



NOAA's Climate Change Education Funding Opportunities



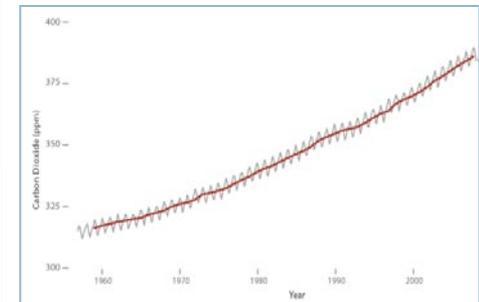
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NCSE: Climate Change Education Workshop

March 15, 2010

NOAA Vision

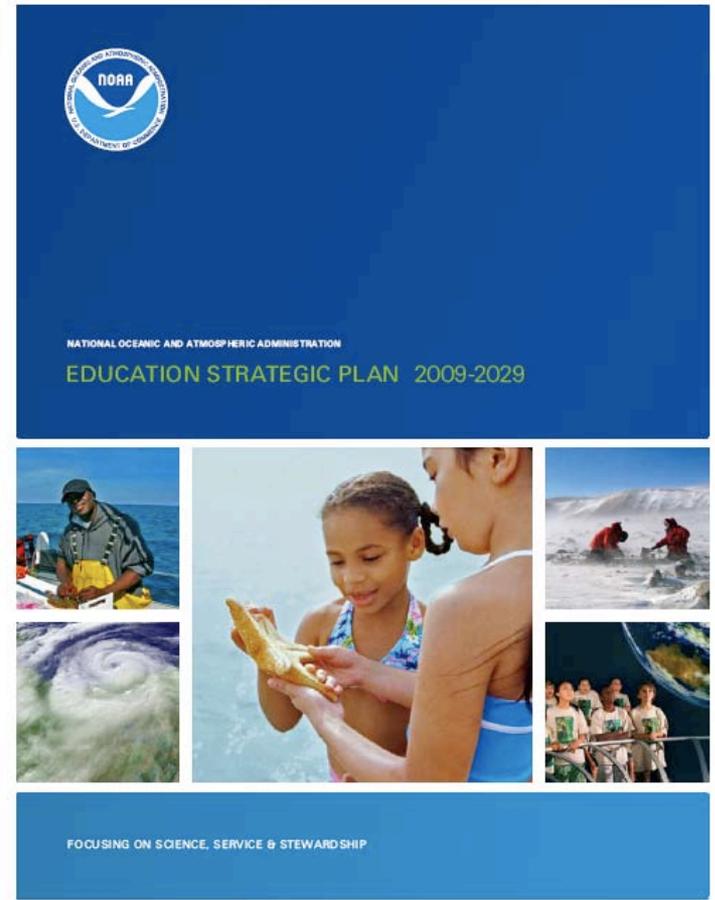
An informed society that uses a comprehensive understanding of the role of the oceans, coasts, and atmosphere in the global ecosystem to make the best social and economic decisions.



Education at NOAA: A 20-year Plan

Goal 1: An environmentally literate public supported by a continuum of lifelong formal and informal education and outreach opportunities in ocean, coastal, Great Lakes, weather, and climate sciences.

Goal 2: A future workforce, reflecting the diversity of the Nation, skilled in science, technology, engineering, mathematics, and other disciplines critical to NOAA's mission.



*An educated public is needed to serve as stewards of the natural environment, take appropriate action in the case of severe weather, and participate in the national debate on complex issues such as **climate change**.*



Environmental Literacy Grants: Overview

- ✔ A competitive grants program for K-12 and informal education-alternating focus each year
- ✔ Began in 2005
- ✔ 48 funded projects = \$24.6M
- ✔ Annually 8-10 awards, \$3.2M - \$7.5M total
- ✔ 121 applications and ~\$64M requested per RFP



<http://www.oesd.noaa.gov/grantprog.html>



Environmental Literacy Grants: Overview

(cont.)

- ✔ 1-5 year awards
- ✔ \$100,000-\$1.25M awards
- ✔ Federal entities and foreign organizations ineligible
- ✔ Types of projects funded:
 - ✔ Teacher PD
 - ✔ Curriculum Development
 - ✔ Citizen Science
 - ✔ Science On a Sphere & Others
 - ✔ Data Visualization & Interpretation
 - ✔ Museum Exhibits
 - ✔ Civic Engagement
 - ✔ Public Opinion Research
- ✔ Audiences: informal education & K-12 students or teachers

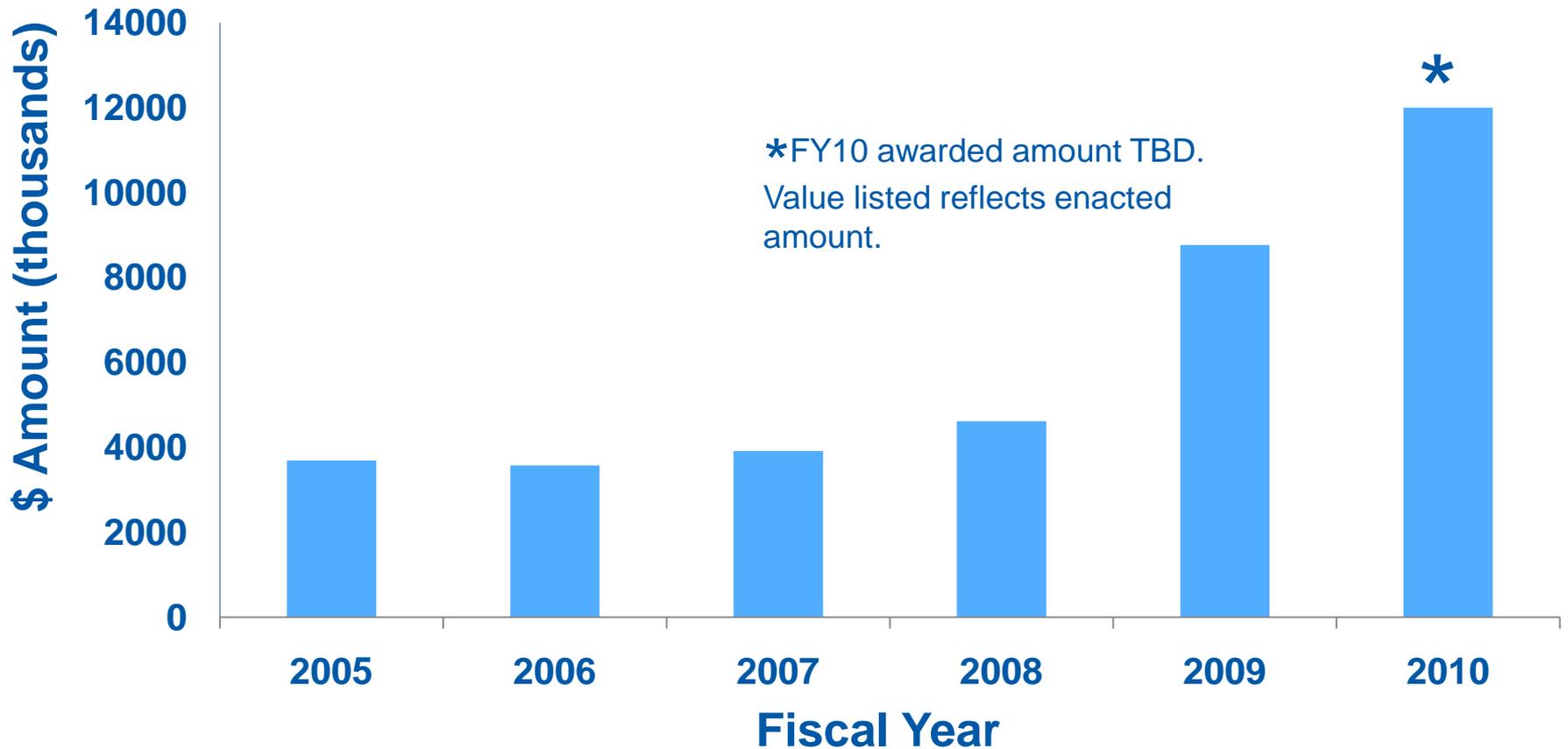


http://www.oesd.noaa.gov/elg_projects.html



Environmental Literacy Grants: Funding History

Amount awarded for NOAA's Competitive Education Grants



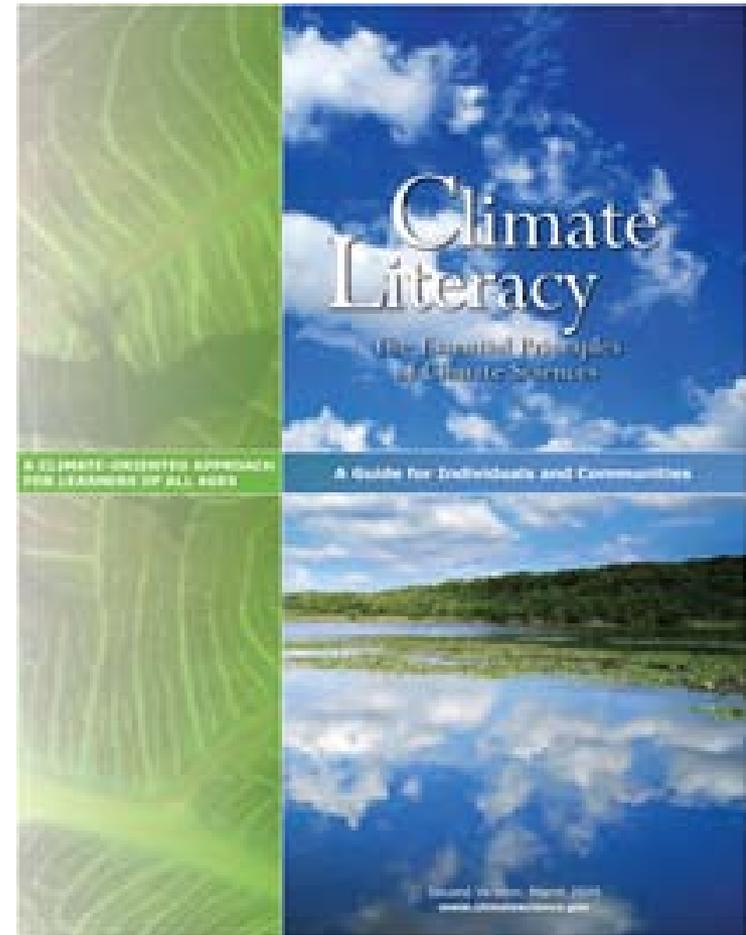
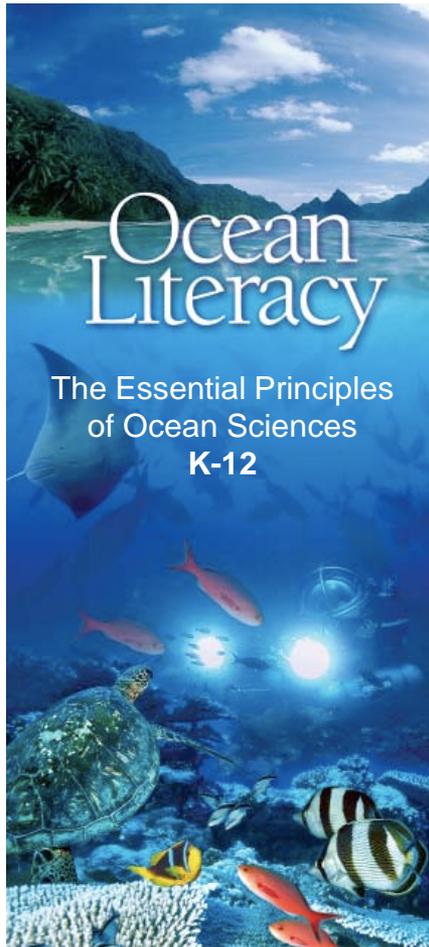
Environmental Literacy Grants: Funding Priorities

- National education priorities, recent reports
- NOAA's mission goals and related science priorities
- NOAA's Education Strategic Plan
- Administration Priorities
- Complement other funding opportunities, especially NSF and NASA

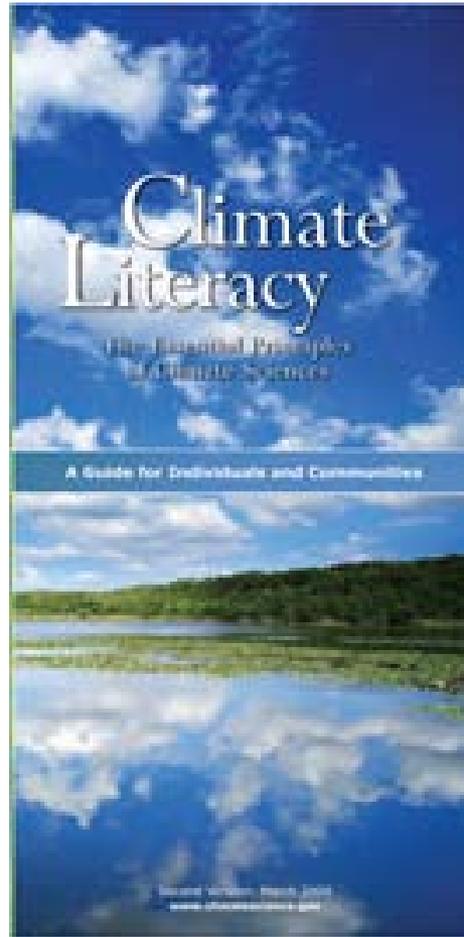
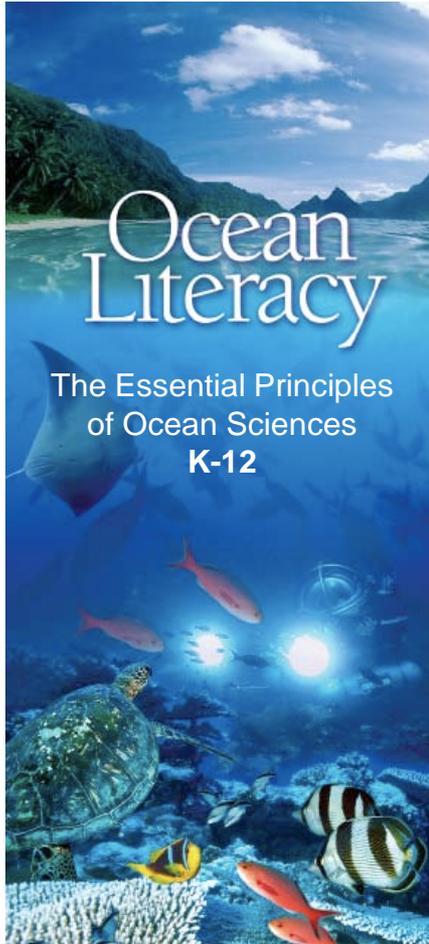
http://www.oesd.noaa.gov/funding_opps.html



Environmental Literacy Grants: Emphasis



Environmental Literacy Grants: Emphasis



- ✔ Robust evaluation
- ✔ Collaborations
- ✔ Leverage NOAA assets
- ✔ Partner with NOAA
- ✔ Advances NOAA's Education Plan

Environmental Literacy Grants: Current Solicitation

Informal/Nonformal Ed

Projects that engage the public in educational activities that

- ✔ utilize emerging and/or advanced technologies and
- ✔ leverage NOAA assets to improve understanding and stewardship of the local and global environment.
- ✔ All projects must focus on one or more of the following informal/nonformal science education activities:
 - ✔ Technologically facilitated outdoor experiential learning for youth and adults;
 - ✔ Public participation in science related to one or more of NOAA's mission goals;
 - ✔ Exhibitions and online programs allowing the visualization and exploration of data supporting the interpretation of ocean, coastal, Great Lakes, weather & climate sciences;
 - ✔ Spherical display system (including NOAA's Science On a Sphere) installations and programming; and
 - ✔ Professional development programs and training programs for informal/nonformal education staff



Environmental Literacy Grants: Current Solicitation

Informal/Nonformal Ed

- ✔ Emphasize partnerships/collaborations, especially for larger awards
- ✔ Encourage utilization of best practices and published research indicating need
- ✔ Encourage building from what others have done
- ✔ Require strong project evaluation
- ✔ Projects will begin ~ Oct. 1, 2010
- ✔ \$7.5 M available for new awards



Environmental Literacy Grants: Future Solicitation

K-12 education

- Projects focusing on K-12 students and teachers
- Will be published in June/July 2010
- Pre-proposals will be due in Fall 2010
- Will emphasize use of climate and ocean literacy frameworks

ELG-Supported Climate Change Projects 2005-2009

Project Title	PI and Lead Institution	Award Amount
Aquarium of the Pacific's Ocean Science Center	Jerry Schubel, Aq. of the Pacific	\$985,306
Climate Change and the Ocean: Awareness to Action	Cynthia Vernon, Monterey Bay Aq.	\$913,593
A National Coalition of Aquariums Educating about Climate Change (collaborative project)	Cynthia Vernon, Monterey Bay Aq., Nancy Hotchkiss, Nat'l Aq. in Baltimore, William Spitzer, New England Aq.	\$1,490,960
Building Environmental Literacy: How the Ocean Community can Connect More Effectively With the American Public	Bill Mott, The Ocean Project	\$375,100
Climate Change Community Outreach Initiative	Debbi Stone, The Florida Aq.	\$627,082
NOAA Earth System Science Courses: Building on the Earth System Science Education Alliance (ESSEA)	Bob Myers, IGES	\$645,815
Resources for Climate Literacy Instruction	Jo Ellen Roseman, AAAS	\$750,000
Promoting Enviro Lit. through Teacher PD Workshops & Climate Change Student Summits	Frank Rack, Univ. of Nebraska, Lincoln	\$694,093
Interpreting Global Half-Hourly Cloud Observations to Promote Weather and Climate Literacy	Rosamond Kinzler, American Museum of Natural History	\$580,265
 Building and Distributing SciGuides and Science Objects	Albert Byers, NSTA	\$463,071

Bay-Watershed Education and Training (B-WET) Grants

- ✔ Projects integrate classroom instructional requirements with meaningful outdoor experiential learning
- ✔ Managed in partnership with Sanctuaries, Chesapeake Bay Office and Coastal Services Center
- ✔ Existing programs in Chesapeake Bay, California, Gulf of Mexico, Hawaii, New England, and the Pacific NW



QUESTIONS?

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National Council for Science and the Environment: Climate
Change Education Workshop

March 15, 2010

Science On a Sphere: Grants & Network

- NOAA created Science On a Sphere (SOS) in 1997, in 2005 we began offering awards to ISE institutions to create permanent exhibits
 - First year was largely experimental
- Today, there are 31 ed institutions with SOS exhibits and 40 members of the collaborative network (21 have received funding from NOAA)
- ELO grants support installations, content development, evaluation & related programs
- *Difficult to support related research learning*
- Collaborative Network that shares best practices
 - NOAA, NASA, Dept. of Energy, universities, museums, zoos, and aquariums are members
 - Workshops, telecons, trainings, capacity building grant
 - Content, technology innovations , and evaluations are shared



<http://www.oesd.noaa.gov/network>

