



What is NOAA?

NOAA stands for the National Oceanic and Atmospheric Administration. NOAA scientists study the skies and the oceans.

NOAA scientists do much of this work by using special aircraft and ships. One of NOAA's jobs is to tell the American people what the weather will be like and to warn them if a storm is coming. NOAA also maps the ocean floor near the coasts so ships bringing goods, such as your CD-player, will know where the water is deep enough for them to sail.

Do you like to go to the beach? NOAA protects the coasts and beaches to make sure the sand and water are clean so you can swim. NOAA has marine sanctuaries, protected areas where people cannot live or develop so the area stays the way nature intended. NOAA studies the fish in the ocean to see how many there are. Why? So fishermen know how many fish they can catch and still leave enough in the sea for future generations. NOAA also protects whales, dolphins, and other marine mammals like sea lions and seals.



So, the next time you see a weather report on TV, have fish for dinner, fly in an airplane or vacation at the beach, think of NOAA. NOAA touches your life in some way, every single day.

Here are a few NOAA Web sites to learn more about NOAA:

- <http://www.noaa.gov>
- <http://www.education.noaa.gov>
- <http://www.fas.noaa.gov>
- <http://www.mmao.noaa.gov>



NOAA has two hurricane hunters – airplanes that fly through severe storms and hurricanes – and a special jet that flies around the storms. These aircraft gather data that help forecasters determine where the storm will go and how dangerous it will be.



NOAA has smaller aircraft that are used to conduct snow surveys to measure the amount of snow that will melt so forecasters can predict spring floods or droughts. Other small NOAA airplanes fly over the ocean, near shore, to count whales, dolphins, turtles and other marine creatures below. Small NOAA airplanes also take aerial photographs to map the coastlines so scientists can see how they are changing because of erosion and storm damage. They also photograph and survey airports to identify obstructions in the flight path for aeronautical charts. These charts are used by commercial aircraft when taking off and landing at an airport.



NOAA has three types of ships. Oceanographic research ships sail across the ocean to study climate. Did you know that the weather you are experiencing right now is affected by the interaction of the atmosphere with the ocean thousands of miles away? Scientists aboard NOAA ships can learn a lot about this by gathering data and doing experiments at sea.

NOAA also has fisheries research ships. These ships collect samples of fish so scientists can see what

kinds of fish are in a particular part of the ocean, what they eat, how old they are, how they reproduce, what their habitat is like, and other kinds of useful information. NOAA gives this information to fishery resource managers who then tell fishermen how much fish they are allowed to catch.

NOAA's hydrographic ships map the ocean floor using side scan sonar, which bounces sound waves off the ocean floor. Sonar technicians can tell how deep the ocean is and whether there are any large objects underwater—like big rocks or sunken vessels—that ships might bump into. This information is later put onto special maps called nautical charts.

Did you know that NOAA also has its own service of men and women who wear uniforms, similar to the Coast Guard? It's called the NOAA Corps, and is the smallest of America's seven services (the other services are the Army, Navy, Marines, Air Force, Coast Guard, and Public Health Service). All NOAA Corps officers have college degrees in science, mathematics, or engineering. They drive the ships and fly the aircraft, and work with civilian employees to make sure that scientists have everything they need to do their research aboard the ships and aircraft.

All of NOAA's ships and aircraft are operated and managed by NOAA Marine and Aviation Operations, or NMAO. The NOAA Corps is also part of NMAO.

