



NATIONAL OCEAN POLICY

Resiliency to climate change and ocean acidification

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National Ocean Policy: Background

- Executive Order 13547:
Stewardship of the Ocean, Our Coasts, and the Great Lakes
- Adopted the Final Recommendations of the Interagency Ocean Policy Task Force (2009-2010)
- Vision:
“To achieve an America whose stewardship ensures that the ocean, our coasts, and the Great Lakes are healthy and resilient, safe and productive, and understood and treasured so as to promote the well-being, prosperity, and security of present and future generations...”

Priority Objectives

- Ecosystem-based management
- Coastal and marine spatial planning
- Inform decisions and improve understanding
- Coordinate and support
- **Resiliency and adaptation to climate change and ocean acidification**
- Regional ecosystem protection and restoration
- Water quality and sustainable practices on land
- Changing conditions in the Arctic
- Ocean, coastal, and Great Lakes observations, mapping, and infrastructure



Coastal Inundation

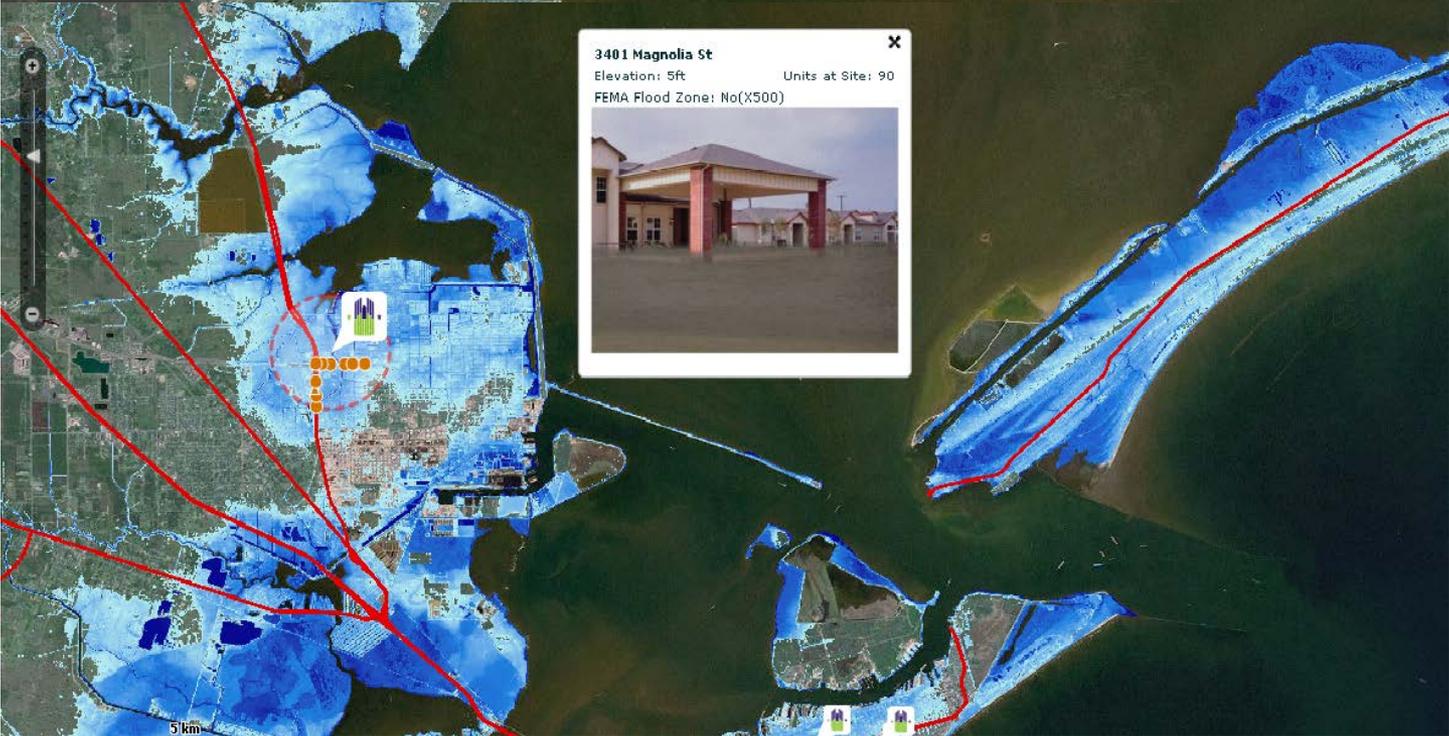


2 feet deep at site

\$1.18B Total Losses Since 1960

\$950M From Hurricanes and Tropical Storms

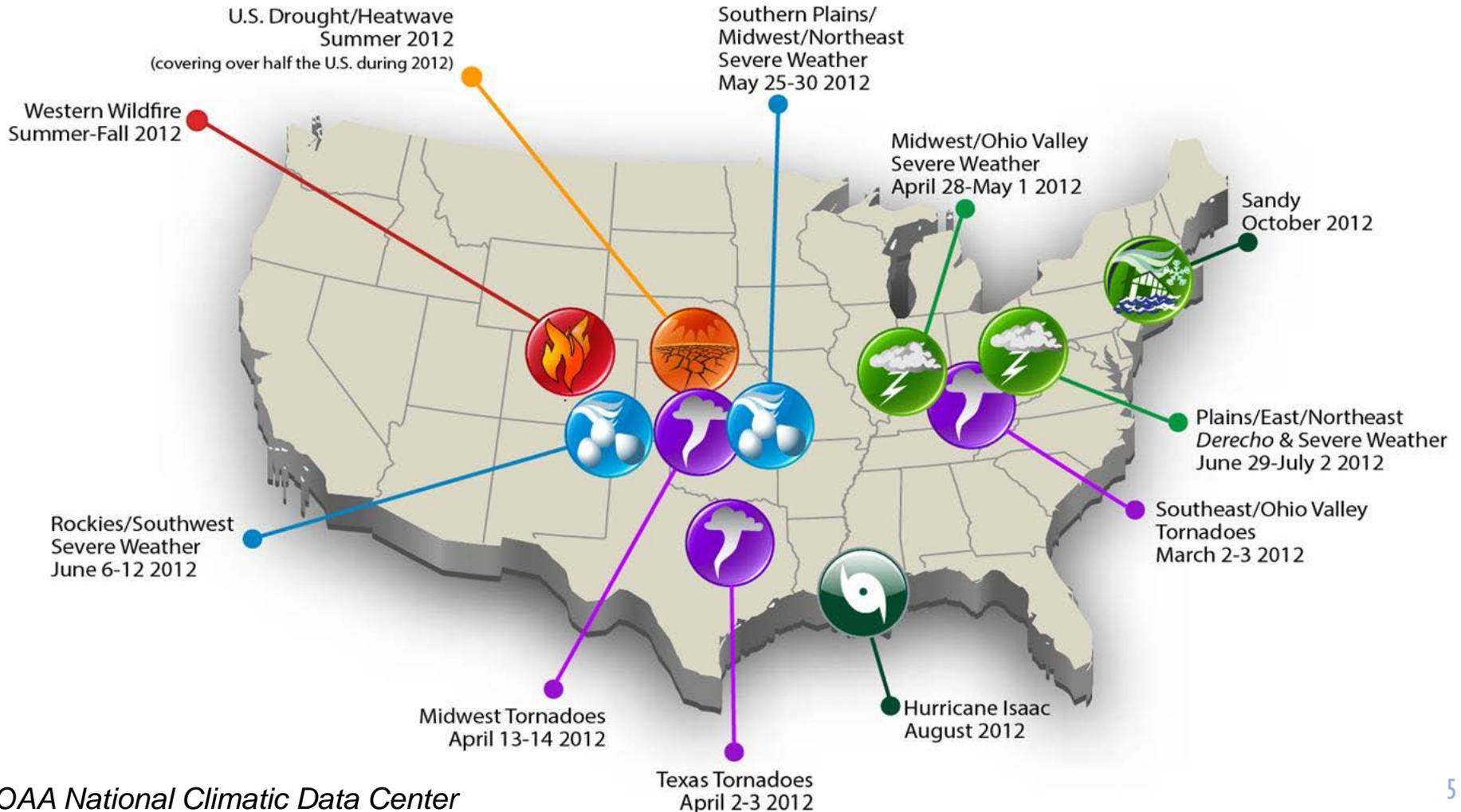
18% Chance of Hurricane Strike



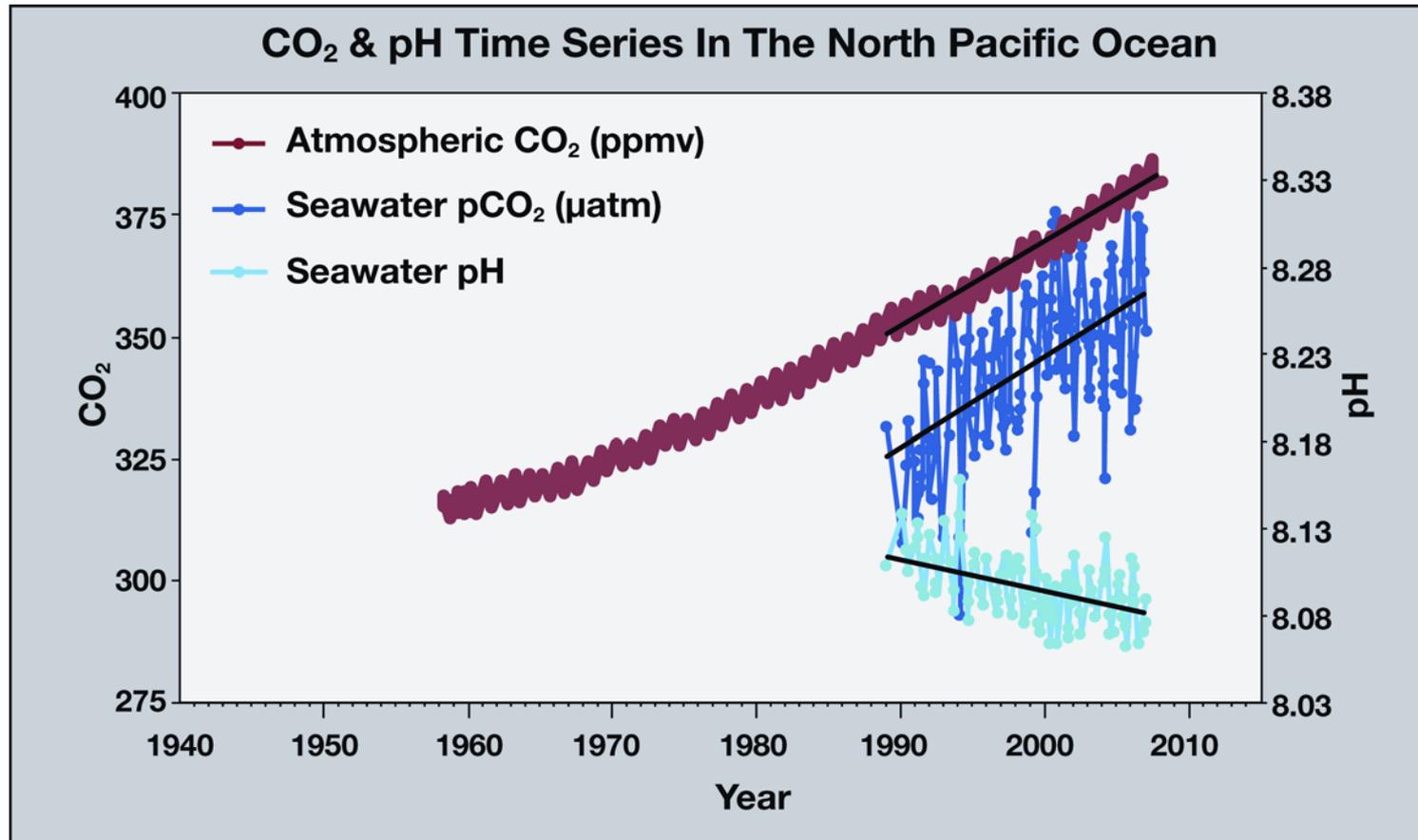
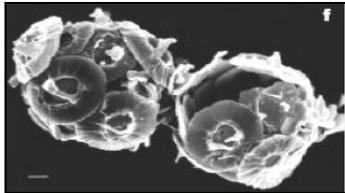
<http://www.csc.noaa.gov/digitalcoast/tools/slviewer>

Extreme Events (11 >\$1B events in 2012; >\$110B total)

U.S. 2012 Billion-dollar Weather and Climate Disasters

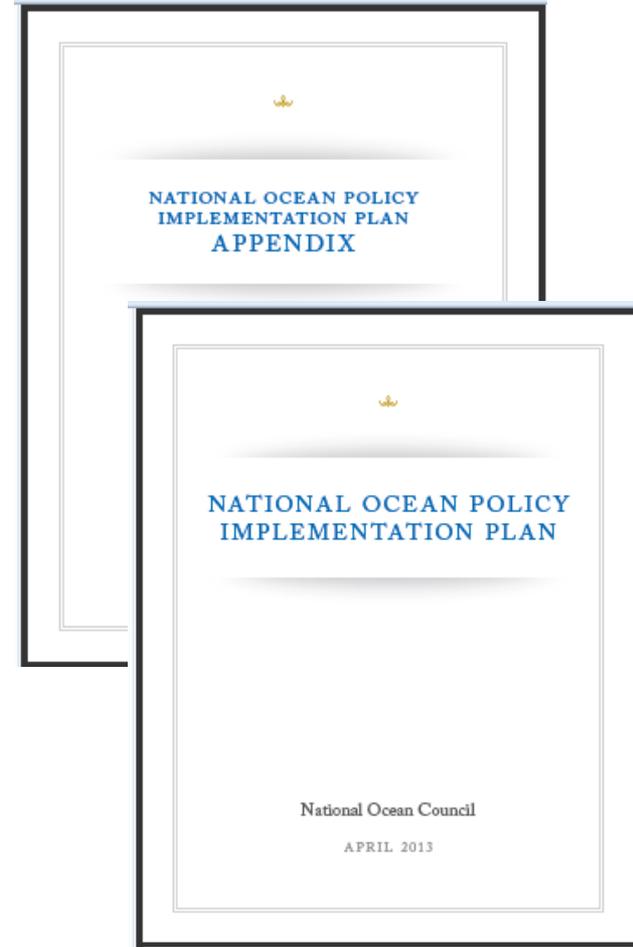


Ocean Acidification



National Ocean Policy: Implementation Plan

- Released by White House in Apr. 2013
- Outlines the economic, safety and security, and environmental stewardship objectives of the NOP
- Highlights the interagency actions required to meet NOP objectives
- Encourages regions to identify their ocean priorities through voluntary marine planning



Emerging Landscape of Interagency Adaptation Efforts

National Fish,
Wildlife and
Plants Climate
Adaptation
Strategy

National
Ocean Policy

Interagency
Climate
Change
Adaptation
Task Force

USGCRP
Adaptation
Science

National
Climate
Assessment

National
Action Plan
for Managing
Freshwater
Resources

NOP Implementation Plan: Preparing for Change



- Strengthen and integrate observations into a coordinated network of sentinel sites to enhance the Nation's ability to provide early warnings, risk assessments, and forecasts for impacts.
- Determine the impacts of interacting stressors on ecological systems, economies, and communities.
- Assess the vulnerability of coastal communities and ocean environments to climate change and ocean acidification and, in partnership with tribes, coastal communities and States, design and implement adaptation strategies to reduce vulnerabilities.

NOP Implementation Plan Appendix: Select 2013 Milestones

- Develop tools and conduct training courses for decision-makers and managers at all levels on how to design and implement vulnerability assessments for coastal and ocean infrastructure, communities, and natural and cultural resources. [NOAA, EPA, FEMA, USACE, DOT]
- Update USACE guidance on incorporating sea-level rise into project planning. [USACE, NOAA]
- Develop a draft framework for indicators of community and ecosystem impacts as part of the sustained National Climate Assessment process. [USGCRP, NOAA]
- Develop an interagency coordinating framework to strengthen the institutions, mechanisms, and capacities for systematically enhancing resilience to hazards. [FEMA, USCG, DOT, working with National Science and Technology Council Subcommittee on Disaster Reduction]

NOP Implementation Plan Appendix: Select 2014 Milestones

- Produce an inventory and assessment of observations and monitoring capabilities in networks and systems of ocean, coastal, and Great Lakes protected areas, research sites, and observing systems. [NOAA, DOI, EPA, DOD]. Build partnerships with both Federal and non-Federal to integrate existing observing activities into sentinel site networks. [NOAA, EPA]
- Develop and disseminate a suite of regional climate projections for coastal and marine regions of the United States. [USGCRP, NOAA]
- Develop regional- and local-scale, decision-relevant models and projections for selected areas that assess climate-related change in the physical, chemical, and biological conditions of coastal and marine ecosystems. [NOAA, DOI (USGS)]
- Develop best practices for climate change and ocean acidification vulnerability assessments for Federally-managed cultural and natural resources, tailored to different ecosystems and landscapes as needed. [NOAA, DOI, DOT, EPA]

NOP Implementation Plan Appendix: Select 2015 Milestones

- Integrate and strengthen sentinel site networks to track the impacts of climate change and ocean acidification on living marine resources (e.g., fisheries and marine protected species), protected areas, and coastal and Great Lakes communities in selected areas. [NOAA, DOI, EPA]
- Provide guidance to waterfront property owners on environmentally responsible management options for shoreline erosion. [USACE, DOI, EPA, FEMA, NOAA]
- Develop tools and water quality protection measures (e.g. BMPs) aimed at assessing and mitigating the impact of future climate change and ocean acidification within existing ocean and coastal programs (e.g. National Wildlife Refuge System, National Park System, National Forests, National Estuarine Research Reserves, National Estuary Program, and State counterpart areas). [DOI, EPA, NOAA, USDA (USFS)]

For More Information



National Ocean Policy Implementation Plan :

<http://www.whitehouse.gov/administration/eop/oceans/implementationplan>

National Ocean Policy Implementation Plan Appendix (includes milestones and timeframe):

http://www.whitehouse.gov//sites/default/files/national_ocean_policy_ip_appendix.pdf