



## An Assessment of Federal Water Programs and Opportunities that Support States and Interstates in Managing Water Resources

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## State Needs from Federal Government

- Hydrologic Data and Information  
Streamgages (USGS), SNOTEL (NRCS), Precipitation (NOAA), ET (BOR), Water Quality (EPA and USGS) - Consistent Quality, Geographically Dispersed, and Readily Available
- Assessment of Interstate Waters – Watershed Scale Water Availability and Water Use Information – Consistent Methodologies Across State Boundaries



## State Needs from Federal Government

- Planning and Management of Federal Water Projects as a Unified System on a Watershed Basis
- Planning Tools and Technical Assistance – Demand Forecasting – Hydrologic Modeling
- Infrastructure Development – Engineering and Financial Support

Note: All Elements of Integrated Water Resources Management



## State Desires from Federal Government

- Better Coordination Between Federal Agencies
- Better Coordination with State and Regional Entities
- Inclusive Planning Process
- Support of Integrated Water Resources Management

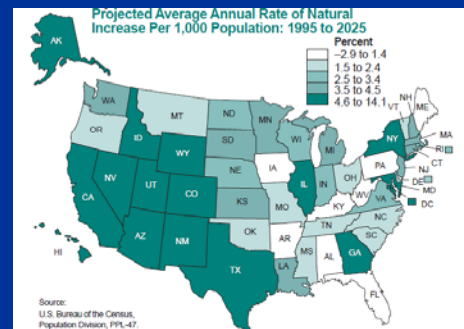


## Recognized Need for Integrated Water Resources Management

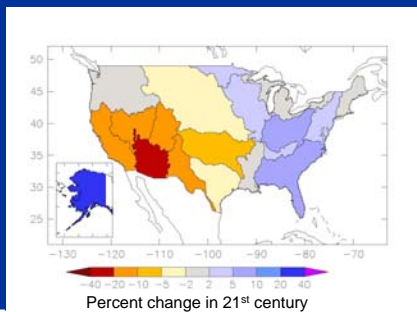
- Climate Change
- Population Growth and Shifts
- Energy/Water Nexus
- Environmental Restoration
- Emerging Water Shortages
- Interstate Waters



## Water resources challenge: Population projections



## Water resources challenge: Regional Estimates of Runoff Change



USGS

From Milly et al. Nature, 2005

## Federal Agency Assessment

Focus on how the Federal government can better support States and regional entities in Integrated Water Resources Management (IWRM)

- Federal Authorities and Initiatives
- Existing Partnerships and Collaboration
- Opportunities for Improvement

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## Federal Agency Assessment

13 Key Federal Water Agencies Inventoried

*Agencies Included in the Assessment:	
-Forest Service (FS)	-FEMA
-Natural Resources Conservation Service (NRCS)	-BLM
-NOAA	-Bureau of Reclamation
-Corps of Engineers	-Fish and Wildlife Service (FWS)
-EPA	-National Park Service (NPS)
	-USGS
	-TVA

USGS

## Federal Agency Assessment

Agency Missions

- Land and Resource Management
- Water Infrastructure and Development
- Environmental Protection
- Disaster Preparation and Response
- Science and Information

Note: 14 Different House/Senate Authorizing and Appropriations Committees

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## Federal Water Programs

Assessment identified 94 federal water programs

- Key program objectives/focus:
  - Water quality/quantity
  - Integrated water resources management
  - Natural hazards management
  - Water supply
  - Climate change
  - Navigation
  - Hydropower
  - Recreation
- Key services offered:
  - Planning
  - Data collection and management
  - Models and methods
  - Regulation
  - Project development
  - Operation and maintenance
  - Grants, funding
  - Technical assistance
  - Water education
  - Mitigation
  - Demonstration projects
  - Research and development

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## Federal Agency Assessment

Examples of Federal Water Programs and Initiatives in Support of IWRM

- Corps: Planning Assistance to States
- Reclamation: Basin Studies Programs
- NRCS: Conservation Technical Assistance
- NOAA: Hydrology Program – IWRSS
- USGS: National Streamflow Information National Water Census

USGS

## Federal Agency Assessment

### Examples of Federal Agency Collaboration

- STORET/ NWIS Data Base Integration – USGS and EPA
- Climate Change and Water Management – BOR, CORPS, USGS, and NOAA
- Great Lakes Interagency Task Force



## Federal Agency Assessment

### Examples of Federal – State Partnerships

- USGS Cooperative Water Program
- Chesapeake Bay Program
- Bay Delta Conservation Plan
- Great Lakes Regional Collaboration
- Comprehensive Everglades Restoration Plan
- WestFAST



## Inclusive Stake Holder Planning

- USGS Cooperative Water Program Regional Stakeholder Meetings
- NOAA Strategic Plan Visioning
- USACE National Collaborative Effort



## Lessons Learned

- Collaboration works best when States take the lead in defining their problems, issues, and desired outcomes
- Address well defined issues with clearly defined outcomes
- Develop regionally based initiatives and stay committed for the long term
- Be flexible, leverage resources, and focus on results



## Opportunities

- Continue State and Federal Dialogue
- Shared Vision for Water Supply Planning and Management
- Coordinate Federal and State Programs
- Federal Tool Box



## Questions?

