



FOURTH NATIONAL WATER POLICY DIALOGUE

In September 2008 the American Water Resources Association (AWRA), the Environment and Water Resources Institute of the American Society of Civil Engineers (EWRI/ASCE), and the National Wildlife Federation (NWF) brought together water resource experts from the public and private sector, congressional staff, and federal agencies to review the results of three National Water Policy Dialogues conducted by AWRA in 2002, 2005, and 2007 at the request of 10 federal water resource agencies. The purpose of the September Dialogue was to identify the challenges that would be faced by the incoming Administration and the 111th Congress when they took office in 2009.

Attached for your information are the summary of the September Water Policy Dialogue and a copy of the letter sent to the President, all governors, and key leaders in Congress following the 2007 National Water Policy Dialogue.

If you have questions concerning the September dialogue or the previous dialogues, please feel free to contact Dr. Gerry Galloway (gegallo@umd.edu, 571-334-2103); Mr. Richard Engberg (dick@awra.org, (540) 687-8390); Mr. Brian Parsons (BParsons@ASCE.org, (703)-295-6071); or Mr. David Conrad (conrad@nwf.org; (202) 797-6697).

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Gerald E Galloway
Co-chair, Water Policy Dialogue
Immediate Past-President, AWRA

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Kyle E. Schilling, P.E., D.WRE, BCEE, Hon.M.ASCE
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David R. Conrad
Senior Water Resources Specialist
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Summary

Fourth National Water Resources Policy Dialogue

September, 2008
Washington, DC

The United States faces severe water resource challenges today and in the decades ahead. The Nation must deal with significant drought, floods, growing threats to its water quality, continuing loss of wetlands and the impact of these losses on the natural and beneficial functions of floodplains and estuaries, and a water resources infrastructure that is aging, in need of revitalization and whose collapse would threaten our economic vitality. The potential impacts of climate change that could increase the intensity of floods, severity of droughts and change or weaken the health and stability of many ecosystems only adds to the challenge. These challenges were highlighted in the reports of three earlier water resource policy dialogues sponsored by the American Water Resources Association at the request of federal water agencies.

On September 22, 2008, 56 US water experts met in the Rayburn House Office Building in Washington, DC to discuss what actions should be taken by the new Administration and the Congress when they take office in 2009 and are forced to face these water challenges. The participants in this dialogue, building on the work of the earlier dialogues, concluded that:

- There is an immediate need for an assessment of the Nation's water resources to include the current status of the resource, the future needs for water and identification of gaps that exist in fulfilling these needs.
- The federal government, in cooperation with state and local agencies, needs to develop a national vision and overarching principles to guide water resources development activities supported by the federal government.
- There is increasing need for mechanisms that will better coordinate the water related activities of federal agencies and among congressional committees. The absence of effective coordination is apparent in the conflicts and overlaps that exist in legislation, programs, and agency activities.
- The relationship among the federal government, states and local communities is changing and must be addressed. The federal government's role in water resources, long seen to be a driving force, must be reevaluated in light of growing state attention and direction of water resource activities.
- Federal actions with regard to water resources must be taken in a watershed context where the underlying planning is conducted in partnership with the states and local entities.

These conclusions are discussed in greater detail in subsequent paragraphs.

The fourth dialogue was sponsored by the AWRA, the Environment and Water Resources Institute of the American Society of Civil Engineers, and the National Wildlife Federation. It built on the results of the three previous dialogues held in Washington DC in 2002, Tucson, AZ in 2005, and Arlington, VA in 2007. The participants in the fourth dialogue represented congressional staffs, federal agencies, and various government and nongovernmental organizations from across the country. The earlier dialogues identified the need for development of a national [not federal] water vision; formulation of policy principles for translating the vision into action; establishment of a mechanism to ensure appropriate coordination and cooperation among federal agencies and with other levels of government; creation of watershed organizations with the involvement and support of federal water agencies; use of incentives to encourage local watershed organization's grass-root involvement in water issue solutions; reconciliation of a myriad of laws, executive orders and Congressional guidance that have created a disjointed, ad-hoc and too often contradictory national water policy; and utilizing the Nation's superb scientific capabilities and cutting edge information technologies to support water-related decision making. In a letter to the President, Congressional leaders, and governors, the co-chairs of the third policy dialogue indicated that, "Stewardship of the Nation's water resources is being neglected and the manner in which we deal with water issues is dysfunctional."

The call for a national assessment stems from concern over the piecemeal approach being taken in examining current water vulnerabilities. Water quality and water quantity are sometimes examined together, but more often are reviewed within the context of a single focus program. We continue to witness the decline in the health and function of many important aquatic ecosystems, both biologically and physically, from a variety of stressors that many scientists say are likely to be further degraded and impacted from the effects of climate changes. Decisions on how to deal with flooding are made in the context of information that does not link actions taken in the floodplain to those in the upland areas generating the floods. The establishment of the National Drought Information System deals with the shortage of water but fails to link it with other aspects of water use and water quality. The last comprehensive assessment that looked across the varying uses of water was accomplished in 1975 by the U.S. Water Resources Council. It developed a comprehensive nationally consistent data base for the 21 water resources regions of the United States. Many would argue that the degree of planning and coordination at the Federal and state level in that and an earlier assessment along with water quantity development for future needs and a concurrent shift to a regulatory paradigm for water quality served the Nation well for many years. However, since 1975, the water picture has changed considerably and both demand and availability have changed in magnitude and in geographic location. Increasing populations, growing urbanization, changing climate and sea level rise, and demographic trends that are increasingly concentrating growth in areas that are further straining water resource health and capacities are presenting critical new challenges that must be addressed in a holistic fashion. In addition, water quality needs have often become more site or condition specific and exhibit more complex linkages to other water resources needs than can be addressed easily or cost effectively by a regulatory approach alone. Conduct of a fixed-term national water assessment would provide the information needed by leaders at all levels to carry out critical water activities.

This assessment of the Nation's water status is needed immediately. It must include the current status of the resource, the contemporary and likely future trends, needs and directions for water management and identification of gaps that exist in fulfilling these needs in a sustainable manner. Such an assessment should deal with not only water quantity and quality but also with use of water for

transportation, recreation, and energy as well as the impacts of water through floods and other weather events.

Actions taken at the federal level in water resources are inconsistent and are guided by ad hoc approaches to water resources needs and long-term challenges. A national vision and overarching principles to guide water resources development activities supported by the federal government are needed. For example, there are no national guidelines regarding the level of support for flood risk reduction that may be practicable within a 21st-century context. Each project is treated on its own without reference to any systems context or its impact on other water sectors. Actions within the agricultural sector that impact water quality are ignored in the development of agricultural support policies. Programs are supported on a sector basis rather than within a watershed context and do not recognize the geographic differences that exist across the Nation. The federal and state governments, working together, should develop principles that would guide both actions within the federal government and the state governments with respect to water resources development and regulation.

Since the shutdown of the federal Water Resources Council in 1983, there is no central water coordinating body at the federal level, and overlaps, inefficiencies and conflicts among federal agencies and their programs have grown. Continuing congressional actions taken within the context of committee jurisdictions have also limited the coordination among major federal water programs and their execution. State and local governments find this lack of coordination a roadblock to successful comprehensive planning and action on critical water resource issues. Reports to the Federal Government by independent bodies continue to point out the need for strong leadership within the executive branch and a new, coordinated approach within the congressional committee system that would provide for needed coordination of actions.

The roles of federal, state, and local governments with respect to water resources is in evolution. While there will always be a need for federally derived standards and federal funding of certain programs, the initiative to address emerging water issues is shifting to the state and regional level. For example, the Texas Water Plan represents a bottoms-up approach to dealing with the myriad water issues faced by that state. California's recent passage of a \$5 billion bond issue to support levee repairs, in the absence of federal support, highlights the trend towards state impatience with a lack of consistency and action in federal programs. Federal agencies and the Congress, in close cooperation with the states, need to look at the impact of this trend on current and future water programs.

Lastly, the dialogue found that more attention must be paid to supporting water resource actions in a watershed context where cross-sector needs can be evaluated and plans developed to address issues in a comprehensive manner rather than on a stove pipe basis. The effective work of the Delaware River Basin Commission in bringing together the actions of its constituent states to concurrently deal with the contrasting needs for flood risk reduction and water storage, represent a step forward in cooperative watershed planning. In dealing with watershed activities, the federal government should serve as a facilitator or partner rather than the leader so that the unique differences such as the geographic heterogeneity of this Nation and the diverse social, economic, and cultural needs of its citizens can be properly addressed.

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February 20, 2007

The President of the United States
The White House
1600 Pennsylvania Ave., NW
Washington, DC 20500-0001

Dear Mr. President:

The water resources of the United States are at risk and concerted action needs to be taken at all levels of government and within the private sector to deal with this challenge. The Nation faces periodic severe drought; increasing flood damages; challenges in reaching the 1972 National goal of fishable, swimmable, and drinkable waters; the continued loss of aquatic species; and a badly neglected and deteriorating water infrastructure. Climate change has become a reality and will influence significantly future water use.

The purpose of this letter is to urge you, in coordination with the Congress, governors and tribal leaders, to focus attention on these water problems so that our Nation will continue to enjoy, now and in the future, the economic, social and environmental benefits that result from sound use of these resources. Because they are in the background of our daily activity, the issues surrounding water are only occasionally in the headlines – and yet each day the problems grow.

Water resources challenges that imperil our quality of life and economic security have been identified by numerous groups and government agencies over the last decade. Major policy implications were identified in two National Water Resources Policy Dialogues conducted by the American Water Resources Association (AWRA) under the sponsorship of ten federal agencies and nearly 40 state, local, business, and nongovernmental organizations. We reported the results to you, the Congress, and the governors in 2003 and 2005. Last month the National Water Policy Dialogue again convened in Washington and was attended by over 150 of the Nation's water resources experts. Dialogue attendees heard from members of your cabinet, Congress, tribes, state and local agencies, and nongovernmental organizations. The general conclusion of the Dialogue was the same as in the previous two – efforts to deal with water issues need focus and immediate attention and can no longer be pushed into the background.

Our Nation's approach to dealing with water is ad hoc. Numerous studies by the National Academies, other nonpartisan organizations, and both the Administration and the Congress speak to "management by earmark." We address problems as they appear or as they merit political support rather than addressing long term needs. Tackling these problems in a rational manner will require that the Nation – the Administration, the Congress, state, tribal, and local officials, and the public – develops a vision that provides a national versus federal perspective on water resources. There was a strong sense within the Dialogue that the center of gravity for national water actions should rest at the state level and be backed by appropriate support from the federal government.

The participants in the 2007 Dialogue focused on identifying actions that need to be taken to develop an effective approach to dealing with water resources. The attendees identified several significant actions that, if taken, would represent major steps forward in dealing comprehensively with these water challenges. The Administration and Congress should



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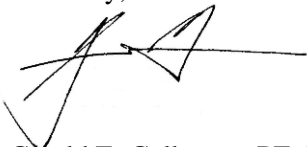
address the urgent requirement for a national assessment of water resources needs. A comprehensive review of physical challenges as well as policy gaps, overlaps, and contradictions is overdue. It has been 30 years since the last national assessment took place and much has changed across the physical and social landscape.

- The Administration and Congress should work with governors and tribal leaders to establish broad principles for water management – in essence, a national vision. In turn the vision must be translated into water policies that clearly define the roles and responsibilities of federal, state and local governments and the public with respect to water and the goals and objectives that would establish a blueprint for future actions.
- The Administration and Congress should better coordinate water resources activities. The efforts of federal agencies can overlap and at times conflict, and there is no body within the Administration to provide substantive coordination or adjudication of disagreements among agencies and to ensure needed collaboration. Furthermore, the Congress should work to eliminate the frequently uncoordinated actions of the numerous Congressional committees that deal with water.
- The Administration, Congress, and the governors must encourage policies that promote watershed planning and change policies that do not. Federal agency operations and programs need to be more watershed-oriented rather than tied to political boundaries and project-level authorizations and appropriations that often create more problems than they solve. Much should be learned from the successful efforts of some states and tribal organizations to operate in this manner.
- The Administration, Congress, and the governors must ensure that the Nation's vast scientific knowledge about water is available to all, clearly presented, and fully considered in making decisions on key water issues. Critical data about water resources must be collected and maintained, and research and development on critical water issues must be supported.

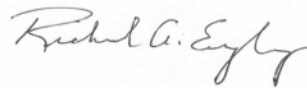
In summary, stewardship of the Nation's water resources is being neglected and the manner in which we deal with water issues is dysfunctional. We urge you, together with Congress and the governors, to initiate substantive efforts to develop a coordinated collaborative national (not federal) approach to preserving and protecting our water resources. A failure to do so will threaten the health and welfare of our citizens, endanger the economy, and weaken our national defense.

We are enclosing a summary that further describes the issues raised during the Dialogue and a list of selected water challenges. We would be most pleased to discuss them with you and the White House staff. We are sending similar letters to the Senate Majority and Minority Leaders, the Speaker and Republican Leader of the House of Representatives, other members of Congress, and all state and territorial governors.

Sincerely,



Gerald E. Galloway, PE, Ph.D.
President, AWRA
Dialogue Co-chair



Richard A. Engberg
Technical Director, AWRA
Dialogue Co-chair

Enclosures



SUMMARY HIGHLIGHTS OF THE THIRD NATIONAL WATER RESOURCES POLICY DIALOGUE¹

Suggestions and Guidance for Reexamining and Revising the Nation's Water Policies

February 7, 2007

Background

The Third National Water Resources Policy Dialogue held January 22–23, 2007, in Arlington, VA, brought together more than 150 persons representing a broad spectrum of government agencies, tribes, nongovernmental organizations, the private sector, and academia to consider how the Nation's diverse and often conflicting water policies can be improved to better address 21st century water resources challenges. Discussions focused on the three priorities identified during the first two water policy dialogues (held in 2002 and 2005): *reconciling contradictory water policies; improving collaboration; and broadening the role of science in policy decisions.*

The Dialogue was conducted by the American Water Resources Association and sponsored by the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U. S. Geological Survey, National Park Service, National Ocean Service, National Weather Service, Bureau of Reclamation, Environmental Protection Agency, U. S. Forest Service, Agricultural Research Service, Natural Resources Conservation Service, and Cooperative State Research, Education and Extension Service, and co-sponsored by 31 nongovernmental and nonfederal organizations.

Reconciling Contradictory Water Policies

As in previous dialogues, participants believed one key route to reconciling contradictory water policies lay in better coordination among federal agencies and across levels of government. There was substantial support for creating a regular forum among water resources leaders to explore and resolve conflicts and align program requirements. Another route to improving water policies was seen to be through ensuring that policy development and reform be based on an up-to-date assessment of the Nation's water resources challenges and needs. It was pointed out that there has not been a comprehensive national assessment of such needs in over 30 years. During this period, the Nation has confronted new water resources challenges including the aging of the country's water resources infrastructure, the huge uncertainties of climate change, and the increasing public insistence that our water resources management must be sustainable in the long term. Finally, a third key route to policy reform was seen to lay in moving from federal-centric thinking about water resources to embrace greater state leadership and utilization of market-based incentives in water management.

¹ In April 2007, AWRA will release a more detailed presentation of results from the Third National Water Policy Dialogue. Summaries of the First and Second Dialogues are available from AWRA (<http://www.awra.org>).

Improving Collaboration

Participants believed that organizing our water resources goals, policies, and rules around the concept of “places” (i.e., basins or watersheds) is a common sense way of improving collaboration. Participants’ number one approach to dealing with this theme was to invest greater authority and resources in our basin-level or watershed-level organizations to plan for, manage, and protect regional waters. Already crucial decisions affecting the health of basins and watersheds are made at the local level by local government and its stakeholders. However, such decision making could be improved by fostering greater collaboration among local, state, and federal levels of government. Participants noted that sharing data at watershed scales, structuring credit-trading programs, and funding demonstration projects were all ways that could promote greater collaboration.

Broadening the Role of Science

Inherent in the need for sound water resource policy decisions is the availability and effective use of good science upon which to base these important decisions. Participants noted with dismay the decline in numbers of stream gages and other basic water data collection processes due to constrained and limited federal financial resources. Ensuring adequate funding to maintain gages and other basic hydrologic data collection mechanisms must be a priority. Another impediment to the use of good, existing data and studies done on sound science is the lack of proper communication of the results to decision makers. Too often, scientists and engineers bombard decisions makers with reams of data with little translation as to its importance or relevance to the decision at hand. Water resources professionals must do a better job in explaining in a qualitative as well as quantitative manner the factors relevant to decisions. In addition, more risk-based analyses need to be incorporated into the evaluation and decision-making processes. Not only is this approach important for decisions makers but also in better explaining to and informing the public of the reasons decisions are being made.

Setting a Direction for Water Policy

As in prior dialogues, participants engaged in a voting process to identify ideas that best represented a sense of the group. While no attempt at reaching consensus was made in the dialogue, there were, nevertheless, broad areas of agreement about needed actions to improve water policy. These broad areas of agreement are noted below, identifying, in general terms, “*who* needs to do *what*.”

- **Administration, Congress. Governors and Tribal Leaders:**
 - Work together to establish principles for water management. National water policy needs state leadership. States and tribes must dialogue with the federal government to establish a coherent vision for water resources planning and management.

- **The Administration:**
 - Form an interagency (and possibly intergovernmental) coordinating body (perhaps based on the Water Resources Council) to ensure better policy coordination and improve interagency collaboration. First step: take a critical look at the pros and cons of coordinating arrangements and lessons learned. What federal interagency coordination arrangements make sense in the current and future water resources environment?
 - Don’t want to uncritically bring back the WRC
 - Do need to incorporate a watershed focus
 - Do need to acknowledge the growing role of states, localities

- Make federal agency operations and programs more watershed-oriented – e.g., organize agencies and data on a watershed basis, align agency programs by watershed to encourage maximum coordination and cooperation.
- Balance qualitative and quantitative factors in water resources decisions – incorporate risk-based evaluation procedures incorporating human and ecological factors. Communicate risk and uncertainty of decisions to the public more compellingly.
- Develop national programs to encourage state- and interstate-level basin planning. Provide technical support, data, and assistance in bringing all stakeholders into such processes.
- **Administration and Congress:**
 - Encourage policies which promote watershed planning and change policies which do not. In particular, modify the provisions of WRDA 86 to eliminate the unintended constraints on watershed planning.
- **Congress:**
 - Authorize and appropriate funds for a national assessment of current and emerging water resources needs such as climate change-related issues – to include a systematic review of policy gaps, overlaps, and contradictions. It has been 30 years since any sort of comprehensive national assessment has been done.
 - Create a joint committee on water, having jurisdiction over all water resources arenas, to deliver a national-level water program.
- **States:** Form/empower basin councils to take an active role in watershed management.
- **Private Sector:** Explore, innovate, and push for ways to bring market-based approaches to bear on water resources decisions – e.g., broadened credit and banking approaches.
- **Water Resources Professionals:** Communicate with decision makers and the public more effectively. Provide results and explain their implications clearly.

The Way Ahead

AWRA is committed to ensuring that the results from the Third National Water Policy Dialogue be made widely available so that they can be discussed and acted upon. To this end, AWRA is sending letters providing key results from the dialogue to the President, the Speaker of the House, Majority Leaders in the House and Senate, and Minority Leaders in the House and Senate, as well as to the Director of Office of Management and Budget, and the Chair of the Council on Environmental Quality. Additionally, the results will be shared with governors of all states. Results will also be provided to party platform-drafting committees. As before, the Dialogue co-chairs will be available to provide supplementary briefings to those who request them.

AWRA hopes that the parties identified as agents of change in the key actions listed in this summary will take the next steps to flesh out and implement the actions. AWRA stands ready to provide information to assist such efforts.



Important Water Resource Facts

- The Nation faces periodic drought and has no drought plan. Legislation authorizing a National Drought Information System to help forecast and monitor drought is stalled in Congress. In 2002, 49 percent of the contiguous United States was in moderate to extreme drought.
- Annual flood losses in the United States continue to increase in spite of nearly 70 years of federal flood control and 39 years of National Flood Insurance. While these latter programs have prevented billions of dollars in damages, the pre-Katrina annual flood costs to the Nation are estimated to be in excess of \$6 billion.
- Climate change will have substantial impacts on water resources. The IPCC reports that, “Peak streamflow is likely to move from spring to winter in many areas where snowfall currently is an important component of the water balance. Glacier retreat is likely to continue.... Water quality is likely generally to be degraded by higher water temperature, but this may be offset regionally by increased flows.... Flood magnitude and frequency are likely to increase in most regions, and low flows are likely to decrease in many regions.”
- Demands for municipal and industrial water supplies are growing in many parts of the country and governments are struggling to deal with these demands. While average per-capita use is declining, the population is growing. By 2050 the U.S. population is expected to grow by almost half from its 2000 level, adding more than 137 million persons and a consequent increased water demand.
- Many ports, gateways to domestic and international trade and overseas military operations, are operating at the margin in terms of channel depths. The inland waterway system is congested and is need of rehabilitation.
- Wetland losses on nonfederal lands are between 70,000 and 90,000 acres annually.
- More than 1300 plants and animals are listed as threatened or endangered. While the Endangered Species Act has prevented extinction for many, it has recovered few. Recovery plans exist for 976 species but are difficult and costly to implement and require many years to move to fruition.
- Multi-billion dollar ecosystem restoration projects in the Everglades, Coastal Louisiana, the Great Lakes and Chesapeake Bay, and on the Upper Mississippi River, are essential to the ecological health of those areas, but lack adequate or, in some cases, any funding.
- EPA’s latest assessment of U.S. water quality – 2000 – indicates that of the 699,946 river and stream miles that were assessed by the states (or 19% of the nation’s river and stream miles), 269,258 (39%) were not fully meeting water quality standards (i.e., at least one use was impaired). Of 31,072 assessed square miles (36% of the nation’s estuarine square miles), 15,676, or 51%, were not fully meeting water quality standards..
- The 2005 American Society of Civil Engineers Report Card for America’s Infrastructure assigns a D grade to water infrastructure and cites an annual shortfall of \$11 billion needed to replace facilities that are nearing the end of their useful life. Wastewater systems face a \$12 billion annual shortfall in funding for their needs.
- Conflicts over the primacy of one water use over another, the water needs of natural systems, and water rights of Native Americans, continue to occur. These differing viewpoints can be seen in the nearly 19 years of disagreement over management of the Missouri River and the nearly eight years that Alabama, Georgia and Florida have been working to allocate waters of the Apalachicola-Chattahoochee-Flint Rivers.

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