



Education Strategic Plan, 2009-2029



EPP Ph.D graduate in Atmospheric Sciences at a Hurricane Hunter console

NOAA's Education Mission

A science-literate public is essential for NOAA to meet its Science, Service and Stewardship Mission. The America COMPETES Act (P.L. 110-69) gives NOAA broad authority for educational activities. Stemming from this statute and other program-specific education mandates, the NOAA education community works collaboratively to advance the priorities outlined in NOAA's Education Strategic Plan and meet NOAA's Education Mission: "To advance environmental literacy and promote a diverse workforce in ocean, coastal, Great Lakes, weather, and climate sciences, encouraging stewardship and increasing informed decision making for the nation".

Who We Serve

NOAA's education activities focus on connecting NOAA-related sciences, places, products, and services with the public, students (k-12 through post-graduate) and educators across the country with the goal of increasing Science, Technology, Engineering and Math (STEM) competitiveness, promoting environmental literacy and helping to create a future workforce that reflects the diversity of the Nation. NOAA's Line Offices and Programs support a wide range of STEM fields, including ocean, atmospheric, climate, and environmental sciences. These programs invest resources in education activities as required by legislation and as a means of meeting their broader program mission. These education investments are a vital component of NOAA's science, service and stewardship functions. Combined, they form a robust education portfolio that takes advantage of NOAA assets that are unique within the federal government. The agency's education portfolio also leverages external capabilities through a wide array of partnerships with academic and other education institutions, and other federal, state and local agencies, to reach our target audiences across the Nation. Below are just a few of NOAA's FY11 education accomplishments.



Teachers learning about a coral nursery at the National Coral Reef Institute, Ft. Lauderdale, FL

Higher Education

NOAA programs help to train the next generation of scientists by providing support to students through scholarships, assistantships and fellowships. Many of these students pursue careers in STEM fields. FY11 accomplishments include:

- 491 students supported by NOAA funding who have been awarded NOAA mission-related STEM post-secondary degrees.¹
- 90 students trained in NOAA-mission related sciences and policies through competitive fellowship support.²

Teacher Professional Development

NOAA provides unique experiences and professional development opportunities to preK-20 teachers and educators that directly tie to and support school curricula. FY11 accomplishments include:

- Over 14,000 teachers and educators participating in in-person professional development that integrates NOAA sciences, data and other information.³
- More than 29,000 teachers and educators participating through distance learning in professional development that integrates NOAA sciences, data and other information.⁴

Contributing Programs:

¹ Educational Partnership Program, Hollings Scholarship, Nancy Foster Scholarship, Sea Grant, Climate Program Office (CPO)

² National Estuarine Research Reserve System (NERRS), Sea Grant

³ Bay Watershed Education and Training (B-WET) Program, Coral Reef Conservation Program (CRCP), Ocean Exploration and Research (OER), Environmental Literacy Grants (ELG), NERRS, Office of National Marine Sanctuaries (ONMS), CPO, Teacher at Sea, National Ocean Service (NOS) Education.

⁴ CRCP, OER, NERRS, ELG, ONMS, NOS Education, CPO



Students at work with the River Center Foundation, a Pacific Northwest B-WET grant recipient

K-12 Students

The most effective way to learn science is by doing it. NOAA plays an important role in teaching science to students/youth by connecting them to their natural environment. FY11 accomplishments include:

- Over 150,000 K-12 students participating in in-person, school-based programs or activities that integrate NOAA sciences, data and other information.⁵
- 7,000 K-12 students/youth participating in in-person out-of-school programs or activities that integrate NOAA sciences, data and other information.⁶

Informal Education

An informed, science-literate, society is key to ensure sustainable use of our natural resources and stewardship of our ocean, coasts and Great Lakes. NOAA contributes to this vision by reaching millions of visitors through partnerships with science centers, museums, aquariums and other educational institutions. FY11 accomplishments include:

- 48.8 million visitors at informal learning institutions with a NOAA-funded exhibit or program that integrates NOAA sciences, data and other information.⁷
- 148 institutions with a NOAA-funded informal learning exhibit or program that integrates NOAA sciences, data and other information.⁸



Science on a Sphere, Orlando Science Center

NOAA Education Program Resources

For more information, visit: www.education.noaa.gov or any of the contributing programs:

- Bay Watershed Education and Training Program; <http://www.oesd.noaa.gov/BWET/>
- Climate Program Office; <http://www.climate.noaa.gov/education/>
- Coastal Services Center; <http://www.csc.noaa.gov/>
- Coral Reef Conservation Program; <http://coralreef.noaa.gov/>
- Educational Partnership Program; <http://www.epp.noaa.gov>
- Environmental Literacy Grants Program; <http://www.oesd.noaa.gov/ELG/>
- Hollings Undergraduate Scholarship; http://www.oesd.noaa.gov/Hollings_info.html
- Nancy Foster Scholarship; <http://fosterscholars.noaa.gov/aboutscholarship.html>
- National Estuarine Research Reserve System; <http://nerrs.noaa.gov/Education.aspx>
- National Marine Fisheries Service; <http://www.nmfs.noaa.gov>
- National Ocean Service; <http://oceanservice.noaa.gov/education>
- National Sea Grant Program; <http://www.seagranted.net>
- National Weather Service; <http://www.nws.noaa.gov/education.php>
- NOAA Satellites and Information Service; <http://www.nesdis.noaa.gov>
- Ocean Exploration and Research Program; <http://oceanexplorer.noaa.gov/>
- Office of National Marine Sanctuaries; <http://sanctuaries.noaa.gov/education>
- Office of Oceanic and Atmospheric Administration; <http://research.noaa.gov/education/>
- Teacher at Sea Program; <http://teacheratsea.noaa.gov/>



Student collects glass eels on Hudson River tributaries as part of a "citizen science" project lead by the Hudson River NERR (NY)

Contributing Programs:

⁵ B-WET, CRCP, NERRS, ONMS

⁶ ONMS

⁷ ELG, ONMS

⁸ ELG, NERRS, ONMS, Sea Grant