

RECLAMATION

Managing Water in the West

Reclamation's Basin Study Program: Collaborative,
Basin-Scale Planning Partnerships to Address a
Growing Gap between Water Supply and Demand

The 17th Water Assembly

OCTOBER 22, 2016, DANE SMITH HALL,
UNIVERSITY OF NEW MEXICO



U.S. Department of the Interior
Bureau of Reclamation

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Basin Study Program

West-Wide Climate Risk Assessment

Baseline Assessment of risks and impacts

Determine Imbalances in Water Supply & Demand

SECURE Guidance Development

Basin Studies

Stakeholder engagement

Develop adaptation strategies

Specified Areas

Water Delivery
Hydropower
Recreation at BOR facilities
Fish & Wildlife Habitat
Endangered, Threatened or Candidate Species
Water Quality
Flow & Water dependent ecological resiliency
Flood control management

Understand risks in a landscape context

Applied science tools

Supporting resource managers

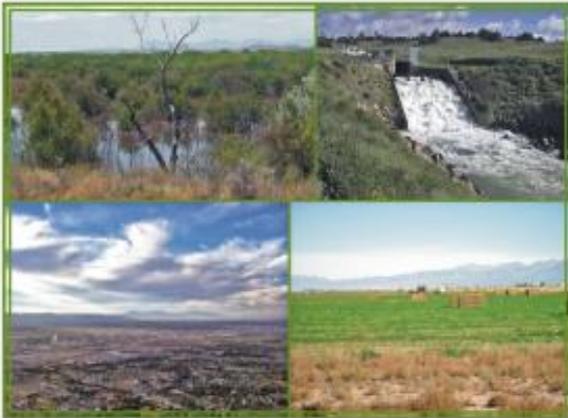
Landscape Conservation Cooperatives

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West-Wide Climate Risk Assessment Activities: Upper Rio Grande Impact Assessment

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West-Wide Climate Risk Assessment: Upper Rio Grande Impact Assessment



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Upper Colorado Region
Albuquerque Area Office

December 2013

- Widely referenced within Middle Rio Grande Community
- Used as Basis for Reclamation Basin Studies, as well as other planning studies in the community such as:
 - Albuquerque-Bernalillo County Water Utility Authority Water 100-year Plan.
 - the DOT Volpe Center study of transportation and land-use planning in the Albuquerque area.

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Santa Fe Basin Study:

Adaptations to Projected Changes in Water Supply and Demand

Santa Fe Basin Study

Adaptations to Projected Changes in Water Supply and Demand

Santa Fe Basin, New Mexico



U.S. Department of the Interior
Bureau of Reclamation
Upper Colorado Region
Albuquerque Area Office



City of Santa Fe
Water Division
Water Resources and
Conservation Section



Santa Fe County
UTILITIES DIVISION

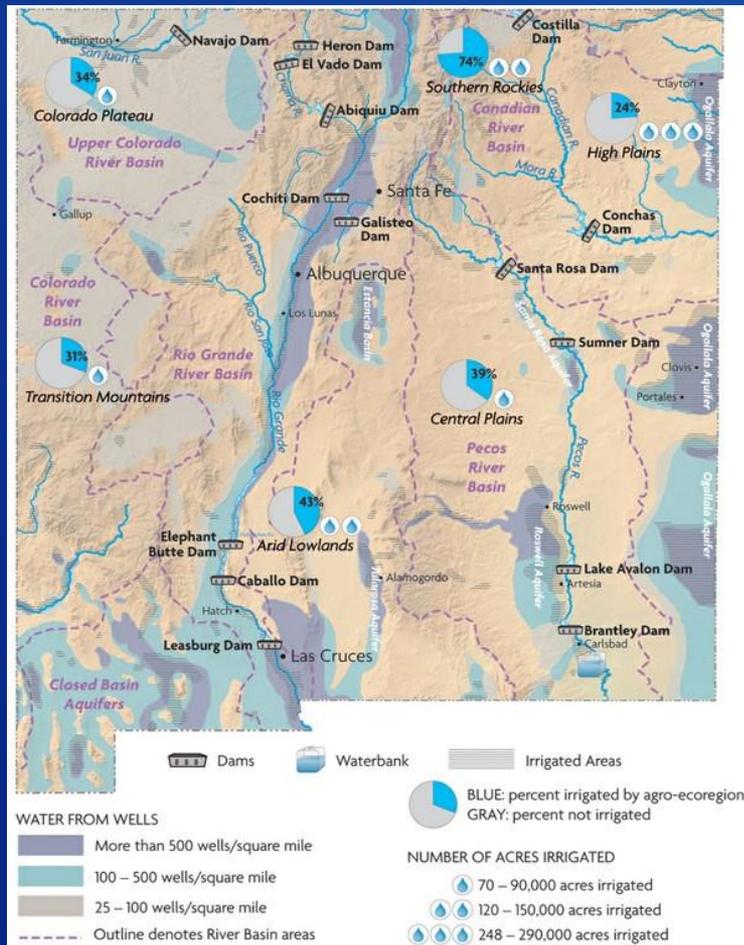
August 2015

- Final study released to public September 2015.
- Focus on municipal water.
- City of Santa Fe is acting on recommendations of the study, and with funding from a Title XVI Grant from Reclamation, has recently completed a feasibility study of Water Reuse options.
- Santa Fe has been awarded funding for follow on analysis to help prioritize adaptation actions.

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Middle Rio Grande Basin Study: Plan of Study

- Received 2015 funding from the Office of Policy for collaboration with partners to develop a **Plan of Study** for a Middle Rio Grande Basin Study
- Led by the Middle Rio Grande Conservancy District
- Project seeks to involve all basin stakeholders in a comprehensive basin study



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Adaptations under Consideration....

- *Flexibility in reservoir operations*
- *Reduction of reservoir evaporative losses*
- *Municipal and agricultural water conservation*
- *Improvements in irrigation system metering, automation, and management*
- *Efficiency improvements within acequias*
- *Shortage sharing agreements within and across all sectors*
- *Upper, mid-watershed and river restoration at large, landscape-scale to increase resilience and reduce damage from uncharacteristically severe wildfire*
- *Upper watershed storage, and ways to detain or store water for later use*
- *Improvements to monitoring and management of extreme precipitation events and floods*
- *Small water system maintenance and capacity improvements*
- *Groundwater management and aquifer storage and recovery*
- *Water reuse and recycling*
- *Water banking and other supply/demand transactions between willing parties*
- *Building of institutional capacity for emergency response, including droughts, floods, wildfire, and debris flows.*