

# NOAA Climate Stewards Education Project





# Who Are We?



## CLIMATE PROGRAM OFFICE

Understanding climate variability and change to enhance society's ability to plan and respond



## NOAA FISHERIES SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



## NATIONAL MARINE SANCTUARIES



National Oceanic and Atmospheric Administration's

## National Weather Service

[weather.gov](http://weather.gov)



## NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM



## NOAA SATELLITE AND INFORMATION SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

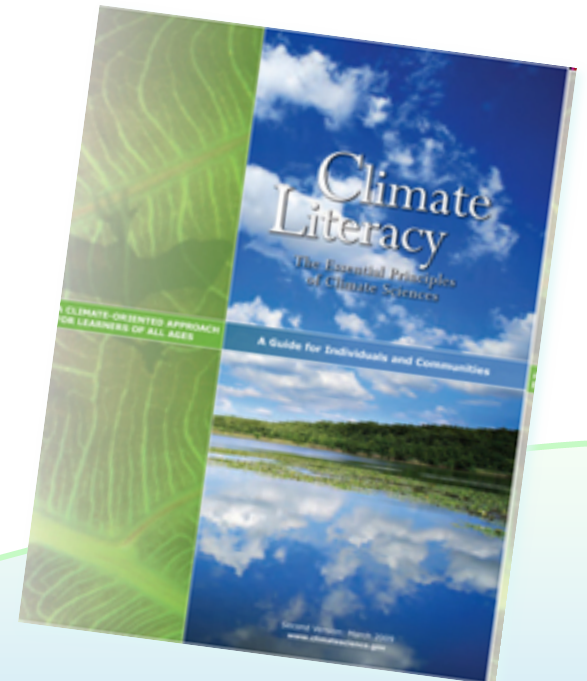




# NOAA Climate Stewards

Builds Climate Literacy so educators and students can:

- ***understand*** the concepts of climate
- ***assess*** the scientific credibility of information
- make ***informed*** and ***responsible*** decisions, and ***initiate actions*** in the community





# Benefits for Participants

- **Sustained professional development**
- **Opportunities for mini-grant funding**
- **Opportunities for travel reimbursements**
- **Educational resource prizes**





# Indicators of Success: Evaluation Results

## NOAA Climate Stewards:

- Showed increased confidence in teaching about climate related topics
- Adopted changes to their teaching practice
- Developed and implemented stewardship projects
- Expressed interest in continuing to participate in ongoing professional development experiences.



*"I am much more able to effectively integrate climate into the curriculum due to the resources and training in the program"*



# Organizational Structure: 2 Ways to be Involved!

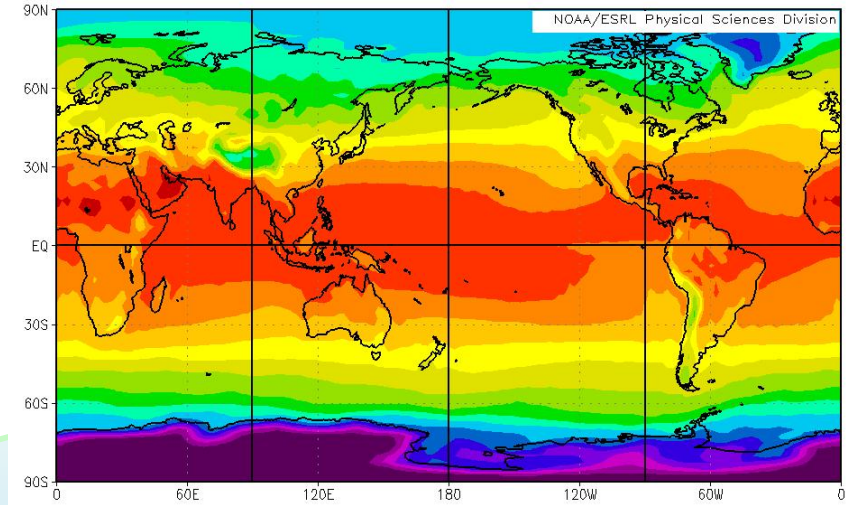
- I. The Education Community
- II. The Stewardship Community





# I. The Education Community

- Monthly webinars
- Monthly discussion groups
- Free Regional workshops – 6 this year!
- Community-wide communication via interactive listserv
- You choose the level of involvement
- Participate in occasional online evaluations.





# II. The Stewardship Community

Support for projects in your classroom or community



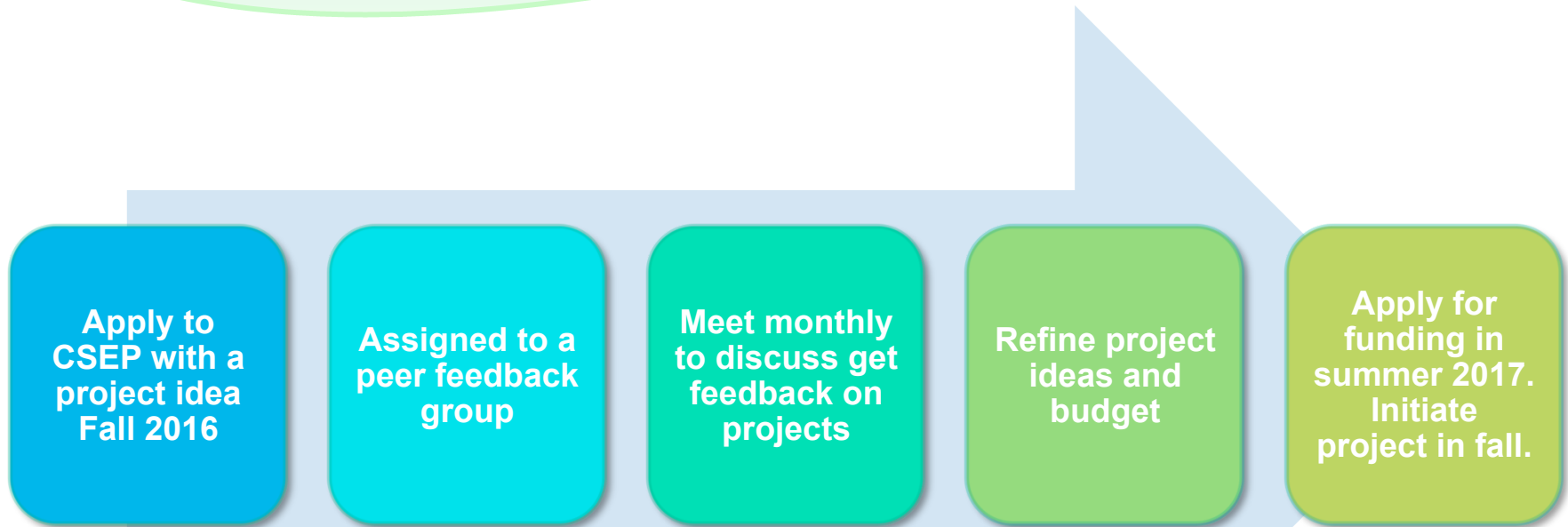
- Propose a stewardship action project to join
- Participate in a peer review group
- Opportunities for travel reimbursements to present at conferences/CSEP regional workshops
- Invitations to participate in special events/PD opportunities







## II. The Stewardship Community





# What is a stewardship project?

A climate stewardship project must involve **action-based behavioral activities focused on the mitigation of, or adaptation to climate change impacts.**

Climate change mitigation involves activities that **reduce the production of human generated greenhouse gases**, i.e. energy reduction/conservation in homes and transportation, recycling; **or increasing sinks of carbon dioxide** i.e. reforestation, planting regionally appropriate gardens.

Climate change adaptation involves **making changes in our environment or the way we do things to respond to changes in climate** i.e. habitat restoration, planting regionally appropriate gardens, establishing regionally appropriate pollinator habitats, birdhouses.





# Stewardship in Action!

- Habitat Restoration and Carbon Sequestration -Beach Grasses
- Polar Bear Challenge: Conserving Energy and Changing Habits
- Anti-idling Campaign: ↓ Carbon Dioxide, ↑ Health
- Climate Impacts on Wetlands – Adapting for the Future
- Schoolyard Gardens & Biochar – Sequestering Carbon
- Ocean Acidification on Hawaiian Ecosystems: What Can We Do?

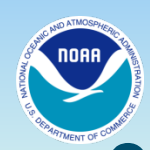




# Strong effects on stewardship project participants:

- Feeling they could make a difference
- Increased knowledge of climate science
- Readiness to apply what they had learned
- Increased awareness of climate science careers
- Meeting other climate-interested people





# oceanservice.noaa.gov/education/climate-stewards



 ABOUT US

 JOIN US

 WHAT WE DO

 IMAGES

 RESOURCES

## What is NOAA Climate Stewards?

The NOAA Climate Stewards (CSEP) provides formal and informal educators working with elementary through university age students with sustained professional development, collaborative tools, and support to build a climate-literate public that is actively engaged in climate stewardship. CSEP also provides support for educators to execute climate stewardship (mitigation or adaptation) projects with their audiences to increase understanding of climate science and practical actions to reduce the impact of climate change. The project is part of NOAA's portfolio of activities to strengthen ocean, climate, and atmospheric science education.

### CSEP Featured in *The Earth Scientist*

What do you think of when you hear the word stewardship? In the [latest issue of the education journal, \*The Earth Scientist\*](#), CSEP educators share their stories, innovations, and resources that you can incorporate into your classroom or education setting. Some articles have links to teacher background materials, supporting materials, and student worksheets that you can download, adapt, and use for yourself. We hope you enjoy this special [Climate Stewards edition of \*The Earth Scientist\*](#)!

Watch this video to learn more!

To receive information about CSEP activities and opportunities **sign up to the listserv.**

Your E-mail address

Your Name (optional)

**SUBSCRIBE!**





# Questions?

**Bruce.Moravchik@NOAA.Gov**

**or**

**[oceanservice.noaa.gov/education/climate-stewards](https://oceanservice.noaa.gov/education/climate-stewards)**

