

2017 Workplan of the Water Resources Adaptation to Climate Change Workgroup Advisory Committee on Water Information

Adopted: January 11, 2017

The Water Resources Adaptation to Climate Change Workgroup (WRACCW) is a subcommittee of the Advisory Committee on Water Information (ACWI). ACWI is an advisory committee chartered under the Federal Advisory Committee Act that is charged with advising the Federal government on a broad range of topics related to water information, management, and programs.

The Climate Change Workgroup was created in 2012 to promote, support, and provide information for effective management and protection of water resources in the United States as the climate changes and to advise Federal agencies on water policy as it relates to climate change adaptation. The Workgroup also serves as a public forum for Federal, State, Tribal, and local government organizations and public interest and professional organizations to exchange information, views, and ideas and to connect efforts concerning adapting water resources to a changing climate.

More information concerning the purposes and structure of the Workgroup is included in the *Terms of Reference* adopted by the ACWI (see Attachment 3).

This *Workplan* outlines the expected activities and interests of the Workgroup during calendar year 2017. Key sections of this document are:

- General Purpose and 2017 Priorities
- Membership and Organization
- Meetings
- Information Gathering, Education and Exchange
- Input to New Administration and Federal Agencies
- Other Actions

Specific tasks for the Workgroup are identified within the text when mentioned with the notation (TASK # --). This list is expected to be somewhat dynamic as requests are received for review of Federal documents and programs and as the Workgroup initiates new activities. A one-page summary of 2017 Tasks is attached (see attachment 1).

I) General Purpose and 2017 Priorities

This section of the *Workplan* outlines the general purposes of the Workgroup and identifies priorities for 2017.

General Purposes: The purposes of the Workgroup are listed in the Terms of Reference (see attachment 3) and generally call for the Workgroup to support more effective management and policies for water resources in response to climate change. This work falls into four categories of actions:

1. **Inform/educate:** including Federal, State, Tribal and local government agencies as well as public interest and professional organizations;
2. **Coordinate/integrate:** both Federal and non-Federal programs and policies;
3. **Review/comment:** on Federal reports, plans and policies; and
4. **Recommend/encourage:** better information, policies and actions.

2017 Priorities: During its first year of operation (2013), the Workgroup focused on the first two categories of action (i.e., inform/educate, and coordinate/integrate). During 2014, this work continued but more attention was given to the latter two categories (i.e., review and comment on plans and policies and recommend needed policy changes). In 2015 and 2016, the Workgroup focused on encouraging implementation of policies to promote water resources adaptation to a changing climate, including providing input to initial planning to revise and “refresh” the 2011 *National Action Plan*.

In 2017, the Workgroup intends to focus on three priority areas:

- Advising and commenting on actions by Federal agencies to implement the 2016 report *Looking Forward: Priorities for Managing Freshwater Resources in a Changing Climate*;
- Developing and advancing recommendations made by the Workgroup to the new administration concerning addressing challenges faced by water resource managers in responding to a changing climate; and

- Continuing to inform and educate Workgroup representatives with the goal of establishing a common level of knowledge among Workgroup participants with respect to the impacts of a changing climate on water resources and the plans and programs underway to adapt water resources management to changing climatic conditions.

This *Workplan* addresses these priorities.

The Co-Chairs provided a draft of this *2017 Workplan* to the Workgroup in December 2016 and revised the draft based on comments. The *Workplan* was finalized by the Workgroup at an in-person meeting on January 11, 2017. (TASK # 1)

The Terms of Reference for the Workgroup provide for an annual report of its activities to the ACWI. The co-chairs drafted an annual report addressing Workgroup activities in 2016 and, after including comments from the Workgroup members, the final report was adopted at the January 10/11 meeting and will be transmitted to the full ACWI. (TASK # 2)

As the Workgroup builds its understanding of climate change and water issues in 2017 and beyond, it will consider initiating assessments of aspects of the management of water resources in a changing climate and making specific recommendations to Federal agencies involved in water resources management to address gaps in responses to climate change or to amend or revise programs, policies, or budgets.

II) 2017 Workgroup Membership and Organization

The 2017 membership, co-chair leadership, and organizational structure of the Workgroup are outlined below.

- **Membership:** Organizations that were members of the Workgroup for 2016, including persons serving as representatives and alternates, are listed in Attachment 2 and include:
 - organizations representing Tribal, State, interstate, and local governments;
 - public organizations interested in adaptation of water resources to a changing climate; and
 - Federal agencies.

(NOTE: Representatives of member organizations or their alternates are expected to attend all meetings of the Workgroup. If a member organization is not represented at three consecutive meetings, then the Co-chairs may appoint a new member organization to replace the organization that has not participated.)

- **Co-Chairs:** Co-Chairs of the Workgroup are drawn from the Federal and non-Federal members. Duties of the Co-Chairs include:
 - work with the Executive Secretary of ACWI on management of the Workgroup and coordination with ACWI;
 - develop agendas for conference calls and meetings;
 - represent the Workgroup at the annual meeting of the full ACWI, at meetings of other ACWI subgroups, and at meetings of other organizations as appropriate;
 - from time to time as the need arises, invite and appoint organizations to become members of the Workgroup;
 - draft the annual workplan for the Workgroup;
 - draft the annual report of Workgroup activities;
 - coordinate the development of informational materials and events for Workgroup members; and
 - draft, or assign drafting responsibility for, comments requested by Federal agencies or groups on climate and water reports, plans, or policies.

The Federal agency members will consider selecting a new Federal Co-Chair for the Workgroup for 2017 in early 2017. **(TASK # 3)** Non-Federal members have the option of appointing a non-Federal Co-Chair at any time in 2017. **(TASK # 3)** In addition, for 2017, the Workgroup will consider appointing Vice Co-Chairs to support the Federal and Non-Federal co-chairs.

Subcommittees and Teams: The Workgroup has authority to establish subgroups to focus on specific tasks and to report back to the full Workgroup with recommendations. In 2017, existing subcommittees will continue from 2016 addressing:

- development of webinars that will help Workgroup members become informed on a range of water resources and climate change topics; and
- inventory of key publications to be cited on the Workgroup website.

The Workgroup will consider establishing other subcommittees as needed. **(TASK # 4)**

III) Workgroup Meetings

The business of the Workgroup will be conducted by conference calls and in-person meetings. At least one in-person meeting of the Workgroup is expected to be held in 2017, provided that resources are available within the current restricted funding levels for travel and meetings.

- **Monthly Conference Calls:** Conference calls will be scheduled on approximately a monthly basis with a target date of the second Thursday of

each month at 1:00 PM eastern time. The Co-Chairs will adjust this time and date when necessary for more effective participation. (TASK # 5)

Agendas for conference calls will be developed by the Workgroup Co-Chairs with input from the members and will generally include:

- a summary of recent events related to water resources and climate change;
 - an informational presentation by a Federal agency or organization concerning a recent product or key issue;
 - an informational presentation by a State or local government or other organization concerning a recent product or key issue;
 - discussion of draft Workgroup comments or input to Federal agencies;
 - round-robin snapshot reports from Workgroup member organizations; and
 - other topics requested by Workgroup members.
- **In Person Meetings:** An in-person meeting of the Workgroup was held January 10 and 11 and another in-person meeting will be held in 2017 if deemed useful by the Workgroup and if resources for such a meeting are available within current funding levels for travel and meetings. (TASK # 6)

IV) Information Gathering, Education, and Exchange

A key function of the Workgroup is to support member representatives and alternates in gaining a common level of knowledge concerning water resources and climate change issues. Key measures to help Workgroup members gain needed information are an inventory of key documents, webinars developed specifically for Workgroup members, and more general training opportunities.

- **Inventory of Climate and Water Documents:** Continue to build the inventory of key water and climate change documents (see: [ACWI Climate Change Reference Database](#) (Excel 204 KB)) (TASK # 7)
- **Education:** The Co-Chairs will work with the Executive Secretary of ACWI to identify existing web-based training that addresses climate change generally and water impacts of climate more specifically and help Workgroup members participate in these training events as needed. (TASK # 8)
- **List Serves and Related Information:** The Co-Chairs will also periodically identify list-serves that provide background information and updates concerning climate change and water and make these sites available to Workgroup members. (TASK # 9) For example, the EPA Office of Water

includes a climate change and water list-serve at:
<http://water.epa.gov/scitech/climatechange/E-Newsletter.cfm>.

V) Workgroup Input to New Administration and Federal Agencies

A key activity of the Workgroup in 2017 will be to provide input and advice to Federal agencies on programs and projects related to water resources and climate change in response to the requests for such input from these agencies.

At an in-person meeting of the Workgroup January 10 and 11, the Workgroup considered a range of policy challenges related to climate change and water resources and developed recommendations for needed actions for the new Administration concerning responses to the challenges that a changing climate poses for water resources managers.

Key policy challenges related to climate change and water resources considered at the meeting included:

- Promoting State Water Resources Planning for Climate Resilience
- Defining Incentives and Support for Corporate Water Resilience
- Strengthening Local Flood Reduction Planning, Practices and Measures
- Promoting Climate Resilience of New Federal Water Infrastructure Investments
- Improving Planning and Financing of Natural Infrastructure for Climate Resilience

During 2017, the Workgroup will work with the full ACWI for approval of the report resulting from this meeting, including providing the report to the February meeting of ACWI. Based on approval by the full ACWI, the Workgroup will work with Federal agencies to advance the recommendations in the report and answer questions that may arise. (TASK # 10)

In addition, although it is not possible to anticipate the specific requests for input that Federal agencies might make during the year, some examples of possible requests include:

- **Federal Agency Implementation of Climate and Water Resources Actions:** In late 2016, Federal agencies released a report describing key actions related to climate change and water resources titled *Looking Forward: Priorities for Managing Freshwater Resources in a Changing Climate*. The Workgroup will monitor efforts by Federal agencies to implement the actions in this report. (TASK # 11)
- **Implementation of Actions in the Priority Agenda: *Enhancing the Climate Resilience of America's Natural Resources*:** The Workgroup will

identify the actions included in the *Priority Agenda* that relate to water resources and will provide input to Federal agencies charged with implementing these actions. Some of these actions were originally identified by the Workgroup in its 2014 report *Next Steps for Managing Freshwater Resources in a Changing Climate*.

- **Other Potential Topics:** The Workgroup may decide to respond to requests for comment from Federal agencies on additional issues or products related to climate change and water resources. For example, the Workgroup may choose to comment on Federal actions related to climate change and water resources, such as the implementation of the *NEPA Climate Change Guidance* and the *Guidelines for Implementing Executive Order 11988, Floodplain Management*.

VI) Other Workgroup Activities

The Workgroup will consider other activities during 2017 where the Workgroup deems such efforts to be productive and consistent with its charge. For example, the co-chairs will work with the Executive Secretary of ACWI to expand the website for the Workgroup (as part of the existing ACWI Website) as resources allow. (TASK # 12).

ATTACHMENT 1 SUMMARY OF 2017 TASKS

1. Develop *2017 Workplan* for the Workgroup (i.e.; this document)
2. Develop annual report of Workgroup activities in 2016 to full ACWI (see 2015 annual report on ACWI website:
http://acwi.gov/climate_wkg/workgroup_2015_annual_report_adopted_march_3_2016.pdf)
3. Select 2017 Federal and non-Federal Co-Chairs for the Workgroup
4. Create subcommittees/teams and task with assignments as needed
5. Hold monthly conference calls of the Workgroup
6. Hold an in-person meeting of the Workgroup, as funding allows within agency travel budget restrictions
7. Continue to build the inventory of key water and climate change documents (see: [ACWI Climate Change Reference Database](#) (Excel 204 KB))
8. Identify web-based training related to climate change and water resources and facilitate participation in such training by Workgroup members
9. Provide recommended links to water/climate list serves
10. Work with full ACWI for approval of a report making recommendations to the new Administration addressing climate change and water resources and answer questions from administration officials as needed
11. Comment on the *2017* work of the Federal Interagency Climate Change and Water Workgroup, including implementation of the plan titled *Looking Forward: Priorities for Managing Freshwater Resources in a Changing Climate*
12. Expand and update Workgroup website as part of ACWI website.

ATTACHMENT 2
2016 WORKGROUP MEMBERS

ACWI WRACC WORKING GROUP - MEMBERSHIP LIST AS OF 12/15/2016		
Federal Agencies	Representative	Alternate
Army Corps of Engineers, Institute for Water Resources	Rachel N. Grandpre	
Centers for Disease Control	Joan Brunkard	
Council on Environmental Quality	Charles Kovatch	
Department of Agriculture, Natural Resources Conservation Service	Noel Gollehon	Aliya Haq Mike Wilson
Department of Agriculture, Forest Service	Chris Carlson	
Department of Energy	Craig Zamuda	
Department of Homeland Security, Federal Emergency Management Agency	Mark Crowell	Paul Huang
Department of Interior, U.S. Geological Survey	Stacey Archfield	
Department of Interior, Bureau of Reclamation	Kenneth Nowak	
Department of Interior, U.S. Fish and Wildlife Service	Tamara McCandless	
Environmental Protection Agency	Jeff Peterson Federal Co-Chair	Karen Metchis
National Oceanic and Atmospheric Administration; National Weather Service	Ernie Wells	Chris Bunner
National Oceanic and Atmospheric Administration; Climate Program Office	Nancy Beller-Simms	

State, Tribal, and Local Government Organizations	Representative	Alternate
Association of Clean Water Administrators	Jeff Manning, NC DENR	
Association of Metropolitan Water Agencies (AMWA)	Erica Brown	
Association of State Drinking Water Administrators (ASDWA)	Brandon Kernen, NH Dept of Environmental Services	Deirdre Mason, ASDWA
Association of State Floodplain Managers	John McShane	Shana Udvardy (Union of Concerned Scientists)
Association of State Wetland Managers (ASWM)	Marla Stelk	Jeanne Christie
Groundwater Protection Council	Mike Paque, Groundwater Protection Council	Mary Musick
National Association of Clean Water Agencies (NACWA)	Brenna Mannion	Cynthia A. Finley,
National Association of County Planners	Judy Francis, NC DENR	
National Tribal Water Council	Dave Fuller, Port Gamble S'Klallam Tribe	
Water Utility Climate Alliance	Keely Brooks, Southern NV Water Authority	Laurna Katz, Denver Water
Western States Water Council	Jeanine Jones, Dept. of Water Resources, Sacramento, CA	

Public and Academic Organizations	Representative	Alternate
American Rivers	Gary Belan	Fay Augustyn
American Society of Civil Engineers	Eric Loucks	
American Water Resources Association	Carol R. Collier, Drexel University	Lisa Engelman, Booz Allen Hamilton
American Water Works Association (AWWA)	Adam Carpenter	
CERES	Karen Yacos	Anisha Anantapadmanabhan
CUAHSI	TBD	
National Ground Water Association	Michael Block, Metropolitan Water District, Tucson, AZ	Paul Gruber
National Wildlife Federation	Melissa Samet	
Natural Resources Defense Council	Rob Moore	
North American Lake Management Society	Nancy Turyk, University of Wisconsin - Stevens Point	Dennis McCauley, Great Lakes Environmental Center
The Nature Conservancy	Jimmy Hague	
Pacific Institute	Heather Cooley	Jason Morrison
U.S. Water Alliance	Radhika Fox	Judson Greif
Water Environment Federation	Paul L. Freedman, LimnoTech Non-Federal Co-Chair	

ATTACHMENT 3

Terms of Reference Water Resources Adaptation to Climate Change Workgroup of the Advisory Committee on Water Information

Approved by the Advisory Committee on Water Information: July 2012.

Official designation

The Water Resources Adaptation to Climate Change Workgroup (WRACCW) is a subgroup of the Advisory Committee on Water Information (ACWI).

Purpose and functions

Purpose - The overall purpose of the Water Resources Adaptation to Climate Change Workgroup (hereafter the "Workgroup") is to promote, support, and provide information for effective management and protection of water resources in the United States as the climate changes and to advise the Department of the Interior and other Federal agencies on water policy as it relates to climate change adaptation.

Additionally, the Workgroup is a public forum for Federal, State, Tribal, and local government organizations and public interest and professional organizations to exchange information, views, and ideas, and to connect efforts concerning adapting water resources to a changing climate.

Functions - The functions of the Workgroup include:

- provide input and comment on proposals and draft materials relating to climate change and water developed by Federal agencies, including future updates or revisions to the *National Action Plan: Priorities for Managing Freshwater Resources in a Changing Climate* published in 2011 by the Interagency Climate Change Adaptation Task Force;
- foster intergovernmental coordination on program management, data collection and analysis, and policy issues related to domestic freshwater resources and climate change,
- support the continuous improvement and integration of programs for adapting water resources to climate change by providing evaluations of overall strategies and individual products, reports, and programs as appropriate,
- inform and coordinate with other ACWI subgroups concerning climate change and water issues;

- provide input and comment on information and decision support systems related to climate change adaptation, including appropriate approaches to making decisions in face of uncertainty;
- encourage the development of water resources information, policies, and programs that are appropriately tailored to respond to climate change in a manner appropriate to fit the diverse needs in different regions of the country,
- identify opportunities to improve coordination of freshwater climate adaptation programs and policies with adaptation programs and policies related to coastal and ocean waters and fish and wildlife,
- identify priority program and policy actions, including those relating to data collection and analysis, that would enhance adaptation of freshwater resources to a changing climate,
- foster communication with and provide input to scientific and research organizations with capability for addressing research issues related to climate change and water resources, and
- encourage and promote training and education related to the impacts of a changing climate on water resources.

The Workgroup will develop an annual operating plan describing activities, events, and products expected to be implemented or developed over the coming year. The Workgroup will also provide to the Advisory Committee on Water Information an annual report describing its activities over the past year.

Membership

Membership in the Workgroup shall come from the following categories:

- Federal agencies,
- organizations representing Tribal, State, interstate, and local governments,
- public organizations interested in adaptation of water resources to a changing climate, and
- representatives of ACWI subgroups that are working on topics related to the goals of the Workgroup (such as, but not limited to, the Subcommittee on Hydrology, Subcommittee on Ground Water, and the Sustainable Water Resources Roundtable).

Total membership of the Workgroup shall not exceed 40 representatives of Federal agencies, State, local, and tribal government representatives, and organizations representing public and private interests. Each ACWI member agency or organization will designate their representative and an alternate to the Workgroup. Where possible, representatives who could fill more than one category would be preferred.

Federal membership on the Workgroup will not exceed 15 representatives and will initially include the agencies identified in the attached membership list. Organizations identified on the attached membership list are invited to participate as charter members of the Workgroup. In the event that any organization on the attached membership list declines to participate in the Workgroup, the Co-chairs may, in consultation with participating members, invite another organization with similar interests to join the Workgroup.

The Workgroup will be chaired by a Federal Co-chair and a non-Federal Co-chair (i.e., the Co-chairs) whose organizations are members of ACWI. The Federal agency Co-chair will be selected annually by vote of the Federal agency members. In the event that the Federal agency representatives do not select a Co-chair, the Federal Co-chair will annually alternate between the U.S. Environmental Protection Agency and the U.S. Geological Survey. The Federal Co-chair will cooperate with the Executive Secretary of ACWI to provide services and staff support to the Workgroup. The non-Federal Co-chair shall serve a 2-year term and shall be selected by vote of the non-Federal Workgroup members, except that the first non-Federal Co-chair shall be nominated by the Federal co-chair and serve a 1-year term.

Representatives or their alternates are expected to attend all meetings of the Workgroup. If a member organization is not represented at three consecutive meetings, then the Co-chairs may appoint a new member organization to replace the member that has failed to participate.

Meetings and procedures

The Workgroup will meet at least two times each fiscal year and at other times as designated by the Co-chairs. The Co-chairs will jointly determine the dates, times, and locations of the meetings in consultation with the members. These meetings may be virtual meetings, using teleconference, video conference, and webinar technologies in order to minimize travel costs.

Representatives to the Workgroup will receive no pay, allowances, or benefits by reason of their service on the Workgroup. However, while away from their homes or regular places of business and in the performance of services for the Workgroup, non-Federal representatives to the Workgroup will be allowed travel expenses if needed. Travel expenses will include per diem in lieu of subsistence, in the same manner as persons employed intermittently in Government service are allowed such expenses under Section 5703 of Title 5 of the United States Code.

The attendance of two-thirds of the representatives, or designated alternates, of the member organizations will constitute the quorum necessary to conduct business. The Workgroup will conduct business in an open fashion by attempting to resolve all issues through consensus and by recognizing the legitimate interests and diverse views of the Workgroup members. If complete agreement cannot be attained, then the following procedures will apply:

- A consensus will exist unless one or more representatives request a vote.
- If a vote is requested, then Robert's Rules of Order will apply, and the Co-chairs will poll the Workgroup. An affirmative vote of two-thirds of the members present will constitute approval. Each Workgroup member organization may cast one vote.
- Actions that constitute final reports or recommendations intended for nationwide implementation will be signed by the Co-chairs and submitted to the ACWI for final approval. Representatives may prepare minority reports and provide them to the Co-chairs within 3 weeks of a decision. Minority reports will be included with the final majority reports.

The Workgroup, with the approval of the ACWI as appropriate, will announce significant proposed actions and products in the Federal Register for the purpose of obtaining public review and comments.

Summaries with action items of Workgroup meetings will be prepared by the executive secretary of the Workgroup and distributed to all members and to the Executive Secretary of the ACWI. In addition, meeting summaries and other documents will be available for public access and review.

Minutes of each Workgroup meeting, recommendations adopted, and copies of all studies and reports received, issued, or approved in conjunction with the activities of the Workgroup will be available for public inspection on the Internet (through the ACWI website, <http://acwi.gov>) and for review and copying at the following location:

Water Information Coordination Program
 U.S. Geological Survey
 12201 Sunrise Valley Drive, Mail Stop 417
 Reston, Virginia 20192

Period of time necessary for the activities of the Workgroup - The total period of time necessary for the Workgroup to carry out its activities is estimated to be for as long as the Federal Government has responsibilities and interests related to adapting water resources to a changing climate.

Official to whom the Workgroup reports - The Workgroup reports to the Chair of the ACWI through the Executive Secretary of the ACWI.

Support Services - The ACWI Executive Secretary and USGS Water Information Coordination Program will provide support services to the Workgroup in the same manner as they support other Subcommittees and Workgroups. The Federal Co-chair shall provide staff support to act as the Executive Secretary for the Workgroup.

Duties of the Workgroup - The duties of the Workgroup are to provide information and advice as set forth above.

Termination date - The Chair of the ACWI has the authority to terminate the Workgroup in consultation with the member organizations of the ACWI and the Workgroup.

Subordinate groups - For assistance in conducting its business, the Workgroup may establish subordinate groups. Such groups may gather information, conduct research, analyze relevant issues and facts, and draft proposed position papers and/or recommendations for deliberation by the workgroup. These groups will have the balanced perspectives and knowledge necessary to perform their assigned functions.

Federal agency subgroup - The Federal agency members shall constitute a subgroup of the Workgroup and will meet to coordinate Federal agency activities related to climate change and water resources, including the Federal agency coordination activities identified in the *National Action Plan: Priorities for Managing Freshwater Resources in a Changing Climate*.

Authority - The Workgroup is part of the Water Information Coordination Program mandated by OMB Memorandum No. M-92-01, dated December 10, 1991. The Workgroup reports to the ACWI that operates under the Federal Advisory Committee Act.