

**Western States Federal Agency Support Team & Federal Agencies, Summary Report
In Support of *Water Needs and Strategies for a Sustainable Future: Next Steps (WGA
2008)***

This report highlights not only activities by the Western States Federal Agency Support Team (WestFAST), but also Federal agency programs and/or activities that provide assistance in implementing recommendations in the WGA 2008 Water Report. WestFAST agencies acknowledge the innovative and ground-breaking model of collaboration and cooperation identified in that report. WestFAST team members are working hard based on the premise that collaboration is built step-by-step; WestFAST continues to seek and develop such opportunities.

During 2008, federal agencies began work on the one over-arching recommendation in the WGA 2008 Water Report, the creation of the WestFAST. In 2009, WestFAST – or individual agencies - initiated work on 19 of the 42 objectives listed in the 2008 Water Report. In developing the 2010 work plan, WestFAST team members looked at the broadest scope for interagency collaboration, integration, and economies of scale. In addition, WestFAST team members continue to seek opportunities for horizontal integration among or between agencies. WestFAST team members identified activities that provided an opportunity for collaboration and synergy.

Specifically, a summary table (see Insert A) illustrates the depth and breadth of Federal involvement in activities, programs, and initiatives that promote the Reports' recommendations. Specific details are provided in the supporting narrative.

Background/Supporting Information

The numbered objectives listed below are from *Water Needs and Strategies for a Sustainable Future: Next Steps*, (2008 Water Report.) The activities, listed as bullets, describe recent and/or current agency or interagency activities in support of specific objectives quoted from the 2008 Water Report.

Foreword

1. The Western States Water Council (WSWC) should enter into a formal agreement to create a "Western States Federal Agency Support Team [WestFAST]" made up of representatives of federal agencies having water resource responsibilities and create a WSWC "liaison position" to facilitate collaboration.

- In 2008, 9 federal agencies signed a Declaration of Cooperation in 2008 and a Federal Liaison Officer was selected.
- In 2010, Department of Energy (DOE) and National Aeronautics and Space Administration (NASA) are formalizing their participation with WestFAST.
- WestFAST collaboratively prepared Work Plans for 2009 and 2010 to assist WSWC in accomplishing objectives outlined in 2008, *Water Needs and Strategies for a Sustainable Future: Next Steps*.

2. The WGA should urge Congress ...

3. Federal agencies should use state water plans: (a) to help determine national water policy and priorities that best align federal agency support to states; and (b) to inform decision making regarding regional water issues.

- In November 2008, the U.S. Army Corps of Engineers launched "Building Strong Collaborative Relationships for a Sustainable Water Resources Future. This initiative compiled an assessment of state water plans and relies upon them as the basis for future action.

- During 2009, the WestFAST Liaison Officer and WestFAST members facilitated the Council's interaction in the Western Regional and National "Collaborative Relationships for a Sustainable Water Future" workshops.
- 2010 activities include: 1) the review and incorporation of comments associated with finalizing the "Building Strong Collaborative Relationships for a Sustainable Water Resources Future" report and 2) identification of next steps.
- As an interim measure in 2010, pilot efforts are being formulated demonstrate how the WestFAST/WSWC collaborative process could be applied to assist state-led water planning; one of the goals for the pilot demonstrations in 2011 is to better understand state water resources priorities and, to the extent possible, leverage existing authorities to assist with state prioritized next steps.

Water Policy and Growth

1. States (who have the legal responsibility associated with the resource), working with interested stake-holders, should identify innovative ways to allow water transfers from agricultural to urban uses while avoiding or mitigating damages to agricultural economies and environmental values.
 - In 2010, the WestFAST Federal Liaison Officer is participating with the Ag/Urban/Environmental Water Sharing Group and the August 2010 Forum.
2. States should offer technical/financial support for watershed groups ...
3. In order to better integrate water and land use planning, states should examine their related laws and institutions

Water to Meet Future Demands

Water Information

4. Congress should immediately provide funding sufficient to include the emissive thermal infrared (TIR) instrument on Landsat 8 as part of the Landsat Data Continuity Mission (LDCM) as a unique and cost-effective means to measure agricultural and other consumptive water uses. The President's FY 2010 budget request for NASA included TIRS on Landsat 8 with a December 2012 launch.
 - The President's FY 2010 budget request included \$13.4 million to allow USGS to meet the ground system requirements for Landsat 8.
5. The National Aeronautics and Space Administration (NASA) should immediately begin preparing a request for proposals (RFP) and take other steps needed to ensure TIR is included on Landsat 8, and request supplemental and future funding sufficient to minimize any necessary delay in the scheduled launch.
 - In 2009, NASA confirmed the LDCM and the TIRS was officially added to the scope of the mission at that time.
6. Congress should: (a) fully fund the US Geological Survey's National Streamflow Information Program ...
7. State and federal water resource agencies should work together to provide universal access to the water-related data collected by all state, local, and federal agencies, as well as tools and models that better enable the synthesis, visualization and evaluation of water-related data, including that to be shared with local governments.
 - In 2008, WestFAST participated in WSWC's Symposium, The West's Water Future: Water Information Needs and Strategies
 - In 2010, USACE announced the future development of a "Federal Support Toolbox" of data/information and technical assistance in support of states' water planning programs. The toolbox is part of USACE's 2009 initiative "Building Strong Collaborative Relationships for a Sustainable Water Resources Future."

Water Planning and Management

8. Federal agencies with long range water supply planning responsibilities should:
- (a) Work in cooperation with states to help communities develop drought preparedness plans, drought contingency plans, establish or enhance federal reservoir drought contingency plans, and be visible and engaged in all drought-related forums: nationally, regionally and locally.
 - In 2008 and 2009, WestFAST participated in the Drought/Climate Services workshops sponsored by WGA and WSWC
 - In 2009, technical experts from local WestFAST offices representing Redamation, USGS, USFWS, and USACE participated in the Oklahoma Comprehensive Water Plan workshops that included public input into drought planning.
 - In 2009, EPA's National Drinking Water Advisory Council formed the Climate Ready Water Utilities Working Group. A WSWC member serves on this advisory committee.
 - (b) Support the implementation of the National Integrated Drought Information System (NIDIS) by
 - (i) providing drought information, such as reservoir storage levels, linking Federal web sites with the NIDIS site;
The website, www.drought.gov, provides data from participating agencies,
 - (ii) supporting state and local drought planning within an integrated water resources management framework;
 - In 2010, USACE announced the future development of a "Federal Support Toolbox" of data/information and technical assistance in support of states' water planning programs. The toolbox is part of USACE's 2009 initiative "Building Strong Collaborative Relationships for a Sustainable Water Resources Future."
 - (iii) providing information on drought impact assessment in areas where they have expertise, such as navigation, hydropower, ecosystem needs, and recreation; and
 - (iv) participating in NIDIS pilot studies, particularly in studies involving water resources management.
 - In 2008, WestFAST members from National Oceanic and Atmospheric Administration (NOAA), USGS, Forest Service, Natural Resources Conservation Service (NRCS), and Redamation participated in meetings to develop and implement the Upper Colorado NIDIS Pilot.
 - (c) Ensure there is an accurate assessment of the Nation's water availability and water demands, with the goal of integrating the information into state water resources planning, recognizing that a truly national assessment must begin at the state and local level with appropriate technical and financial support from the federal government.
 - In 2009, Redamation began the cooperative, cost-shared Basin Studies Program and is completing an assessment of availability and demand in the Colorado, Yakima, and St. Mary's Milk River Basins.
 - In FY 2011, USGS will conduct a Water Census to provide clear information about the status of water resources and trends in water availability and use.
9. Congress should: (a) modify the applicable authority of the Corps of Engineers ...
10. States should encourage the use of water banks, rotating fallowing and dry year leasing, as well as other voluntary means ...

Promising Technologies and Strategies

11. The Congress and the Administration should support more spending for research and development related to innovative water conservation and supply augmentation strategies, including ground water recharge and recovery, desalination, recycling and reuse, and weather

modification. Financial assistance should be provided as well where there is a significant national or regional benefit.

- Reclamation announced funding opportunities for FY 2010, for cost-shared System Optimization Review, Water and Energy Efficiency, Advanced Water Treatment Pilot and Demonstration, or Research grants.
- In 2010, Redamation's Desalination and Water Purification Research program plans to award 7 cost-shared grants to develop more cost-effective, technologically efficient means by which to desalinate water.
- During 2010, Redamation is developing funding criteria for a fiscal year 2011 Title XVI funding opportunities.
- EPA's WaterSense is a partnership program that promote water efficiency and enhances the market for water-efficient products, programs, and practices. WaterSense helps consumers identify water-efficient products and programs that meet WaterSense water efficiency and performance criteria, perform well, help save money, and encourage innovation in manufacturing.

12. The Bureau of Redamation, Corps of Engineers, Department of Agriculture, Department of Energy, EPA, NOAA and USGS should support and coordinate research and development of such strategies, focusing on reducing the costs and maximizing the benefits, as well as defining the scope of any potential adverse effects or obstacles to implementation, such as the impact of emerging contaminants on drinking water as it relates to reuse and recharge.

- In 2010, the Department of the Interior (DOI) launched the Sustain and Manage America's Resources for Tomorrow (WaterSMART) program. WaterSMART integrates and coordinates water sustainability efforts of Redamation and USGS and federal, state and private partners.

13. Federal, state, and local agencies should further their efforts to investigate the availability and use of brackish waters to meet future water needs, particularly those of rural communities without other readily available sources of supply, and to identify ways to mitigate adverse impacts of brine disposal.

- In 2010, Redamation is completing an assessment of rural water needs, as required by the Rural Water Act (PL 109-451)
- During 2010, USACE, working with local state and federal organizations, continued reevaluation and construction activities for components of the Red River Chloride Control Project, Texas and Oklahoma. The projects are designed to control natural brine emissions at major source areas to improve water quality for municipal & industrial and agricultural use.

14. States should evaluate their current capacity ...

15. States should also provide administrative, financial and technical assistance to research ...

16. State and federal water management agencies should evaluate the potential for integrating artificial groundwater storage ...

Water Infrastructure Needs and Strategies

Water and Wastewater Treatment

17. Congress should maintain and increase Clean Water Act and Safe Drinking Water Act State Revolving Fund appropriations ...

18. Congress should remove the state volume caps for private activity bonds ...

19. ... private and public/private financial partnerships can be useful and should be encouraged.

20. All levels of government, along with appropriate private sector involvement, should cooperate in the development and implementation of appropriate criteria for prioritizing infrastructure needs, asset management strategies, policies, standards, techniques and technologies.

- In 2009 USACE worked with WestFAST and WSWC members to conduct a Society of American Military Engineers Regional Conference session on “Water Resources and Associated Infrastructure Challenges.”
- WestFAST is partnering with WSWC on the November, 2010 Financing and Infrastructure Symposium.
- In 2010, formulation of pilot activities were initiated to demonstrate how the WestFAST/WSWC collaborative process could potentially be applied to help states develop their water plans and assist them with next steps including, the consideration of aging infrastructure needs.

21. States should encourage adequate and progressive local asset management plans ...

22. States, with assistance from relevant federal agencies, should provide institutional mechanisms ...

23. Utilities should adopt transparent planning and rate setting processes

Water Resources

24. In cooperation with federal, state, local and private landowners, states should identify and prioritize anticipated future water resources infrastructure needs as a component of western state water plans and planning processes.

- WestFAST is partnering with WSWC to plan and present the 2010 Symposium, Western Water Resources Infrastructure Strategies: Identifying, Priorities and Financing Needs.

25. Federal agencies should work cooperatively with state and local water agencies to identify necessary studies, data and projects and states should actively support funding to assist in implementation.

- In 2010, DOI launched the Landscape Conservation Cooperatives, management-science partnerships that inform integrated resource management actions addressing climate change and other stressors within and across landscapes.
- In 2010, Federal agencies in Utah continue their partnership with Utah State agencies in the Utah Partners in Conservation and Development to address healthy watersheds.

26. With federal technical and financial assistance, states should identify, restore and preserve high value watersheds and natural features (such as wetlands) that provide ecological service (mitigate flooding, filter and remove pollutants, recharge ground water, etc.), and that may minimize the need for structural alternatives.

- The NRCS program, Wetlands Reserve program, authorized by the 2008 Farm Bill, provides easements and cost-share assistance to restore or enhance wetlands functions and values.

27. The WSWC should update information and compile a report ...

Resolution of Indian Water Rights

28. Congress should ensure that any land or water settlement ...

29. Congress should explore opportunities to provide funding for the Bureau of Reclamation ...

Climate Change Impacts

30. Congress should appropriate sufficient funds to conduct a portfolio assessment ...

31. Federal agencies should begin a systematic updating of their respective reservoir operating plans and drought contingency plans to assure that operating plans are adaptable to a changing climate.

32. The National Oceanic and Atmospheric Administration should take the lead in improving forecasts on multiple geographic and temporal scales and conduct additional research in

collaboration with water management agencies so that forecasts can be incorporated into reservoir operations.

- In 2009 and 2010, WestFAST participated in the Drought/Climate Services workshops sponsored by WGA and WSWC

33. The USGS, in cooperation with states, should improve monitoring and data collection to identify and respond to changing regional and local trends, and allow for better early warning systems that (a) focus on critical or vulnerable systems; (b) deliver real-time data; (c) improve data access, storage and retrieval; (d) allow for real-time “smart” analysis; and (e) provide feedback and evaluation.

- In 2009, EPA formed a Climate Change Council; a WSWC member serves on this Council
- In 2010, WestFAST is developing an inventory of federal climate change programs
- In 2010, the Council on Environmental Quality is leading an interagency effort to develop a comprehensive climate adaptation report.

34. The federal government, in cooperation with states, should take the lead in putting together a web site to provide more useful and scaled output from climate models for the water management community.

35. Water managers should take the initiative to clearly communicate their needs for applied science to the climate research community, and must seek opportunities to guide hydroclimate research in directions that will support real-world problem solving.

- In 2009, Redamation, NOAA, USGS and USACE formed the Climate Change and Western Water Group to provide interagency climate change research coordination. A WSWC representative serves on the CCAWG Advisory Committee.

36. Planning for climate changes should be undertaken at all levels, from the federal government to private and public water utilities, with participation from non-governmental organizations.

- In 2010, USACE continued to collaborate with WestFAST members and advance the “Response to Climate Change Program.” The mission of the program is to develop, implement, and assess adjustments or changes in operations and decision environments to enhance resilience or reduce vulnerability of USACE projects, systems, and programs to observed or expected changes in climate.
- In 2010, the Bureau of Land Management (BLM) began a five-year effort to systematically identify landscape-scale, ecologically-based conservation and restoration needs so they can be appropriately considered in developing future resource management and use objectives.

37. More water storage should be considered, accompanied by an extensive risk and cost-benefit analysis, together with an analysis of the potential for reducing demand and increasing water use efficiency.

- In 2010, WestFAST is developing an inventory of Federal agency planning assistance available to states.

38. States that share river basin or groundwater resources ...

39. States should examine their existing water laws and institutions ...

40. States should anticipate an increased need ...

Coordination and Cooperation in Protecting Aquatic Species under the Endangered Species Act

41. While recognizing the existence of tools and remedies under federal law, those seeking to protect and enhance instream flows for Endangered Species Act (ESA) and other purposes should first consider utilizing existing state tools to address their concerns before resorting to

other means, as this approach can not only avoid conflict but provide enhanced protection within the regime of state laws and administration.

- Federal legislation that created the Dominguez Canyon Wilderness Area directed BLM to negotiate with the State of Colorado for instream flow rights, as opposed to exerting a federal reserved right. The negotiated agreement calls for the State to hold instream flow rights for the BLM, with unique seasonal flow requirements that provide natural hydrologic variability for ecosystems but also account for needs of upstream users.

42. In instances where proposals to protect or enhance instream flows for ESA or other purposes cannot be accommodated under state law, a process of negotiated compromises resulting in formal agreements should be pursued to resolve conflicts.

- BLM, National Park Service, U.S. Fish & Wildlife Service, and Bureau of Indian Affairs have negotiated a series of stipulated settlements with entities in to resolve water rights protests related to groundwater development projects. Federal agencies have agreed to withdraw protests in return for entities implementing management, monitoring, and mitigation plans designed to address concerns raised by Federal agencies in their protests.

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| Section, 2008 Water Report | Activity | Federal Liaison Officer | USACE | Reclamation | USGS | EPA | NOAA | USFWS | USFS | NRCS | BLM | NASA | DOE | Other |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------|--------------------|-------------|------------|-------------|--------------|-------------|-------------|------------|-------------|------------|--------------|
| | BLM's Healthy Lands Initiative to systematically identify landscape-scale, ecologically-based conservation and restoration needs | | | | | | | | | | X | | | |
| Climate Change Impacts , Objective 37 | WestFAST is developing an inventory of Federal agency planning assistance | X | X | X | X | X | X | X | X | X | X | X | X | |
| Coordination and Cooperation in Protecting Aquatic Species under the Endangered Species Act , Objective 41 | BLM negotiated with State of Colorado for in-stream flow rights | | | | | | | | | | X | | | |
| Coordination and Cooperation in Protecting Aquatic Species under the Endangered Species Act , Objective 42 | Negotiated agreements to resolve water rights protests related to groundwater development projects in Nevada. | | | | | | | X | | | X | | | NPS, BIA |