

If coral stress levels, due to excess turbidity or sedimentation during dredging activities, exceed a pre-established threshold, the County's Biological Monitoring Plan, as agreed to with Florida's Department of Environmental Protection, states that the county will suspend activities until coral condition improves and dredging can be safely resumed.

In order to determine stress levels, NCRI researchers rate corals in the field according to experimentally determined stress levels. They also collect small tissue samples for lab examination at the cellular and sub-cellular level to accurately categorize the stress level and calibrate field observations. The new technique could have worldwide applicability helping resource managers protect coral reef ecosystems from damage due to a variety of human activities.

"This project is an excellent example of NOAA's dedication to transition research into practical applications," said retired Navy Vice Admiral Conrad C. Lautenbacher, Jr., Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator. "NOAA's support for the work on these important marine ecosystems directly assists the resource management community in making important decisions."

Coral reef conservation and education are priority items in the President's Ocean Action Plan that focuses attention and efforts on coral reefs and deep sea corals.

"This monitoring program gives the County near real-time feedback regarding the effects of the beach nourishment project on corals," says Stephen Higgins, Broward County's beach erosion administrator. "As a result we are able to flexibly manage project operations to achieve maximum productivity with minimal impacts to resources."

NOAA's Center for Sponsored Coastal Ocean Research, part of NOAA's Ocean Service, administers and supports coral reef research in support of locally-based management agencies and the mission of NOAA's Coral Reef Conservation Program through grants to NCRI as well as Institutes in Hawaii, (Hawaii Coral Reef Research Initiative) and Puerto Rico (Caribbean Coral Reef Institute). The National Coral Reef Institute (NCRI) was established by Congressional mandate in 1998. NCRI's primary objective is the assessment, monitoring, and restoration of coral reefs through basic and applied research and through training and education. NCRI operates at the Nova Southeastern University Oceanographic Center near Ft. Lauderdale, Fla.

The NOAA Coral Reef Conservation Program supports effective management and sound science to preserve, sustain and restore valuable coral reef ecosystems. The program is a partnership between the NOAA line offices working on coral reef issues, including the National Ocean Service, the National Marine Fisheries Service, the Office of Oceanic and Atmospheric Research and the National Environmental Satellite, Data and Information Service.

NOAA's National Ocean Service is dedicated to exploring, understanding, conserving and restoring the nation's coasts and oceans. It 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 National Oceanic and Atmospheric Administration, an agency of the U.S. Commerce Department, 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. Through the emerging Global Earth Observation System of Systems (GEOSS), NOAA is working with its federal partners and nearly 60 countries to develop a global monitoring network that is as integrated as the planet it observes.

On the Web:

NOAA: <http://www.noaa.gov>

NOAA's National Ocean Service: <http://oceanservice.noaa.gov/>

National Centers Coastal Ocean Science: <http://coastalscience.noaa.gov>

Center for Sponsored Coastal Ocean Research: <http://www.cop.noaa.gov>

NOAA Coral Reef Conservation Program: <http://www.coralreef.noaa.gov>