



Frequently Asked Questions

National Water Program 2012 Strategy: Response to Climate Change

Q1: Why are you revising the previous EPA National Water Program Climate Strategy?

A: When EPA developed the first National Water Program Climate Strategy in 2007 (published in 2008), the Agency was starting to have conversations about the impacts of climate change on the EPA's water programs. EPA identified a range of actions to help begin the process of building the Agency's knowledge on climate change adaptation. Much has been learned since then, and EPA decided it was time to lay out a longer-term strategy to guide program planning that goes beyond the next two or three years.

In addition, there is now much more activity underway throughout the U.S. in local, tribal, state and federal areas. This presents EPA with the opportunity to build stronger collaborations needed to achieve its goals. This Strategy attempts to elaborate on potential collaborations.

Q2: What is your main message?

A: Climate change alters the hydrological background in which ecosystems and society function. To remain effective, EPA and its partners and stakeholders need to understand the changes underway in order to account for not only changes in average conditions but also changes in extreme conditions. However, while there is strong evidence that changes are underway, there is a range of uncertainty about the exact nature and extent of changes at the local scale where most decisions are made. Therefore, water managers need to develop flexible adaptive management strategies while we collectively continue to build the tools needed to project changes, understand vulnerability, and respond appropriately.

The pressures and stresses on the water environment come from many directions – from land use, population growth, municipal uses, industrial activity, agriculture, energy generation – all competing for limited supplies, all contributing to water quality impairment, and all struggling with how to account for the hydrological shifts associated with climate change.

This *2012 Strategy* presents a comprehensive look at EPA's entire National Water Program, and describes the long-term vision that will involve EPA working in conjunction with our federal, state, tribal and local partners to achieve. It also outlines the long-term goals reflecting EPA's role and programmatic mission. The *2012 Strategy* also lays out strategic actions that are the mid-term building blocks that should be undertaken in the next 3 to 8 years in order to work towards achieving those goals.

Taken as a whole, the *2012 Strategy* lays out the directional intentions for EPA's programs as we work to mainstream climate change considerations into our core programs and as we work collaboratively with a wide range of partners.

Q3: How is this “National Water Program 2012 Strategy: Response to Climate Change” different from the other federal climate change strategies and adaptation plans that have been, or will soon be, released?

A: The Interagency Climate Change Adaptation Task Force (Interagency Task Force) was established by President Obama in 2009. Over 20 federal agencies have been working together to develop recommendations to adapt to climate change impacts both domestically and internationally and have developed three cross-cutting adaptation plans. EPA was involved in all three plans associated with the Interagency Task Force, which are:

1. Freshwater National Action Plan
2. Fish, Wildlife and Plants Adaptation Plan
3. Oceans and Coasts Implementation Plan of the National Ocean Policy

In addition, the Interagency Task Force is also requiring each Federal Agency to develop adaptation plans addressing their operations, missions and programs. Consequently, EPA as a whole is also developing such a plan, which will be publicly available in the future.

The *2012 EPA National Water Program Climate Change Strategy*, which updates and revises an initial strategy published in 2008, is an in-depth treatment of just one of EPA's program areas and is coordinated with EPA's forthcoming Agency-wide climate adaptation plan. It also reflects EPA's commitments under the three national action plans mentioned above associated with the Interagency Task Force.

Q4: How does the Strategy address stopping global warming?

A: The *2012 Strategy* describes opportunities to reduce greenhouse gases in the water sector, which accounts for 3% to 14% of the nation's energy use (depending on what you count). The strategy describes how EPA's National Water Program intends to promote opportunities to increase energy efficiency at wastewater and drinking water treatment plants, promote technologies to recover energy from waste streams, and reduce water consumption which then reduces energy needed to pump, treat, distribute and use water.

Q5: Does this Strategy impose any regulations or policies?

A: No. This document provides a bird's eye view of the EPA National Water Program and how it needs to evolve in order to be a 'climate resilient' water program. It provides directional intention, but it does not establish any binding commitments, regulations or policies. However, it does describe the challenges the program will face and how those programs should evolve over time. Particular policies and programs will be developed in the course of typical annual planning and action development processes.

Q6: How is the Strategy organized and what are the main elements?

A: The principle theme of the *2012 Strategy* is Integrated Water Resources Management (IWRM). IWRM is a framework to holistically address current water resource issues and emerging climate change complications. There are several definitions of this term, but for the purpose of this strategy, the NWP uses IWRM to describe opportunities for state, interstate, tribal and local officials (supported by Federal agencies) to voluntarily collaborate at watershed or aquifer scales to protect and preserve fresh water resources through mutually beneficial solutions. IWRM calls for inter-sector planning (e.g., between the energy sector and the water sector) to sustainably manage water resources.

The Strategy is organized around six key sections:

- Infrastructure
- Water Quality
- Watersheds and Wetlands
- Coastal and Ocean Waters
- Working with Tribes
- Geographic Regions

Q7: Why do you focus on “Working with Tribes” as a separate area?

A: Tribes have particular vulnerabilities due to climate change. Tribal cultures and economies are closely tied to the land they live on, and adaptation options may be limited. The *2012 Strategy* describes how EPA intends to work with Tribes to help them develop sustainable strategies for their communities.

Q8: Why is the Regions section of the strategy based on Geographic Regions instead of EPA Regions?

A: EPA needs to work with Federal, state, tribal and local partners to achieve the visions and goals described in the *2012 Strategy*. Therefore, the strategy identifies the strategic issues shared by adjacent EPA Regions in order to leverage resources and build collaborations with other federal, state, tribal and local entities working at broader regional scales.

Q9: What are some of the key programs and actions in the *2012 Strategy*?

A:

- Climate Ready Estuaries (CRE)
- Climate Ready Water Utilities (CRWU)
- Green Infrastructure
- Healthy Watersheds Initiative
- Sustainable Infrastructure
- WaterSense

- Energy-Water Futures
- National Ocean Policy implementation
- Conduct research and develop information and tools to inform adaptation decisions

Q10: Why are non-EPA programs described in the 2012 Strategy?

A: There is a complex array of actors involved in managing water resources in the U.S. EPA's mission is to protect human health and the environment. EPA's mandate is to protect the quality of surface water and aquatic ecosystems and protect drinking water, including underground sources of drinking water. EPA is only involved in water quantity to the extent it is a factor in preserving aquatic ecosystems and water quality. Yet, the inter-relationships between the water environment and the many uses of water by society are many, and the actors involved in managing water are diverse. Therefore, to improve resilience of ecosystems and society, federal, state, tribal and local entities will need to work together.

Q11: How do you plan to balance the work needed to adapt to climate change with existing demands of other important work of EPA, States and Tribes?

A: Over time water managers will learn how to mainstream climate change into their programs. This is a tough economic environment, and water managers are balancing many demands. Program managers will need to take the steps they can, including low-regret strategies that build flexibility for addressing multiple stressors including climate change. But it is also important to recognize that it is incumbent upon us to ensure that resources are not wasted and opportunities are not lost by failing to account for climate change impacts.

The actions described in the *2012 Strategy* will enhance our Nation's ability to sustainably manage water resources when facing a variety of stressors, including climate change.

Q12: How and when will progress toward Goal achievements be monitored?

The NWP intends to track our institutional process and progress in incorporating climate change considerations into EPA programs. An annual internal reporting process will assemble information for evaluating and publicly reporting progress. We have adopted a seven-phased system that recognizes the need for adaptive management that incorporates active learning and new information while managing risk. The seven phases are:

- Initiation
- Assessment
- Response Development
- Initial Implementation
- Robust Implementation
- Mainstreaming
- Monitoring and Adaptive Management

Highlights of progress will be publicly reported annually.