

# Western States Watershed Study

Briefing for the Honorable  
John Paul Woodley, Jr.



Assistant Secretary of the Army  
for Civil Works

3 September 2008





# Western States Watershed Study

## Shared Vision Partnership Agreement for, the WESTERN STATES WATERSHED STUDY

### Purpose:

To promote and facilitate a long term working and collaborative relationship between participants at the State, Federal, and local levels to develop the Western States Watershed Study.

This is an unaffiliated 17-Division, So collectively

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We, as repres work together that solutions the Western stakeholders, fostering a sp

We pledge to work together as a Watershed Study Team and meet in partnering sessions as needed. We also commit to developing a subsequent collaborative action plan with specific initiatives and measurable milestones to be reviewed on an annual basis.

It is understood that this agreement supports the parties' cooperation for a comprehensive analysis examining multi-jurisdictional use and management of water resources on a watershed or regional scale. This is not a funding obligating or fiscal document. Any exchange of funds or other tangible resources in furthering the purposes of the partnering agreement will require execution of a separate written agreement in accordance with applicable law. Nothing in this agreement will be construed as affecting the authorities of the participants to act as provided by statute or regulation or as binding beyond their respective authorities or to require the participants to obligate or expend funds in excess of available appropriations.

### Effective Date:

This agreement may be reviewed periodically to renew the Parties' commitment and to consider changes that might be needed. Amendments will be made in the spirit of cooperation and partnership by agreement of the signatories. It will remain effective until the Parties agree to terminate it by consensus.

  
Duane Smith  
Chairman, Western States Water Council

Date 10/27/06



  
Doug T. Riley  
Major General, US Army  
Director of Civil Works

Date 12-20-06



An October 2006 Shared Vision Partnership Agreement with the Western States Water Council (WSWC) defined the Study goals



# Western States Watershed Study

## Water Needs and Strategies for a Sustainable Future



Western Governors' Association ♦ June 2006

Study scope based on several recommendations contained in the Western Governors' Association (WGA) / WSWC June 2006 Report.

### Study Topics:

- Water Data Collection
- Drought, Climate Change
- Watershed Tools/Collaborative Planning
- Asset Management
- Federal Resources and Collaboration
- Policy and Programs



# Western States Watershed Study

**Water Needs and Strategies  
for a Sustainable Future:  
Next Steps**



Western Governors' Association ♦ June 2008

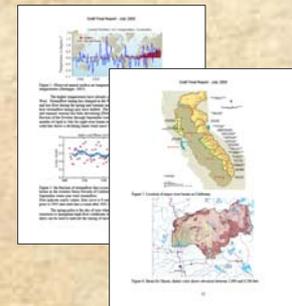
- WSWC used selected information from the study for their follow-on June 2008 report.
- Report recommendations do not represent positions of any federal agency but rather provide information useful for a range of applications and decision makers.



# Western States Watershed Study

## Summary of Study Products

- Shared Vision Partnership Agreement.
- Various technical and summary reports (majority developed with multi-organization input/collaboration) associated with water data collection, drought, climate change, watershed tools/collaborative planning, federal resources/collaboration, asset management, and policy/programs.





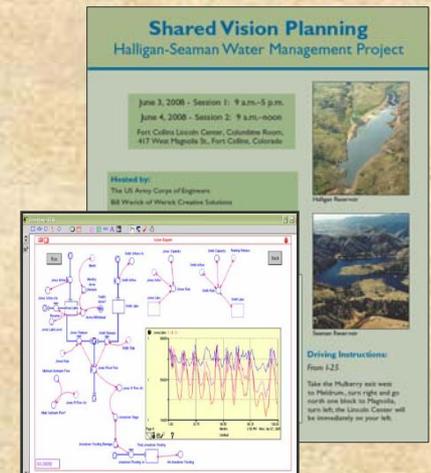
# Western States Watershed Study

## Summary of Study Products

- Engineering Research and Development Center (ERDC) System Wide Water Resources Program (SWWRP) Arc GIS Toolbar technology transfer to Utah State University.



- Institute for Water Resources (IWR) pilot Shared Vision Planning Process/Model applied to Regulatory component activities at Greeley/Ft. Collins, Colorado (workshop and 1<sup>st</sup> phase of collaborative model development completed).





# Western States Watershed Study

- Other Shared Vision Planning (SVP) products associated with Regulatory activities include a pamphlet and video (refer to [www.SharedVisionPlanning.us](http://www.SharedVisionPlanning.us))

Cache la Poudre, CO.  
pilot on SVP for  
404 water  
supply permit

## Why Use SVP?

- Improve predictability with respect to issue identification and reaction to impacts from the Corps and from Federal Agencies
- Improve issue resolution
- Reduce controversy during the review process and at the presentation of the permit decision
- Increase the reliability of answers to resource questions.
- Reduce the chances for supplemental DEIS by identifying and addressing issues upfront.
- Improve early issue identification
- Support or rebuke findings of no significance (FONSI).
- Develop a project constituency.
- Improve trust among stakeholders.
- Improve information sharing.

## Current Case Studies

- Cache la Poudre, CO
- Willamette, OR
- James River, VA
- Upper Great Lakes, US & Canada
- Connecticut River, New England

## Want More Info?

- Description of Cache la Poudre pilot on SVP for 404 water supply permit.
  - White Paper "Shared Vision Planning Applied to Regulatory Decisions"
  - Video & workshop summary on SVP in 404 & Water Supply
  - Visualization Primer and Tutorials
  - Case Studies, Background, References, links
- [www.SharedVisionPlanning.us](http://www.SharedVisionPlanning.us)



## Contacts:

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US Army Corps of Engineers

## Shared Vision Planning

Shared Vision Planning integrates

- tried-and-true Planning principles
- systems modeling
- collaboration

into a practical forum for making water resource management decisions.

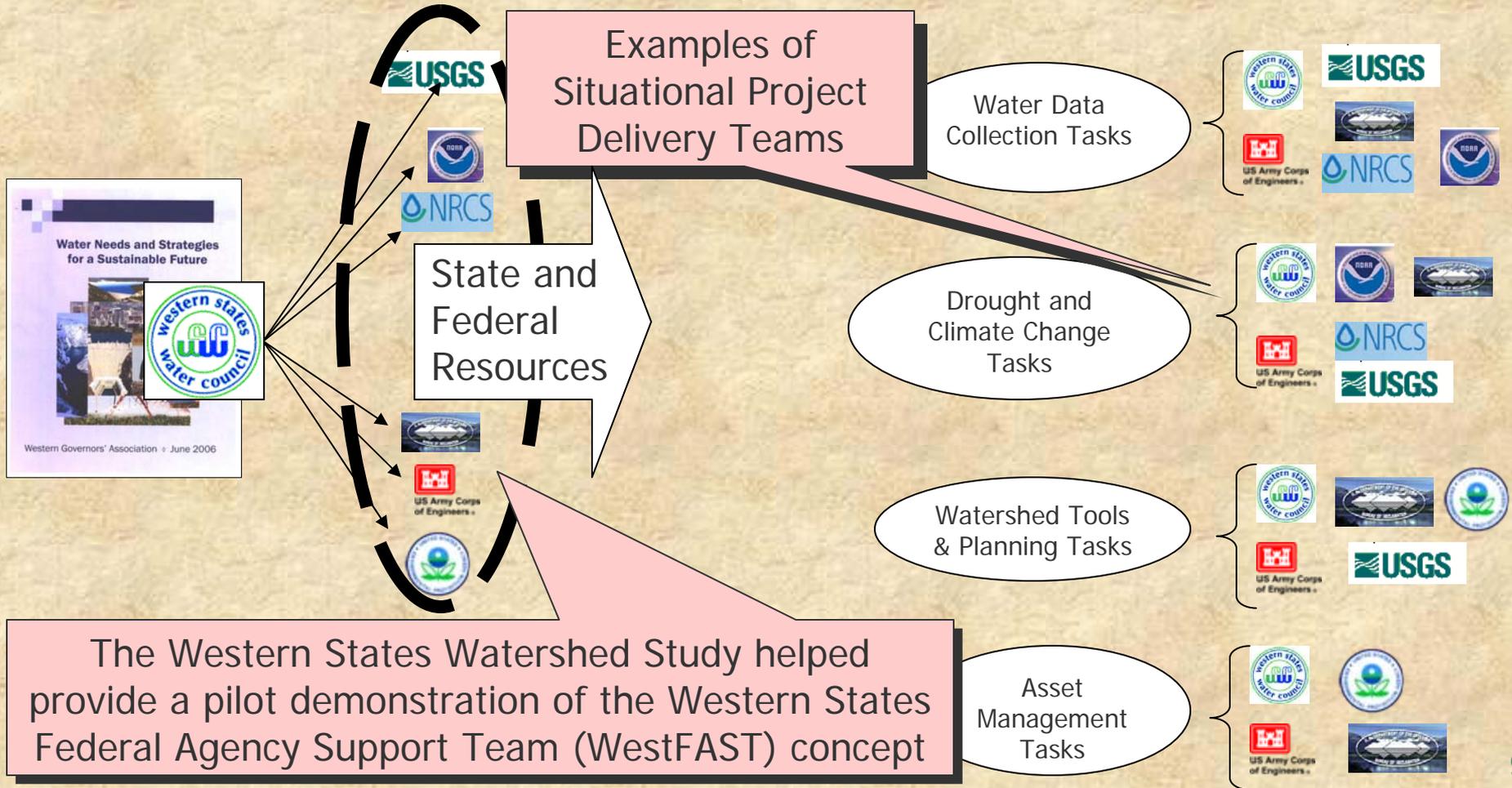
[www.SharedVisionPlanning.us](http://www.SharedVisionPlanning.us)





# Western States Watershed Study

## Approach for Multi-Organization Collaboration

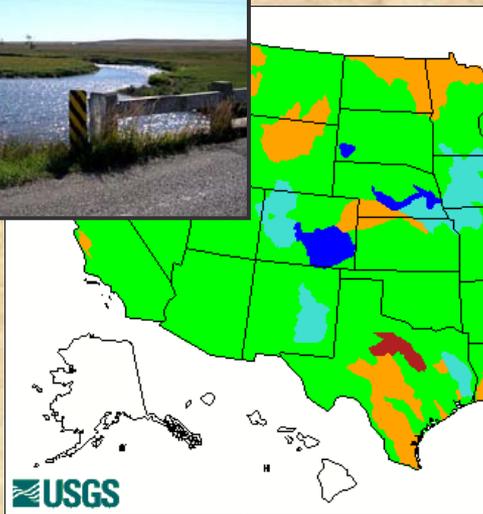


The Western States Watershed Study helped provide a pilot demonstration of the Western States Federal Agency Support Team (WestFAST) concept



# Western States Watershed Study

## Water Data Collection



- Report on existing status and strategic plan to maintain and improve the collection of basic water data.

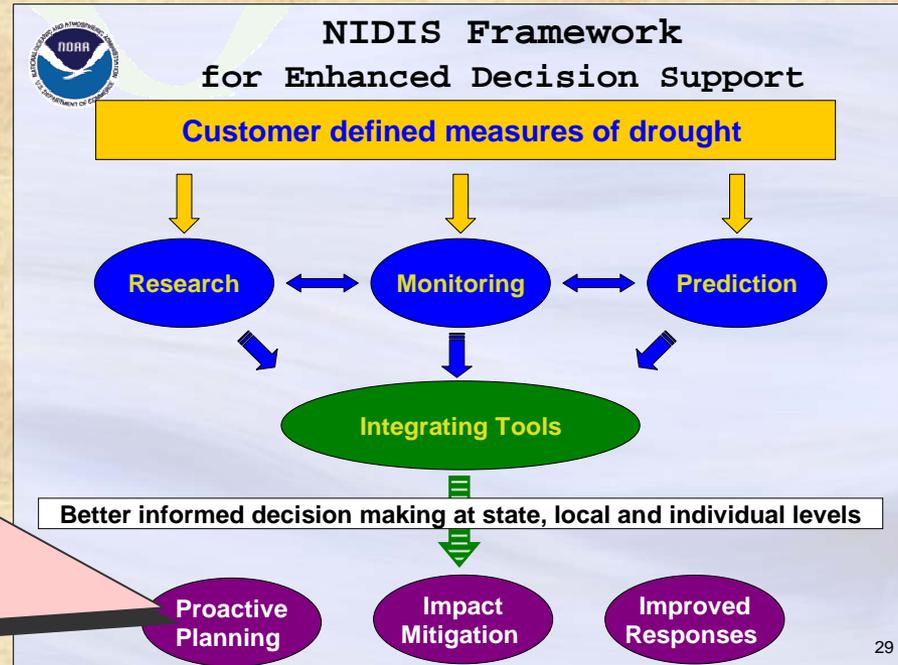
Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		



# Western States Watershed Study

## Drought

Pilot strategic plan to enhance the Corps' preparation and response to support the implementation of the National Integrated Drought Information System (NIDIS).





# Western States Watershed Study

## Climate Change

The pilot study included 3 reservoirs in the Sacramento River basin



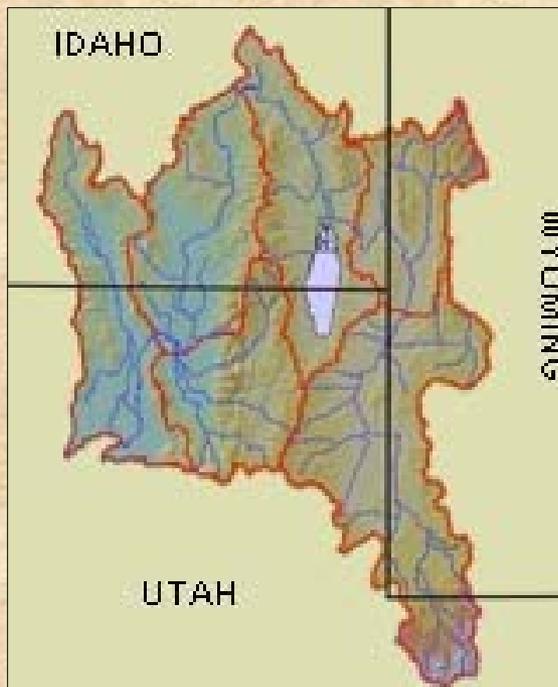
Report on a process that could be used to modify flood control rule curves to help mitigate loss of snowpack storage.





# Western States Watershed Study

## Watershed Tools and Collaborative Planning

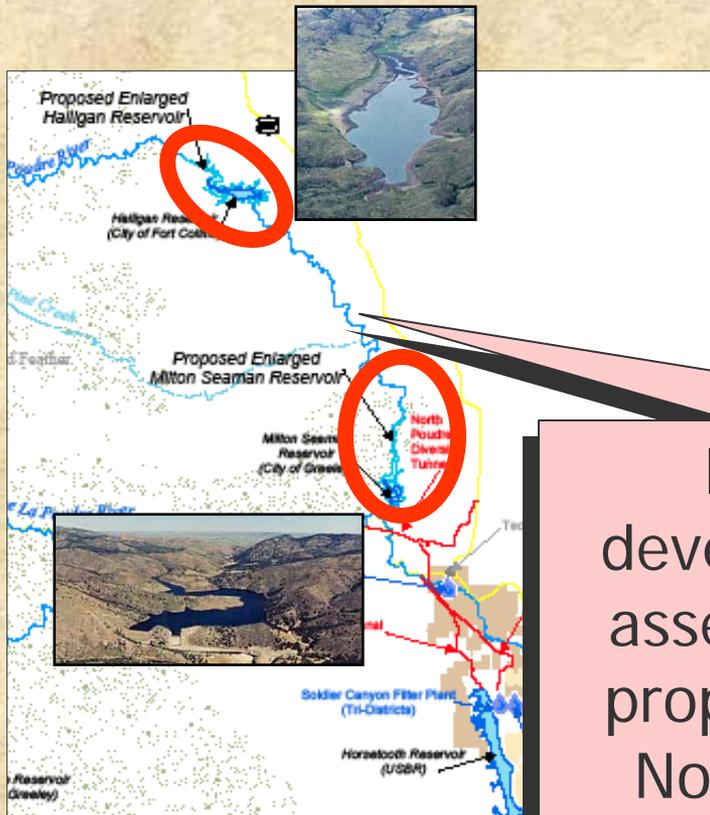


- Report on the Bear River Basin case study of successful on-going collaboration between states, lessons learned, and a pilot demonstration of the Corps' ERDC GIS Toolbar technology used by Utah State University.



# Western States Watershed Study

## Watershed Tools and Collaborative Planning



- On-going pilot demonstration of the potential application of Shared Vision Planning (SVP) to the Corps Regulatory process.

IWR and Stakeholder Phase I development of a SVP model to help assess managed flows between two proposed enlarged reservoirs on the North Fork of the Cache la Poudre River, Colorado is completed.

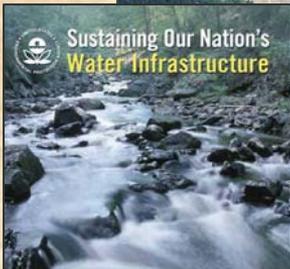
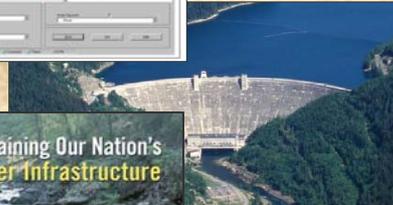
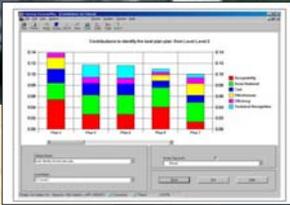
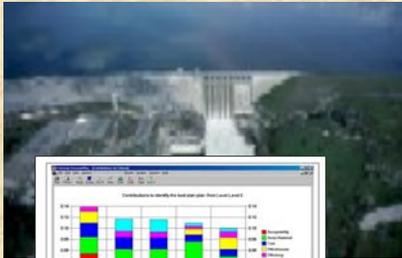


# Western States Watershed Study

## Asset Management

- Report on concepts for Reclamation/Corps/EPA collaboration associated with development of federal Asset Management (AM) systems approach expertise and technology transfer to states.

- Other organizations, such as the Interstate Commission On the Potomac River Basin, could potentially benefit from AM technology transfer – PCoP Conference remarks by Mr. Joseph K. Hoffman, Executive Director.

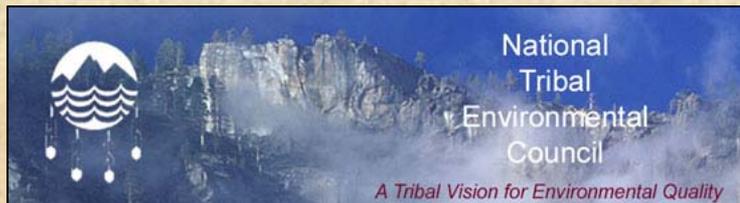




# Western States Watershed Study

## Federal Resources and Collaboration

- Memorandum report identifying and examining venues, such as the 2007 and 2008 National Tribal Environmental Council conferences, to enhance federal agency collaboration with multiple tribes on addressing regional topics such as drought, climate change, etc.





# Western States Watershed Study

## Federal Resources and Collaboration



### Western States Federal Agency Support Team

#### *A Declaration of Cooperation*

#### *Working Together for the Sustainable and Efficient Use of Western Water Resources*

We, as representatives of our respective Federal agencies, do hereby declare our intent to cooperate as members of a Western States Federal Agency Support Team (WESTFAST) partnership. We will work together whenever and wherever possible throughout the 17 Western States to promote and educate the public on the benefits of sustainable and efficient use of water resources.

We declare that WESTFAST supports a continued commitment on the part of Federal, and State organizations; working with local, Tribal, and other stakeholders; to improve the effectiveness of collaboration to seek watershed solutions to water issues in the Western States. This effort emphasizes proactive, voluntary, participatory and incentive-based approaches to water resource management and conservation assistance programs throughout the Western States.

We hereby declare that we as WESTFAST partners will collaborate with the Western States Water Council to guide the development of an appropriate action plan for this partnership.

We hereby declare to support, in concept, the establishment of a Federal liaison position to work with the WESTFAST members and the Western States Water Council in developing a collaborative work plan to carry forward joint water resource initiatives. Contributory cost sharing such a position; will be based on authorized and available funds.

- Examination of case studies on federal and state agency collaboration in support to locally-led watershed studies.
- Information useful for WSWC-led efforts associated with the WestFAST (efforts underway to formalize), Federal Liaison Officer, and other watershed initiatives.



# Western States Watershed Study

## Preliminary Evaluation Metric Indicators

### 1. Resource Leveraging Metric:

- Resource Leveraging Factor (RLF)



### 2. Sustainability Indicator Metrics:

- WSWS SVPA

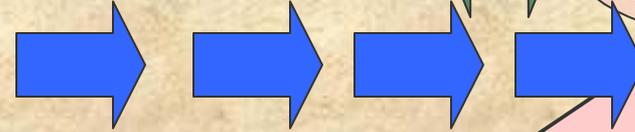


- Western States Water Council Federal Liaison Officer, Ms. Jonne Hower
- WestFAST Declaration of Cooperation (underway)
- June 2008 Water Needs and Strategies for a Sustainable Future: Next Steps report

Organization	Example (rough estimate) Funding / Work-In-Kind Contributions
Federal Agencies (Western States Federal Agency Support Team)	\$1,000,000
Non-Federal Organizations (WSWC staff and members participation)	\$1,000,000
Total WSWC / WestFAST Contributions	\$2,000,000
Corps of Engineers' Western States Watershed Study (WSWS) Contribution	\$830,000
Corps' WSWS Resource Leveraging Factor (Total ÷ Corps' WSWS Investment)	2.4



**Local Plans**

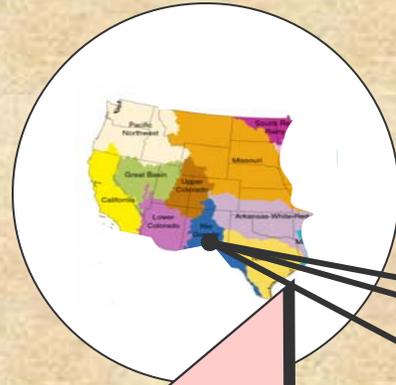


**State Plans**



**Regional and Tribal Information / Plans**

Over-arching principle is that states provide the pivotal role in the grassroots approach to water resources planning.



Regional issues are candidates for initiatives that promote the shared development of solutions

- WA
- ID
- MT
- OR
- CA
- ND
- SD
- NE
- KS
- NV
- UT
- WY
- CO
- NM
- AZ
- TX
- OK

- Pacific NW
- California
- Missouri
- Great Basin
- Upper Colorado
- Rio Grande
- Lower Colorado
- Texas-Gulf
- Ark.-White-Red



# Next Steps

## Policy and Programs



The WestFAST could potentially leverage resources to help states develop their water plans which would contribute information for a regional assessment of needs. Ideally, this initiative could serve as a large-scale demonstration for a national assessment.



Information for National Water Policy (i.e. regional water supply, climate change, Asset Management, etc.)

State water plans could also serve to help develop, and be integrated into, national policy/programs that best align federal agency support to states and consider regional watershed issues

Anticipated initial "WestFAST". Additional team members TBD



# Next Steps

## Policy and Programs

State Plans would provide information and identify needs for regional / watershed efforts

State Water Plans updated every 5-10 years.

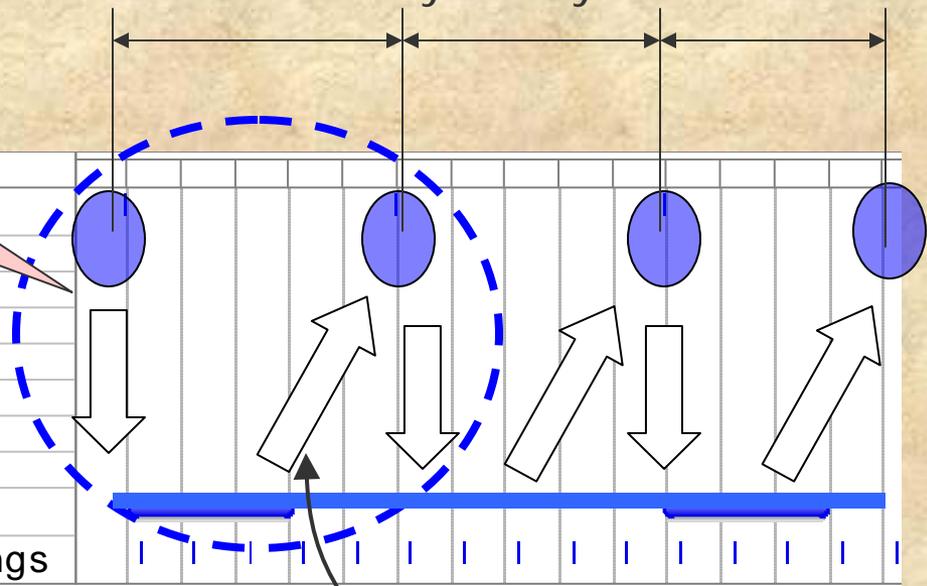
Task Name

Periodic State Plan Updates



Regional / Watershed Updates

Multi-Organization National Policy Strategy Meetings



Regional / watershed efforts would contribute information, such as risk-based climate change scenarios, for states to use in the updates of their plans



# Next Steps

Senior Leader proponents associated with USACE water resources planning and other coordinated technical support to the WestFAST initiative:



•Dr. Steve Stockton, Deputy Director of Civil Works, HQ.



•Mr. Mike Fallon, Director of SWD Programs, WestFAST member.



•Mr. Robert Pietrowsky, Director of IWR.



•Dr. Beth Fleming, Director of the Environmental Laboratory, ERDC.





# Western States Watershed Study

Thank You.....  
Questions?



Collage Graphics courtesy  
of New Mexico, USGS, and  
USACE websites

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