

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

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# Outline

- Workgroup Organization and Charge
- Activities to Date
- *Next Steps* Report
- Future Direction



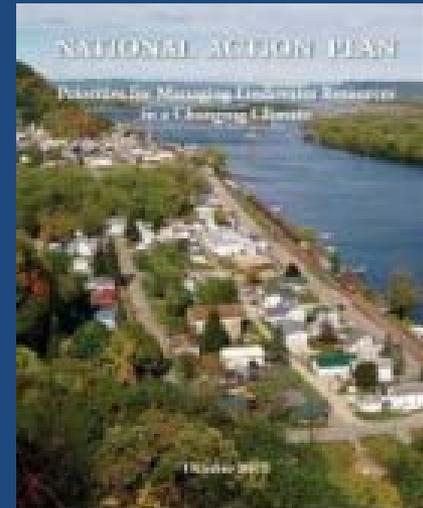


# Water Resources Adaptation to Climate Change Workgroup

- Created in June 2012
- Co-chairs: Water Environment Federation and EPA Office of Water
- Membership: 40 Organizations
  - State and Local Organizations
  - Academic and Non-Profit
  - Federal Agencies
  - Other ACWI Subgroups

# *National Action Plan: Priorities for Managing Freshwater Resources in a Changing Climate*

- Published October 2011 by Interagency Climate Change Adaptation Task Force
- Key Recommendations:
  - Establish Planning Process
  - Improve Water Information
  - Strengthen Vulnerability Assessments
  - Expand Water Use Efficiency
  - Support Integrated Water Resources Management
  - Support Training and Outreach



# Workgroup Charge

- Established in response to recommendation in *National Action Plan*
- Provide information for the effective management of US water resources as the climate changes
- Advise the Department of Interior and other Federal agencies on water policy as it relates to climate change adaptation
- Be a forum for stakeholders to exchange Information, views and ideas



# Workgroup Activities to Date



- Creation of 2013 Workplan
- Monthly Meetings; Member Education
- Organize Subcommittees:
  - Webinars
  - Reference Database
  - In-Person Meeting 2013 Annual Report
- 2014 Workplan
- In-Person Meeting: February 2014
- *Next Steps* Report: Spring 2014

# 2013 Priorities - Internal

- Hindered by 2013 budget “constraints”
- Develop WRACC operations & relationships
- Educate WRACC members to share & leverage existing data, information, & reports
- Establish a foundation for specific assignments

# WRACC Educational Activities

- Monthly calls with discussion, coordination & updates on relevant activities & reports
- ~20 webinars & presentations available on website
- Fact Sheets characterizing 9 Federal coordinating groups on climate change
- Key Reference Database



# Climate Change Adaptation Searchable References Database

- Available since Spring 2014
- Available at ACWI WRACC website - [http://acwi.gov/climate\\_wkg/index.html](http://acwi.gov/climate_wkg/index.html)
- 77 references as of June 10, 2014
- Collaborative stakeholder input on relevant references and keywords



# Climate Change References Database: Structure

- Search by 6 Primary Keyword Categories and up to 61 subcategories
  - Publication type - 6 options
  - Impact driver(s) - 10 options
  - Impacted area(s) - 15 options
  - Solution(s) - 10 options
  - Tool(s) - 11 options
  - Geographic Area(s) - 10 options

# References Database: Search Categories

Sub Category	PUBLICATION TYPE	IMPACT DRIVERS	IMPACTED AREAS	SOLUTIONS	TOOLS	GEOGRAPHIC AREA
1	Technical Article	High Flow/Floods	Drinking Water Infrastructure	Water Storage	Flood Inundation Mapping	SE
2	Policy Direction	Low Flow/Drought	Waste Water Infrastructure	Climate Resilient Development	Watershed Models	SW
3	Problem Definition	Snow/Ice melt	Flood Control Infrastructure	Conservation	Climate Change Scenarios	NE
4	Case Study	Increasing Temperatures	Other Infrastructure	Transport of Water to affected area	Land Use Projections	NW
5	Agency Strategy	Sea Level Rise	Water Supply	Vegetation Planting	Water Use Projections	Mid West
6	MultiAgency	Increased Erosion	Water Quality	Reservoir Operation	Case Studies	Mid-Atlantic
7		Changing Precipitation Patterns	Agriculture	Land Use Changes	Vulnerability Assessments	East Coast
8		Decreased Snowpack	Land Use & Management	Watershed Approaches (IWRM)	Design Standards	Gulf Coast
9		Increased Fires	Energy	Barrier Islands Restore	Monitoring Programs	West Coast
10		Storm Surge	Ecosystem Health	Wetlands Restore	Model Ordinances	National Scale
11			Habitat Loss		Sea Level Rise Predictions	
12			Human Health			
13			Recreation			
14			Forest Management			
15			Riparian Corridors			

# Climate Change References Database: Excel Query Tool

14\_0610ACWI\_Working\_Reference\_Database.xlsm [Read-Only]

**Climate Change Publication Selection Criteria:** **ACWI Climate Change Reference Database (last updated: 6/10/2014)** Admin

1. Select publication type(s):

Technical Article  
Policy Direction  
Problem Definition

Select All Clear All

2. Select impact driver(s):

High Flow/Floods  
Low Flow/Drought  
Snow/Ice melt

Select All Clear All

3. Select impacted area(s):

Drinking Water Infrastructure  
Waste Water Infrastructure  
Flood Control Infrastructure

Select All Clear All

4. Select solution(s):

Water Storage  
Climate Resilient Development  
Conservation

Select All Clear All

5. Select tool(s):

Flood Inundation Mapping  
Watershed Models  
Climate Change Scenarios

Select All Clear All

6. Select geographic area(s):

SE  
SW  
NE

Select All Clear All

Query Options:

Return only publications containing all of the selected keywords

Return all publications that contain any of the selected keywords

[Build Publication List](#)

Title	Author / Lead Agency	Web Link	Year Published	Submitted By
National Water Program 2012 Strategy: Response to Climate Change	U.S. Environmental Protection Agency, National Water	<a href="http://water.epa.gov/scitech/climatechange/upload/FINAL-NWP-2012-Climate">http://water.epa.gov/scitech/climatechange/upload/FINAL-NWP-2012-Climate</a>	2012	Jeff Peterson
2012 Highlights of Progress: Responses to Climate Change by the EPA	U.S. Environmental Protection Agency, National Water	<a href="http://water.epa.gov/scitech/climatechange/upload/epa_2012_climate_water">http://water.epa.gov/scitech/climatechange/upload/epa_2012_climate_water</a>	2013	Jeff Peterson
EPA Draft Climate Change Adaptation Plan	U.S. Environmental Protection Agency	<a href="http://www.epa.gov/climatechange/pdfs/EPA-climate-change-adaptation-plan">http://www.epa.gov/climatechange/pdfs/EPA-climate-change-adaptation-plan</a>	2013	Jeff Peterson
The President's Climate Action Plan	Melillio, Jerry M.; Terese (T.C.), Richmond; Yohe, Gary V	<a href="http://acwi.gov/useful-links/2014_climate_change_report_ov&amp;findings.pdf">http://acwi.gov/useful-links/2014_climate_change_report_ov&amp;findings.pdf</a>	2014	ANS

# 2014 Priorities

- Input to Federal agencies responding to Climate Change Executive Order
- Advise and comment on actions to implement the *National Action Plan*
- Continue to inform and educate Workgroup members
- Respond to specific requests for input



# 2014 In-Person Workgroup Meeting



- February; Crystal City, Va.
- 18 non-WRACC speakers (14 agency, 4 private sector)
- Teams in 5 Areas of *National Action Plan*
  - Data and Information
  - Vulnerability
  - Water Use Efficiency
  - Integrated Water Resources Management
  - Outreach and Training
- Team Work Sessions and Report Recommendations

# *Next Steps Report:*

- Water Data and Information
  - Strengthen long-term hydrologic observation and data management systems
  - Enhance data access and interoperability
  - Bolster critical data sets
- Vulnerability Assessment
  - Develop guidance for and assistance to communities in use of existing tools
  - Create strategic plan for engagement with non-Federal partners to inform and improve future tool development

# *Next Steps Report:*

- Water Use Efficiency
  - Give priority to agriculture for development of nationally consistent metrics
  - DOE should update Federal efficiency standards for plumbing products
  - Develop national program to support water efficiency and reuse comparable to BOR program in West
- Integrated Water Resources
  - Facilitate Federal agency coordination
  - Create incentives for State/local/tribal for climate resilience planning on a watershed or aquifer basis
  - Incentive use and protection of ecosystem services/natural capital

# *Next Steps Report:*

- Training and Capacity Building
  - Expand information sharing (e.g.: Water Resources Research Institutes)
  - Expand training for workforce and technical service providers
- Additional Recommendations
  - Consider new investment in natural infrastructure (e.g.; State Revolving Loan Fund)
  - Strengthen community flood preparedness (e.g.; flood insurance premium sharing with communities)
  - Consider support of non-profit organization to promote water/climate training /accreditation and project recognition on a voluntary basis

# *Next Steps* Report: ACWI Input

- Workgroup briefed ACWI members on *Next Steps* report in 2 teleconferences in May
- 8 ACWI members provided comments
- Draft report revised consistent with Team and Workgroup
- Agreement to post report on ACWI website
- Summary of comments posted on ACWI website



# Workgroup Future Directions



- Continue advice and information functions
- Continue input to Federal agency implementation of *National Action Plan*
- Encourage actions proposed in *Next Steps* report
- Cooperate with other ACWI Subgroups
- Cooperate with other climate strategy efforts:
  - National Ocean Policy
  - Fish/Wildlife/Plants Climate Strategy
  - Agency climate adaptation strategies

# Thank You

For more information see:

[http://acwi.gov/climate\\_wkg/index.html](http://acwi.gov/climate_wkg/index.html)

Or Contact:

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