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:
  Wendy Drake; Office of Water
  US EPA; 1200 Pennsylvania Ave.
  Washington, D.C. 22460
- E-mail Comments to:
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Strategy Comment Period

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