

# Waquoit Bay Coastal Training Program

## Plan to Protect: How Coastal Communities can Prepare for Climate Change

### RESOURCE SHEET

#### Publications

Beavers, Rebecca. 2002. *Vulnerability of U.S. National Parks to Sea-level Rise and Coastal Change*, National Park Service, Natural Resource Program Center, Geological Resources Division. Denver, CO

Frumhoff, P.C., J.J. McCarthy, J.M. Melillo, S.C. Moser, and D.J. Wuebbles. 2007. *Confronting Climate Change in the U.S. Northeast: Science, Impacts, and Solutions*. Synthesis report of the Northeast Climate Impacts Assessment (NECIA). Cambridge, MA: Union of Concerned Scientists (UCS).

Neumann, James E., R. Nicholls, G. Yohe. 2000. *Sea-level rise and Global climate change. A Review of Impacts to U.S. Coasts*, Pew Center on Global Climate Change. Arlington, VA

New England Regional Assessment Group. 2001. *Preparing for a Changing Climate: The Potential Consequences of Climate Variability and Change. New England Regional Overview*, U.S. Global Change Research Program, 96 pp., University of New Hampshire.

Snover, A.K., L. Whitely Binder, J. Lopez, E. Willmott, J. Kay, D. Howell, and J. Simmonds. 2007. *Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments*. In association with and published by ICLEI – Locale Governments for Sustainability, Oakland, CA.

Thieler, E.R. 2000. *National Assessment of Coastal Vulnerability to Future Sea-level Rise*, United States Geological Survey [USGS]. Woods Hole, MA

Thieler, E.R., S.J. Williams. 2002. *Vulnerability of U.S. National Parks to Sea-level Rise and Coastal Change*, USGS. Woods Hole, MA

Union of Concerned Scientists. 2006. *Climate Change in the U.S. Northeast. A Report of the Northeast Climate Impacts Assessment*. Cambridge, MA: Union of Concerned Scientists

#### Online Resources

**Adaptation Options for Coastal Areas Guide** - The Climate Ready Estuaries program has finalized a technical report entitled [Synthesis of Adaptation Options for Coastal Areas](#) (PDF, 1.2 MB), which provides an overview of adaptation options available to coastal managers to reduce their system's vulnerability to climate change impacts. For more information, see EPA's [Adaptations Options web page: http://www.epa.gov/climateadaptyestuaries/adaptationoptions.html](http://www.epa.gov/climateadaptyestuaries/adaptationoptions.html)

**Cape Cod Cooperative Extension Wildfire Assessment and Preparedness Planning**  
[http://www.capecodextension.org/doc.php?92,,12270p,ww66310,0,0,Index,ck\\_.html](http://www.capecodextension.org/doc.php?92,,12270p,ww66310,0,0,Index,ck_.html)

Cape Cod Cooperative Extension is carrying out a Wildfire Assessment and Preparedness Program. Developed by extension staff in early 2003, the program is intended to help with public education about the risk of wildland (forest) fires and address the issue of fire safety, specifically management of available wildland fuels on public owned lands.

**Climate Change 101: Understanding and Responding to Global Climate Change** [http://www.pewclimate.org/global-warming-basics/climate\\_change\\_101](http://www.pewclimate.org/global-warming-basics/climate_change_101)

**Climate Choices** – A project of the Union of Concerned Scientists <http://www.climatechoices.org/ne/index.html> is a website that was created to explain to people in the United States what climate change will mean for us, our children, and our grandchildren. Using the most up-to-date science, ClimateChoices.org lays out two possible emission pathways we can take.

**Climate Literacy: The Essential Principles of Climate Science** is available online at:

<http://www.noaa.gov/climateliteracy.html> and <http://www.climatescience.gov>. “This guide is a first step for people who want to know more about the essential principles of our climate system, how to better discern scientifically credible information about climate, and how to identify problems related to understanding climate and climate change.” The 13-page guide includes information on how people can help reduce climate change and its impacts. It also defines important terms and concepts used when talking about climate and approaches to adaptation and mitigation.

**Communicators Guide to Wildland Fire** - [http://www.nifc.gov/preved/comm\\_guide/wildfire/](http://www.nifc.gov/preved/comm_guide/wildfire/) - excellent background on fire dependent ecosystems, fire behavior, fire use and educational resources.

**Falmouth Coastal Resources Working Group Report** [www.falmouthmass.us/coastal/crwg\\_falmouth\\_report.pdf](http://www.falmouthmass.us/coastal/crwg_falmouth_report.pdf)

**Firewise website** – [www.firewise.org](http://www.firewise.org) – provides a wealth of informational material, online courses, interactive modules and networking opportunities, as well as an online catalog to order print publications and audiovisual materials. “Wildfire! Preventing Home Ignitions” DVD is recommended viewing for audiences wishing to adapt to wildfire. This is where to find guidance and application forms for Firewise Communities/USA recognition and to review stories and case studies of successful adaptations in hundreds of communities throughout the U.S.

**International Council on Local Environmental Issues (ICLEI)** – Local governments for Sustainability [www.iclie.org](http://www.iclie.org) is an international association of local governments as well as national and regional local government organizations that have made a commitment to sustainable development.

**Intergovernmental Panel on Climate Change (IPCC)** <http://www.ipcc.ch/index.htm> The IPCC was established to provide the decision-makers and others interested in climate change with an objective source of information about climate change. The IPCC does not conduct any research nor does it monitor climate related data or parameters.

**Managing Fuels in Northeastern Barrens program** – This effort under the Joint Fire Science Program combines multi-agency efforts along with the University of Massachusetts at Amherst Department of Natural Resources and Conservation. <http://www.umass.edu/nebarrensfuels/index.html>

**National Academy of Sciences (NAS)** [www.dels.nas.edu/globalchange/](http://www.dels.nas.edu/globalchange/) The [National Academies](http://www.nas.edu), which includes the National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and the National Research Council, provide a unique public service by working outside the framework of government to ensure independent advice on matters of science, technology, and medicine. They enlist committees of the nation's top scientists, engineers, and other experts, all of whom volunteer their time to study specific concerns.

**National Center for Atmospheric Research (NCAR)** [www.ncar.ucar.edu](http://www.ncar.ucar.edu) NCAR provides the university science and teaching community with the tools, facilities, and support required to perform innovative research.

**National Fire Protection Association** – [www.nfpa.org](http://www.nfpa.org) – Check “About the Codes” to review NFPA 1144 and 1141, standards on assessing wildland fire hazards, construction, landscaping, and fire protection infrastructure design

**National Research Council** – This entity recently released a report, **Informing Decisions in a Changing Climate** calling for new federal efforts to identify local officials who need assistance in planning for climate change impacts. According to a press release by the National Academies, "The report recommends six principles that all agencies should follow in supporting decision makers who are facing the effects of climate change. The report was sponsored by the EPA and

NOAA. To read the press release and link to the report: <http://www.nationalacademies.org/morenews/20090312.html>. The summary is available online at: [http://books.nap.edu/openbook.php?record\\_id=12626&page=1](http://books.nap.edu/openbook.php?record_id=12626&page=1)

**The Nature Conservancy** – this organization’s “Fire and Conservation” program is active around the U.S., including Massachusetts. See <http://www.nature.org/initiatives/fire/> for general information and <http://www.nature.org/wherewework/northamerica/states/massachusetts/preserves/art6489.html> for more about their work on Cape Cod.

**New England Integrated Sciences and Assessment (NEISA)** [www.neisa.unh.edu/](http://www.neisa.unh.edu/) The New England Integrated Sciences and Assessments (NEISA) is an engaged research program devoted to the development of decision relevant information concerning climate and air quality for the citizens of New England. NEISA is a University of New Hampshire coordinated, multi-institutional and multi-disciplinary [integrated assessment](#) focusing on the relationship between climate, air quality, and human health in New England. NEISA– Indicators of Climate Change in the Northeast <http://www.neisa.unh.edu/Climate/index.html>

**National Oceanic and Atmospheric Administration (NOAA)** [www.noaa.gov/climate.html](http://www.noaa.gov/climate.html) NOAA is an agency that enriches life through science. Our reach goes from the surface of the sun to the depths of the ocean floor as we work to keep citizens informed of the changing environment around them.

NOAA-FAQs <http://www.ncdc.noaa.gov/oa/climate//globalwarming.html>

**NOAA’s Office of Ocean and Coastal Resource Management (OCRM)** has launched a new section of its website that focuses on climate change. The OCRM [Climate Change web page](#) is designed as a resource for coastal managers and to inform the public about the effects of climate change on coastal habitats and communities. The site includes discussions of sea level rise, ocean acidification, and changing species distribution <http://coastalmanagement.noaa.gov/climate.html>

**National Park Service Fire & Aviation** - [http://www.nps.gov/fire/fire/fir\\_wildland.cfm](http://www.nps.gov/fire/fire/fir_wildland.cfm) - Detailed information about wildfire management in the National Parks, including the Cape Cod National Seashore.

**Northeast Climate Impacts Assessment (NECIA)** <http://www.northeastclimateimpacts.org/> The Northeast Climate Impacts Assessment (NECIA) is a collaboration between the Union of Concerned Scientists (UCS) and a team of [more than fifty independent](#) experts to develop and communicate a new assessment of climate change, impacts on climate-sensitive sectors, and solutions in the northeastern United States.

**Pew Center on Global Climate Change** <http://www.pewclimate.org> The Pew Center on Global Climate Change brings together business leaders, policy makers, scientists, and other experts to bring a new approach to a complex and often controversial issue. Our approach is based on sound science, straight talk, and a belief that we can work together to protect the climate while sustaining economic growth.

**Real Climate-Climate science from climate scientists** [www.realclimate.org](http://www.realclimate.org) RealClimate is a commentary site on climate science by [working climate scientists](#) for the interested public and journalists. We aim to provide a quick response to developing stories and provide the context sometimes missing in mainstream commentary. The discussion here is restricted to scientific topics and will not get involved in any political or economic implications of the science.

**StormSmart Coasts** - <http://www.mass.gov/czm/stormsmart/>. This program is spearheaded by the MA Office of Coastal Zone Management. It is designed to help people working in coastal communities address the challenges arising from storms, floods, sea level rise, and climate change, and provides a menu of tools for successful coastal floodplain management. Fact sheets on a number of issues are available on the site.

**U.S. Climate Change Science Program (CCSP)** [www.climatescience.gov](http://www.climatescience.gov) The U.S. Climate Change Science Program (CCSP) integrates federal research on climate and global change, as sponsored by [thirteen federal agencies](#) and overseen by the Office of Science and Technology Policy, the Council on Environmental Quality, the National Economic Council and the Office of Management and Budget.

U.S. Climate Change Science Program, Synthesis and Assessment Product 4.1 on Coastal Sensitivity to Sea-level Rise [www.climatescience.gov/Library/sap/sap4-1/final-report/default.htm](http://www.climatescience.gov/Library/sap/sap4-1/final-report/default.htm)

**U.S. Environmental Protection Agency (EPA)** <http://www.epa.gov/> EPA leads the nation's environmental science, research, education and assessment efforts. The mission of the Environmental Protection Agency is to protect human health and the environment. Since 1970, EPA has been working for a cleaner, healthier environment for the American people.

Climate Change Health and Environmental Effects <http://epa.gov/climatechange/effects/adaptation.html>

Recent EPA Sponsored Conference on Water Resources and Climate Change  
<http://www.epa.gov/nrmrl/wswrd/wqm/wrap/workshop.html>

**U.S. Geological Survey (USGS)** [www.usgs.gov](http://www.usgs.gov) The USGS serves the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.

**U.S. Global Change Research Program (USGCRP)** <http://www.usgcrp.gov/usgcrp/default.php> The U.S. Global Change Research Program (USGCRP) supports research on the interactions of natural and human-induced changes in the global environment and their implications for society.