



Congressional Brief: Sample of 2008 NOAA Activities

NOAA's work touches the daily lives of every person in the United States and in much of the world. From weather forecasts in the Midwest to fisheries management on the East Coast, from safe navigation to coastal services in the Gulf, from remote sensing to climate research and ocean exploration, NOAA's products and services contribute to the foundation of a healthy economy and affect approximately one-third of the nation's gross domestic product.



NOAA worked with Congress to support important legislation including:

- Passage of the National Sea Grant College Program Authorization Act and Hydrographic Services Improvement Act.
- Consideration of aquaculture, NOAA Organic Act, corals, ocean exploration, ocean observations, and climate change legislation.

Complete details on the stories highlighted below may be viewed at: http://www.noaa.gov/newsarchive.html

Did you know? NOAA protects critical habitats and builds sustainable fisheries.

January – NOAA and Partners Recognize Newest Business to Join Dolphin SMART Program. The third charter operator into a new program created to help protect wild dolphins in the Keys was accepted by NOAA's Florida Keys National Marine Sanctuary and its partners. Key West Eco Tours officially joined the Dolphin SMART program after successfully meeting standards that promote responsible viewing of dolphins in the wild. Dolphin SMART's approach to protecting wild dolphins by working with the businesses that depend on them is an excellent example of the value of partnerships in marine conservation. NOAA's National Marine Sanctuary Program, NOAA's National Marine Fisheries Service, Whale and Dolphin Conservation Society, and the Dolphin Ecology Project developed the Dolphin SMART program.





April - NOAA Invests Record Funding to Clean up Miami's Biscayne Bay. NOAA announced it will invest \$200,000 in Florida's Miami-Dade County — the largest NOAA contribution ever made towards a community marine debris cleanup project — to support the large-scale removal of marine debris, such as abandoned vessels, docks and pilings, and other large items that cannot be bagged by volunteers. In our role as coastal steward, NOAA wants to remove as much marine debris as we can. This grant helps Miami-Dade restore fish habitat, make boating safer, and enhance the overall experience for people enjoying the Bay.

May – NOAA Issues Far-Reaching Plans for Protecting Northwest Salmon. NOAA, through the National Marine Fisheries Service, is charged with protecting Northwest salmon listed under the Endangered Species Act (ESA), and released a trio of biological opinions that provide comprehensive, far-reaching plans for the protected salmon species. A biological opinion, a requirement of the ESA, sets forth benchmarks other federal agencies must meet to avoid undue harm to listed fish. All three of the biological opinions will be in effect for at least 10 years. Two of the plans govern federal agencies' operations of eight hydropower dams in the Columbia River basin and almost two dozen other Northwest dam-related irrigation projects on the Upper Snake River in Idaho. The third sets forth a plan for managing salmon harvests for Indian tribes in Washington, Idaho, and Oregon, and for those states themselves.



August - NOAA Protects 130,000 SNM of Bering Sea Habitat. NOAA has prohibited the use of bottom trawl gear in 130,000 square nautical miles (SNM) of the Bering Sea, an area where the gear has not been used previously, to protect the sea bottom habitat. This allows bottom fishing to continue where it has occurred historically, while protecting undisturbed habitats and near shore bottom habitat that support subsistence marine resources and blue king crab. The rule, recommended by the North Pacific Fishery Management Council, protects large areas of sea bottom for the future, with minimal effects on today's fisheries.



October – NOAA Coral Bleaching Monitoring Network Now Global.

NOAA's Coral Reef Watch bleaching monitoring network has expanded its network of "virtual stations" from 24 to 190 locations worldwide. These stations warn coral reef managers when there is an elevated risk of coral bleaching, based on temperature data from NOAA's environmental satellites. The satellite alert system provides approximately two weeks' advance warning before bleaching occurs, giving reef managers time to respond. Continuous monitoring of sea surface temperature at global scales provides researchers and stakeholders with tools to understand and better manage the complex interactions leading to coral bleaching.

October – NOAA Issues Stronger Protections for Elkhorn and Staghorn Corals in Southeast United States. NOAA increased its protection of threatened elkhorn and staghorn corals in Florida, Puerto Rico, and the U.S. Virgin Islands through a new rule to prohibit activities that result in death or harm to either species. The new regulations took effect on November 21. These corals provide the branching framework for reef creatures in search of a safe place to live, eat, and grow. The preservation and recovery of these threatened corals is essential to the conservation of an entire ecosystem. Both elkhorn and staghorn corals were listed as threatened under the *Endangered Species* Act in May 2006.

December – Ships Must Slow Down to Protect Right Whales. Ships in southeastern Atlantic and mid-Atlantic U.S. waters must slow down to protect endangered right whales. A landmark regulation went into effect on December 9 that requires ships 65 feet or longer to travel at 10 knots or less in certain areas where right whales gather. The goal is to reduce the chances ships will collide with whales, injuring or killing them. With only 300 to 400 in existence, North Atlantic right whales are among the most endangered whales in the world.



Did you know? NOAA conducts critical research and expeditions to advance our understanding of the oceans and atmosphere.

April – Carbon Dioxide, Methane Rise Sharply in 2007. In 2007 alone, global levels of atmospheric carbon dioxide, the primary driver of global climate change, increased by 0.6 percent, or 19 billion tons. Additionally methane rose by 27 million tons after nearly a decade with little or no increase. NOAA scientists released these and other preliminary findings as part of an annual update to NOAA's greenhouse gas index, which tracks data from 60 sites around the world.

May – NOAA Models Predict Fewer, But More Intense Hurricanes Late This Century. A new model simulation of Atlantic hurricane activity for the last two decades of this century projects fewer hurricanes overall, but a slight increase in intensity for hurricanes that do occur. Hurricanes are also projected to have more intense rainfall, on average, in the future. Scientists at NOAA's Geophysical Fluid Dynamics Laboratory in Princeton, New Jersey, reported the studies in findings published online in Nature Geoscience.



May – Scientists Find 'Acidified' Water on the Continental Shelf from Canada to Mexico. Evidence of corrosive water caused by the ocean's absorption of carbon dioxide (CO₂) was found less than 20 miles off the west coast of North America during a field study from Canada to Mexico last summer. This was the first time "acidified" ocean water has been found on the continental shelf of western North America. The authors included two oceanographers from NOAA's Pacific Marine Environmental Laboratory.

June – Jason-2 Satellite Data to Help NOAA Track Sea Level Rise. The Jason-2/OSTM, a joint, international effort between NOAA, NASA, France's Centre National d'Etudes Spatiales (CNES), and the European Organisation for the Exploitation of Meteorological Satellites (Eumetsat), was launched. NOAA will use data from the Jason-2/Ocean Surface Topography Mission (OSTM) to extend a 15-year record from two earlier altimeter missions that currently show sea level is rising at a rate of 3.2 mm/year — nearly twice as fast as the previous 100 years.



July – Unmanned Aircraft Get Birdseye View of Shrinking Greenland Ice Sheet. Two of NOAA's low-flying unmanned aircraft cruised over Greenland to closely observe the melting of the Greenland Ice Sheet and its potential contribution to global sea level rise in the coming century. Scientists believe the buildup of heat-trapping gases in Earth's atmosphere is the main culprit, but the mechanisms are unclear. Better observations will shed light on the role of short-lived surface lakes and why the edges of the ice sheet are melting rapidly.

September – NOAA Launches Fourth Fisheries Survey Vessel. NOAA launched the fourth of a series of new fisheries survey vessels designed to study fish quietly without altering their behavior. The 208-ft. *Bell M. Shimada* and her sister ships were built for NOAA by VT Halter Marine Inc., in Moss Point, Mississippi, as part of the Department of Commerce and NOAA fleet replacement strategy to provide world-class, state-of-theart platforms for U.S. scientists.



Did you know? NOAA protects lives and livelihoods.

January – NOAA to Ensure Global Navigation Satellite System Accuracy. NOAA personnel will compile and analyze satellite orbit data from 10 analysis centers worldwide to ensure the accuracy of GPS information. For the next four years NOAA's National Geodetic Survey will serve as the Analysis Center Coordinator for the International Global Navigation Satellite Systems Service, a voluntary federation of more than 200 organizations that provide continuous global satellite-tracking data.



March – NOAA Launches Final Two Buoys to Complete Tsunami Warning System. NOAA deployed the final two tsunami detection buoys in the South Pacific, completing the buoy network and bolstering the U.S. tsunami warning system. This vast network of 39 stations provides coastal communities in the Pacific, Atlantic, Caribbean, and the Gulf of Mexico with faster and more accurate tsunami warnings.

August – NOAA Installs New Storm Tide Stations in the Gulf of Mexico: NOAA Sentinels Designed to Withstand Category 4 Hurricanes. NOAA dedicated the first of four new hurricane-hardened water level observing stations installed at key locations in coastal Mississippi and Louisiana. The yellow, 25-foottall "NOAA Sentinel" provides real-time water level and meteorological data to help coastal authorities and the public prepare for, mitigate, and respond to, storm tides generated by severe coastal storms.





October – SARSAT Makes 6,000th Rescue in the United States. SARSAT uses NOAA weather and climate satellites to pinpoint downed pilots, shipwrecked mariners, and stranded hikers. Since 1982, SARSAT has been credited with supporting more than 25,000 rescues worldwide. NOAA's National Environmental Satellite, Data, and Information Service (NESDIS) manages SARSAT. SARSAT continues to save lives. Total number of rescues for 2008 was 282.

November – NOAA Simulation Tool Prepares Oregon Coastal Towns for Tsunamis and Floods.

Developed by NOAA's National Geophysical Data Center and the Cooperative Institute for Research in Environmental Science, the Digital Elevation Models (DEMs) are detailed coastal relief models constructed from near-shore seafloor depth and land elevation data. DEMs allow scientists to forecast the magnitude and extent of coastal flooding caused by a tsunami or storm surge with greater accuracy.

Year Round – NOAA Issues Millions of Forecasts, Warnings, Alerts, and Outlooks to Help Protect the Lives and Livelihoods of Every American.

- Daily national, regional, and local weather forecasts and warnings
- Hurricane, tornado, and inland flooding warnings and watches
- Seasonal weather outlooks for hurricanes, wildland fire, drought, temperature, and precipitation
- Marine and aviation forecasts, advisories, and warnings and tsunami alerts and warnings
- Space weather warnings, watches, alerts, and predictions

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