## Fixing Our Earth



After four centuries as a major center of ocean commerce and naval power, the Elizabeth River is the most polluted waterway on the Chesapeake Bay for some cancer-causing chemicals.

Courtesy Captain Albert E. Theberge, NOAA Corps (ret.)



Adobe Creek in Sonoma County, California was once alive with salmon and steelhead trout; but after years of pollution and neglect, state officials declared it "dead." Courtesy NOAA Restoration



Seagrasses provide food and habitat for different species of fish, lobster, wading birds, manatees and sea turtles. In Tampa Bay, more than 70 percent of seagrass meadows have been destroyed by pollution, coastal development, dredging, and boat propellers. Courtesy NOAA Restoration Center

#### What You Will Do

Get involved in a project to restore damaged natural resources

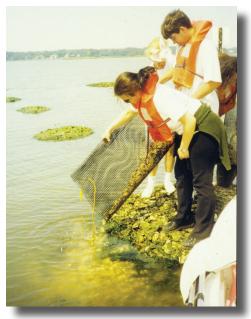
There are hundreds of stories about damage to coral reefs, rivers, fisheries and other resources caused by storms, oil spills, chemical pollution, and many other events.

So, is there anything we can do? Yes! We can help restore habitats and save many species! NOAA has worked with more than 2,500 groups throughout the U.S. to protect and restore marshes, wetland forests, oyster reefs, seagrass beds, beaches, and tidal streams that have been damaged by natural events and human activities. Restoration projects include:

- Removing invasive species
- Repairing damaged habitats
- Cleaning up pollution
- Restoring natural ecosystem processes such as water flow
- Re-introducing native organisms
- Monitoring activities to evaluate long-term success

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# Kids play a big part in many restoration projects!



Local middle and high school students grew more than 100,000 bushels of seed oysters that were used to successfully restore oyster reefs in the Elizabeth River, Portsmouth, VA. Courtesy NOAA Restoration Center



Students at Casa Grande High School built the only student run fish hatchery in the lower 48 states, removed trash from Adobe Creek, planted trees, so that Steelhead and Chinook salmon are once again spawning in the steam. Courtesy NOAA Restoration Center



Students in the Tampa Bay area grow marsh grasses and seagrasses, and assist with monitoring and planting to restore damaged habitats. Courtesy Tampa BayWatch

## Here's how you can start helping to fix our Earth!

#### What You Will Need

- ☐ Good ideas
- ☐ Desire to make things better
- ☐ Willingness to get involved

#### Warning

Work on this project with an adult partner! Be sure you have permission and expert advice before starting any restoration activities.

#### How to Do It

- 1. Visit the Web sites listed on "NOAA's

  Restoration Programs." Read some of the
  case studies to get ideas about different
  kinds of restoration projects. Also, check
  out the "Volunteers" page at NOAA's
  Restoration Portal http://www.habitat.
  noaa.gov/restorationtechniques/public/
  volunteers\_about.cfm
- Look over "Some Organizations Involved with Habitat Restoration Projects." Check your local telephone directory to see if any of these organizations have an office nearby. If so, give them a call and ask about restoration projects in your area. If not, contact NOAA's Fisheries Restoration Center (see the contact list at <a href="http://www.nmfs.noaa.gov/habitat/restoration/contact.html">http://www.nmfs.noaa.gov/habitat/restoration/contact.html</a>), and NOAA's Office of Response and Restoration (orr.webmaster@noaa.gov) for ideas.
- 3. Talk to your parents, friends, teachers, and other groups about getting involved in a restoration project. Many successful restoration projects begin with one person who wants to make things better. Maybe you can be that person!

### NOAA's Restoration Programs

The Damage Assessment and Restoration Program focuses on events such as oil spills, release of toxic chemicals, or ships that run aground. http://www.nmfs.noaa.gov/habitat/restoration/projects\_programs/darp/index.html

The Community-Based Restoration Program works with local partners to restore fishery habitats and encourage conservation of living marine resources. http://www.nmfs.noaa.gov/habitat/restoration/projects\_programs/crp/index.html

The Office of Response and Restoration investigates natural resource damage, plans restoration projects, and helps local groups design monitoring plans to measure the success of restoration projects. http://www.response.restoration.noaa.gov/

Through the National Coastal Zone Management Program, NOAA partners with state coastal zone management programs to develop habitat restoration plans and carry out a variety of restoration projects. http://coastalmanagement.noaa.gov/issues/habitat\_activities.html

The National Estuarine Research Reserve System works with local and state partners as well as other NOAA offices and federal agencies carry out habitat restoration projects based on scientific observations and historical analysis of

# Some Organizations Involved with Habitat Restoration Projects

American Littoral Society American Rivers American Sportfishing Association Chesapeake Bay Foundation Coalition to Restore Coastal Louisiana Connecticut River Watershed Council Conservation Law Foundation **Ducks Unlimited** EarthCorps Gulf of Maine Council on the Marine Environment Gulf of Mexico Foundation Institute for Fisheries Resources Institute For Sustainable Forestry National Fish and Wildlife Foundation North Carolina Coastal Federation Ocean Trust/National Fisheries Institute Save the Bay (Narragansett Bay) The Nature Conservancy Tampa Bay Watch Trout Unlimited

ecosystems. http://nerrs.noaa.gov/Restoration/welcome.html

The Coral Reef Conservation Program provides funding and technical assistance to NOAA offices and partner groups to support restoration, monitoring, and research on the effectiveness of coral reef restoration methods. http://www.coralreef.noaa.gov/