









# AUG 2 2 2008

## **MEMORANDUM**

SUBJECT: Federal Agency Cooperation on Adaptation of Water-Related Programs

to the Impacts of Climate Change

FROM: Benjamin H. Grumbles

Assistant Administrator for Water

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VADM Conrad Lautenbacher, Jr. Under Secretary and Administrator

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U.S. Department of Defense

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Under Secretary for Natural Resources and the Environment

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Acting Assistant Secretary for Water and

U.S. Department of Interior

TO: Agency Senior Staff (see addressees below)

This memorandum authorizes senior staff from our agencies to cooperate in work to adapt water program management to reflect changing climatic conditions. We recognize that the changing climate may have important implications for water resources and water programs and that our agencies are each working to identify and address the water-related consequences of climate change. We believe that this work will benefit from expanded cooperation among our agencies, including sharing of information and data, consideration of research priorities, and cooperative implementation of projects.

#### BACKGROUND

At an initial meeting in March of this year, we reviewed the likely impacts of climate change on water resources and the water programs that we administer. Based on that meeting, we concluded that a changing climate may have significant consequences for water resources and water programs. Some key impacts of climate change on water resources include:

- nising sea levels;
- · changes in rain and snow levels;
- · changes in the intensity of storms; and
- warmer air and water temperatures.

Although our agencies are cooperating on climate change research projects, less coordination is occurring as we work to adapt our program management and delivery to reflect the changing climate. In response to this concern, we directed senior staff to meet to review options for strengthening cooperation among our agencies on efforts to adapt program management to climate change.

Senior staff met over the past several months to share information about work to adapt water-related programs to climate change. The wide range of projects and activities now underway in this area were discussed in these meetings and agencies are sharing this information in various formats.

These meetings also included review and discussion of existing interagency coordination mechanisms that might be available to help facilitate coordination among our agencies on this topic. Although the various existing coordination mechanisms have important strengths, they are addressing a range of other issues and needs. In addition, amending the scope and direction of an existing group would involve an extended process at a time when prompt action is needed to begin cooperation on water and climate change matters.

## **CHARGE TO STAFF**

We charge senior staff in each of our agencies to cooperate in work to adapt water program management to reflect changes in climate. This work should include, at a minimum:

- sharing of water-related climate change information and data;
- · exchange of information about climate change programs and activities related to water,
- · consideration of research priorities related to climate change and water; and
- cooperative implementation of water-related climate change adaptation programs and projects.

More specifically, this cooperative work could include:

- Establishment of a forum for cooperative efforts with appropriate staff support;
- Regular meetings and periodic reporting on the water and climate change adaptation work of each agency;
- Coordination with the National Integrated Drought Information System on issues related to climate variability and change;
- Identification of "best management practices" that facilitate adaptation to climate change and dissemination of supporting information and data;
- Development of common standards and definitions for data systems;
- · Coordination of programmatic metrics;
- Identification of opportunities for cooperation with other Federal agencies and committees and with State, Tribal, and local program managers;
- Identification of opportunities for cooperation in the education of water program managers on issues related to climate change and water;
- Identification of emerging issues related to climate change of common concern to Federal water program managers;
- Identification of potential cooperative projects among the agencies;
- Identification of policy and program issues related to water and climate change needing to be elevated to the attention of senior managers;
- Exploration of the need for, and desirability of, a more formal coordination framework for climate change and water issues;
- Identification of measures of progress and supporting data that can be used to assess the success of adaptation strategies;
- Coordination with the Climate Change Science Program Interagency Working Group
  on Water in identifying research needs and priorities to strengthen adaptation of water
  programs to climate change; and
- Facilitation of the prompt sharing of climate change research findings among Federal water program managers.

We believe that all of our agencies will benefit from an expanded effort to coordinate our work related to climate change and water resources and we look forward to the results of this cooperative effort.

## Addressees:

Michael Shapiro; Environmental Protection Agency, Office of Water Jeff Peterson; Environmental Protection Agency, Office of Water

Ko Barrett; National Oceanic and Atmospheric Administration, Climate Program Office Carolyn Olson; Department of Agriculture, Natural Resources Conservation Service

Anne Zimmermann; Department of Agriculture, Forest Service

Karl Wirkus; Department of Interior, Bureau of Reclamation

Peter Murdoch; Department of Interior, US Geologic Survey

Chip Smith; Office of the Assistant Secretary of the Army (Civil Works),

Department of Defense

Rolf Olsen; Army Corps of Engineers; Institute for Water Resources