Addressing
Climate Change
in the Office of
Water

A CONVERSATION
ON DEVELOPING
OFFICE OF WATER'S
CLIMATE
ADAPTATION
IMPLEMENTATION
PLAN

Agenda

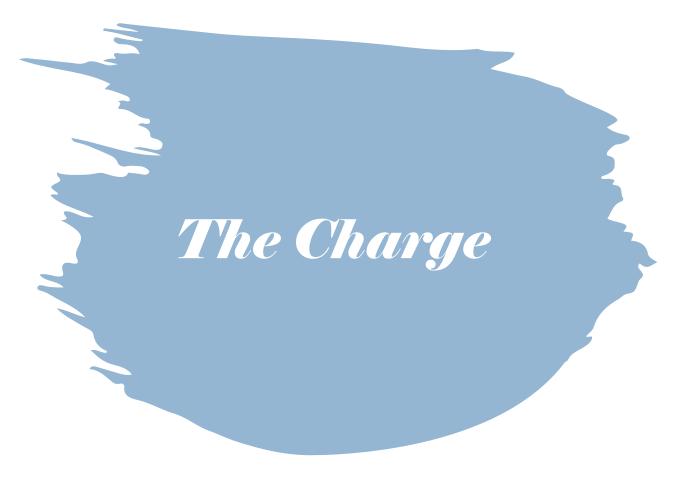
- Background
- Development Process
- Priority Actions
- Moving Forward
- Discussion











As a requirement of **EPA's 2021 Climate** Adaptation Action Plan and Policy Statement on Climate Adaptation, under the direction of **E.O. 14008**, all EPA Regional and National Program Offices were instructed to develop a Climate Adaptation Implementation Plan (FY22-26) to proactively incorporate climate adaptation throughout all programs, policies, rules, and operations, while working to reduce greenhouse-gas emissions and social injustice.

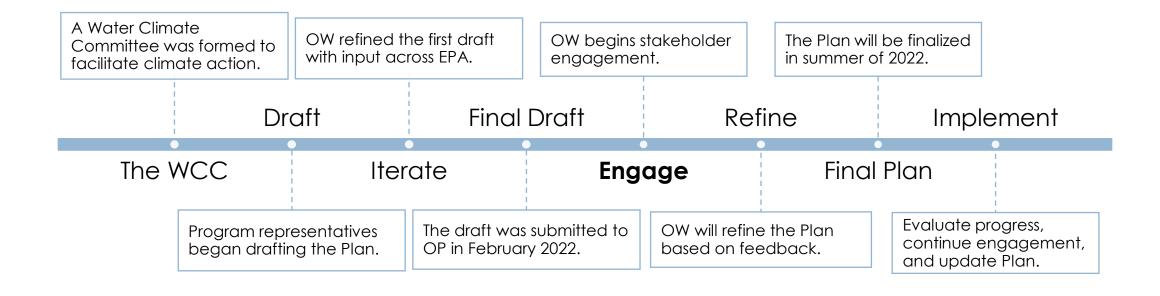




The Process

WORK TO DATE

Timeline



Core Components of the Plan

- The Plan will span FY22-FY26 and be revised adaptively over time as needed.
- Five specific items must be included in all implementation plans:
 - Designation of a Senior Career Leader responsible for overseeing climate adaptation activities in the office.
 - A Climate Vulnerability Assessment for the Office's programs.
 - Priority actions that will be taken to address the five agency-wide priorities identified in EPA's 2021 Climate Adaptation Action Plan.
 - A training plan for enhancing staff knowledge about climate adaptation.
 - Identification of science needs.
- Measures will be used to annually assess progress with implementing each individual action.

Categories of Core OW Program Vulnerabilities

- Critical Water Infrastructure
- Availability of Water for Human Use
- Waterborne Illness and Water Treatment Needs
- Aquatic Ecosystem Health
- Transportation and Energy Infrastructure Interfacing with Water
- Impacts of Climate Change on Vulnerable Communities and Populations:
 - Overburdened, Underserved, and Disadvantaged Communities
 - Tribal Nations and Indigenous Peoples
 - Territories and Island States

Research is needed to inform...

- Advancing Modeling Methods to Include and Regionalize Climate Change Information
- Building Resilient Water Infrastructure
- Supporting Climate-Smart Investments with Economic and Finance Data
- Safeguarding Human Health and Community Well-being

- Supporting Community and Watershed-scale Adaptation
- Protecting Aquatic Ecosystems and their Services
- Mitigating and Reducing Greenhouse Gas Emissions
- Evaluating the Nexus of Water Quality and Availability



Framing the Draft Priority Actions

Goal 1: Improve the climate resilience of America's water infrastructure

- Deploy Grant and Loan Programs to Advance Climate Objectives
- Incorporate Climate Planning Resources into Technical Assistance Programs
- Promote Resilient Infrastructure Solutions

Actions include:

- Incorporate climate change considerations into infrastructure grant and loan guidance and processes, including the State Revolving Funds (SRFs), Water Infrastructure Finance and Innovation Act (WIFIA), WIIN, and others.
- Expand access to technical assistance and climate risk assessment, such as through the Creating Resilient Water Utilities Program.
- Encourage green infrastructure and nature-based solutions across federal investments to improve climate resilience, water quality, and public access to natural spaces.

Framing the Draft Priority Actions

Goal 2: Protect the nation's waters from the impacts of a changing climate

- Integrate Climate Considerations in CWA and SDWA Actions and Programs
- Invest in Ecosystem Protection and Restoration
- Leverage Strategic Research

Actions may include:

- Advance a "Climate-Ready" National Pollutant Discharge Elimination System (NPDES)
 Program by providing permit writers with information to support adaptation.
- Leverage the BIL's historic funding of OW's Geographic Programs and National Estuary Programs to enhance ecosystem and community resilience to climate change.
- Develop a strategy to understand and address the climate-related causes and impacts of freshwater harmful algal blooms (HABs).

Framing the Draft Priority Actions

Goal 3: Advance the adaptive capacity of the water sector and the climate knowledge of all communities and decisionmakers

- Support Assessment of Climate Risks and Climate-Informed Decision Making
- Improve Availability of Data and Information to Support Climate-Informed Decisions

Actions include:

- Improve the accessibility and transparency of water and climate data to the public through interactive online mapping platforms, such as How's My Waterway.
- Leverage the Urban Waters Federal Partnership to address climate adaptation in urban, underserved communities.
- Work with tribal representatives to support and integrate Traditional Ecological Knowledge (TEK) into decision-making tools.

Addressing Climate Beyond the Plan

- Monitoring & Assessment
- Innovative Finance
- Stormwater & Green/Natural Infrastructure
- Watershed Restoration & Protection
- Nonpoint Source (NPS) Control
- Wetlands Protection & Restoration
- Water Quality Standards
- Drinking Water & Source Water Protection
- Water Efficiency, Conservation, & Reuse
- Water Supply Planning
- Drought Mitigation & Coordination
- Watershed Protection

- Integrated Water Resource Management
- Ecosystem Connectivity
- Coastal Management
- National Pollutant Discharge Elimination System (NPDES)
- Total Maximum Daily Loads (TMDLs)
- Disaster Response & Recovery
- Hazard Mitigation
- Research, Data, & Tools
- Partnerships Programs
- Collaboration with Diverse Partners
- Public Engagement Activities





Open Discussion

- What are your priorities and concerns when it comes to the impacts of climate change on water resources and the water sector?
- Do OW's priority actions resonate with your greatest needs for addressing climate change through adaptation actions?
- Do you have feedback to help shape OW's proposed actions, or additional actions to recommend?
- How can we keep you informed of and engaged in our adaptation efforts?

Thank you

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