
National Water Program Strategy: Responding to Climate Change

National Water Program

U.S. Environmental Protection Agency

October 2007

Presentation Outline

- **Water Program Climate Change Workgroup**
- **Draft Water Program *Strategy***
 - Background: Water and Climate Change
 - Proposed Program Response Actions
- **Comment Period and Next Steps**

Water Climate Change Workgroup

■ Principles:

- ❑ Organize Around EPA Climate Change Framework:
 - ❑ Mitigation
 - ❑ Adaptation
 - ❑ Research
- ❑ Link to Administration/Agency Priorities
- ❑ Work with Other EPA Program Offices
- ❑ Open Communications with Stakeholders

Water Climate Change Workgroup

- **Workgroup Goal:**

Create the capacity within the National Water Program to develop and implement specific actions responding to climate change in coordination with Federal, State, Tribal and other partners

- **Workgroup Product:**

- *DRAFT National Water Program Strategy: Response to Climate Change*

Water Climate Change Workgroup

■ Link to Administration/Agency

Priorities:

- ❑ President's Goal for Greenhouse Gas Emission Reduction
- ❑ Agency Priorities for Clean Energy and Sustainable Water Infrastructure
- ❑ Agency HQ/Regional Workgroups on Energy and Climate Change
- ❑ Agency Climate Programs and Research

Water Climate Change Workgroup

■ Key Steps in Process:

- Stakeholder “Listening Sessions” - June/July
- Agency Climate Meeting in Seattle - June
- National “Fly-in” for Water Directors - July 20
- Workgroup Draft *Strategy* – August

■ Next Steps:

- Internal Review - September
- Public Review - Fall
- Final Strategy - Winter

Water Climate Change Strategy

- **Structure of Draft *Strategy*:**
 - Executive Summary/Introduction
 - Background: Climate Change Impacts on Water Resources and Programs
 - National Water Program: Climate Change Response Actions
 - Appendices

Water Climate Change Strategy

■ **Background: Climate Change Impacts on Water Resources:**

- ❑ Climate Change Basics
- ❑ Air/Water Temperature
- ❑ Rain/Snow Levels and Distribution
- ❑ Storm Intensity
- ❑ Coastal/Ocean Characteristics
- ❑ Sea Level Rise

Water Climate Change Strategy

■ Selected Adverse Impacts of Climate Change on Water Resources:

- ❑ Increases in Water Pollution Problems
- ❑ More Extreme Water-Related Events
- ❑ Reduced Availability of Drinking Water Supplies
- ❑ Waterbody Movement and Disappearance
- ❑ Changing Aquatic System Biology
- ❑ Collective Impacts on Coastal Areas

Water Climate Change Strategy

Potential Program Impacts of:

- **Warmer Air/Water**
- **Rain/Snow Changes**
- **Storm Intensity**
- **Sea Level Rise**
- **Ocean Characteristics**

Water Climate Change Strategy

■ Five Major Goals:

- Goal 1: Use Core Water Programs to **Mitigate** Greenhouse Gases
- Goal 2: **Adapt** Water Programs to Climate Change
- Goal 3: Improve Climate Change Water **Research**
- Goal 4: **Educate** water stakeholders on Climate Change
- Goal 5: Establish **Management** capabilities within water program to respond to Climate Change challenges

Water Climate Change Strategy

■ Goals Propose Specific Response Actions:

- Total Number of Actions: 48
 - Actions Related to Mitigation: 11
 - Actions Related to Adaptation: 25
 - Actions Related to Research: 3
 - Actions Related to Education: 5
 - Actions Related to Management: 4
- All Actions to be Initiated in FY 2008 or 2009 with Assumption of Level Funding

Water Climate Change Strategy

■ Selected Mitigation Actions:

- ❑ Improve Energy Efficiency at Drinking Water and Wastewater Facilities
- ❑ Publish Federal Agency Water Conservation Guidance
- ❑ Promote Green Buildings
- ❑ Evaluate Geologic Carbon Sequestration
- ❑ Study Options for NPS Biological Sequestration

Water Climate Change Strategy

■ Selected Adaptation Actions:

- ❑ Develop Biological Indicators/Methods
- ❑ Review Existing Effluent Guidelines
- ❑ Develop Watershed/Climate Change Policy Memo to Support Watershed Resiliency
- ❑ Evaluate Impacts on Wet Weather Permit Program
- ❑ Develop Sustainability Handbook for Climate Impacts
- ❑ Review Wetlands Regulatory Framework

Water Climate Change Strategy

■ Selected Research Actions:

- ❑ Communicate Results of US Interagency Research (CCSP) to Water Managers
- ❑ Expand Water Program Role in EPA Global Change Research Program Planning
- ❑ Adjust Water Research Priorities to Reflect Climate Impacts

Water Climate Change Strategy

- **Selected Education Actions:**
 - Clearinghouse/Website Water and Climate Change
 - Annual Reports on *Strategy* Implementation
 - Expand Existing Training to Address Climate
 - Develop Climate Change Background Papers
 - Outreach to Partners and Stakeholders

Water Climate Change Strategy

■ Selected Management Actions:

- ❑ Maintain Water Program Climate Workgroup
- ❑ Revise Annual Program Guidance and Agency *Strategic Plan*
- ❑ Develop Regional Supplements to *Strategy* as Needed
- ❑ Establish Federal Agency Water/Climate Coordination group

Water Program Climate Strategy

- **Implementation of *Strategy*:**
 - Preparation for Implementation Ongoing
 - With Final *Strategy*, Full Implementation Begins
 - National Programs Implement Response Actions with Workgroup Oversight
 - Regions Consider Needed Supplements to Reflect Regional Priorities
 - Annual Reports of Progress

Strategy Comment Period:

(Expected to be November-December 2007 timeframe)

■ During the *Strategy* Comment Period:

- Meetings with Stakeholders:
 - States/Local Governments/Tribes
 - Industry
 - Agriculture
 - Environmental
- EPA Regional Office Outreach
- Conferences/Meetings
- Prepare for Implementation

Strategy Comment Period

■ Comments on the Draft *Strategy*:

□ Comments Due to EPA by: ***TBD***

□ Mail Comments to:

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Strategy Comment Period

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