



Highlights of [GAO-11-876T](#), a testimony before the Subcommittee on Financial Services and General Government, Committee on Appropriations, U.S. Senate

Why GAO Did This Study

A 2009 assessment by the United States Global Change Research Program (USGCRP) found that many types of extreme weather events, such as heat waves and regional droughts, have become more frequent and intense during the past 40 to 50 years. According to the assessment, changes in extreme weather and climate events will affect many aspects of society and the natural environment, such as infrastructure. In addition, the Department of Defense found that climate change may act as an accelerant of instability or conflict, placing a burden to respond on militaries around the world.

According to the National Academies, USGCRP, and others, greenhouse gases already in the atmosphere will continue altering the climate system into the future regardless of emissions control efforts. Therefore, adaptation—defined as adjustments to natural or human systems in response to actual or expected climate change—is an important part of the response to climate change.

This testimony addresses (1) the actions federal, state, and local authorities are taking to adapt to climate change; (2) the challenges that federal, state, and local officials face in their efforts to adapt and actions federal agencies could take to help address these challenges; and (3) the extent to which federal funding for adaptation and other climate change activities is consistently tracked and reported and aligned with strategic priorities. The information in this testimony is based on prior work, largely on GAO's recent reports on climate change adaptation and federal climate change funding.

View [GAO-11-876T](#) or key components. For more information, contact David Trimble at (202) 512-3841 or trimbled@gao.gov.

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CLIMATE CHANGE ADAPTATION

Aligning Funding with Strategic Priorities

What GAO Found

Federal, state, and local authorities are beginning to take steps to adapt to climate change. Federal agencies are beginning to respond to climate change systematically through an Interagency Climate Change Adaptation Task Force formed to recommend key components for inclusion in a national adaptation strategy. Individual agencies are also beginning to consider adaptation actions. For example, in May 2009, the Chief of Naval Operations created Task Force Climate Change to address the naval implications of a changing Arctic and global environment. Some state and local government authorities were beginning to plan for and respond to climate change impacts, GAO reported in 2009. For example, the state of Maryland had a strategy for reducing vulnerability to climate change, which focused on protecting habitat and infrastructure from future risks associated with sea level rise and coastal storms. In another example, King County, Washington, established a countywide flood control zone district to upgrade flood protection facilities and increase the county's resilience to future flooding, among other things.

Federal, state, and local officials face numerous challenges in their efforts to adapt to climate change, and further federal action could help them make more informed decisions. These challenges include a focus of available attention and resources on more immediate needs and insufficient site-specific data—such as local projections of expected climate changes. The lack of such data makes it hard to understand the impacts of climate change and thus hard for officials to justify the cost of adaptation efforts, since future benefits are potentially less certain than current costs. GAO's October 2009 report identified potential federal actions for improving adaptation efforts, including actions to provide and interpret site-specific information, which could help officials understand the impacts of climate change at a scale that would enable them to respond. In a May 2008 report on the economics of policy options to address climate change, GAO identified actions Congress and federal agencies could take, such as reforming insurance subsidy programs in areas vulnerable to hurricanes or flooding.

Funding for adaptation and other federal climate change activities could be better tracked, reported, and aligned with strategic priorities. GAO's report on federal climate change funding suggests that methods for defining and reporting such funding are not consistently interpreted and applied across the federal government. GAO also identified two key factors that complicate efforts to align funding with priorities. First, officials across a broad range of federal agencies lack a shared understanding of priorities, partly due to the multiple, often inconsistent messages articulated in different policy documents, such as strategic plans. Second, existing mechanisms intended to align funding with governmentwide priorities are nonbinding and limited when in conflict with agencies' own priorities. Federal officials who responded to a Web-based questionnaire, available literature, and stakeholders involved in climate change funding identified several ways to better align federal climate change funding with strategic priorities. These include a governmentwide strategic planning process that promotes a shared understanding among agencies of strategic priorities by articulating what they are expected to do within the overall federal response to climate change.