

# RECLAMATION

*Managing Water in the West*

## **Sacramento-San Joaquin Rivers Basin Study**

**Mid-Pacific Region Division of Planning**

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**&**

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U.S. Department of the Interior  
Bureau of Reclamation

# WaterSMART Program

- Implements SECURE Water Act, Public Law 111-11
- Established in 2010 by Secretary Salazar to...
  - Improve water conservation
  - Promote sustainability
  - Help water resource managers make decisions about water use
  - Develop strategies to ensure sufficient of water for multiple uses
  - Develop adaptive measures to climate change and its on future water demands



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# Reclamation's WaterSMART Components

- **WaterSMART Grants**
  - Water and Energy Efficiency Grants
  - System Optimization Reviews
  - Advanced Water Treatment Pilot and Demonstration Projects
  - Grants to Develop Climate Analysis Tools
- **Water Conservation Field Services**
- **Title XVI Water Reclamation and Reuse Program**
- **Basin Study Program**
  - West-Wide Climate Risk Assessments
  - Basin Studies
  - Landscape Conservation Cooperatives
- **WaterSMART Clearinghouse**

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# Basin Study Program

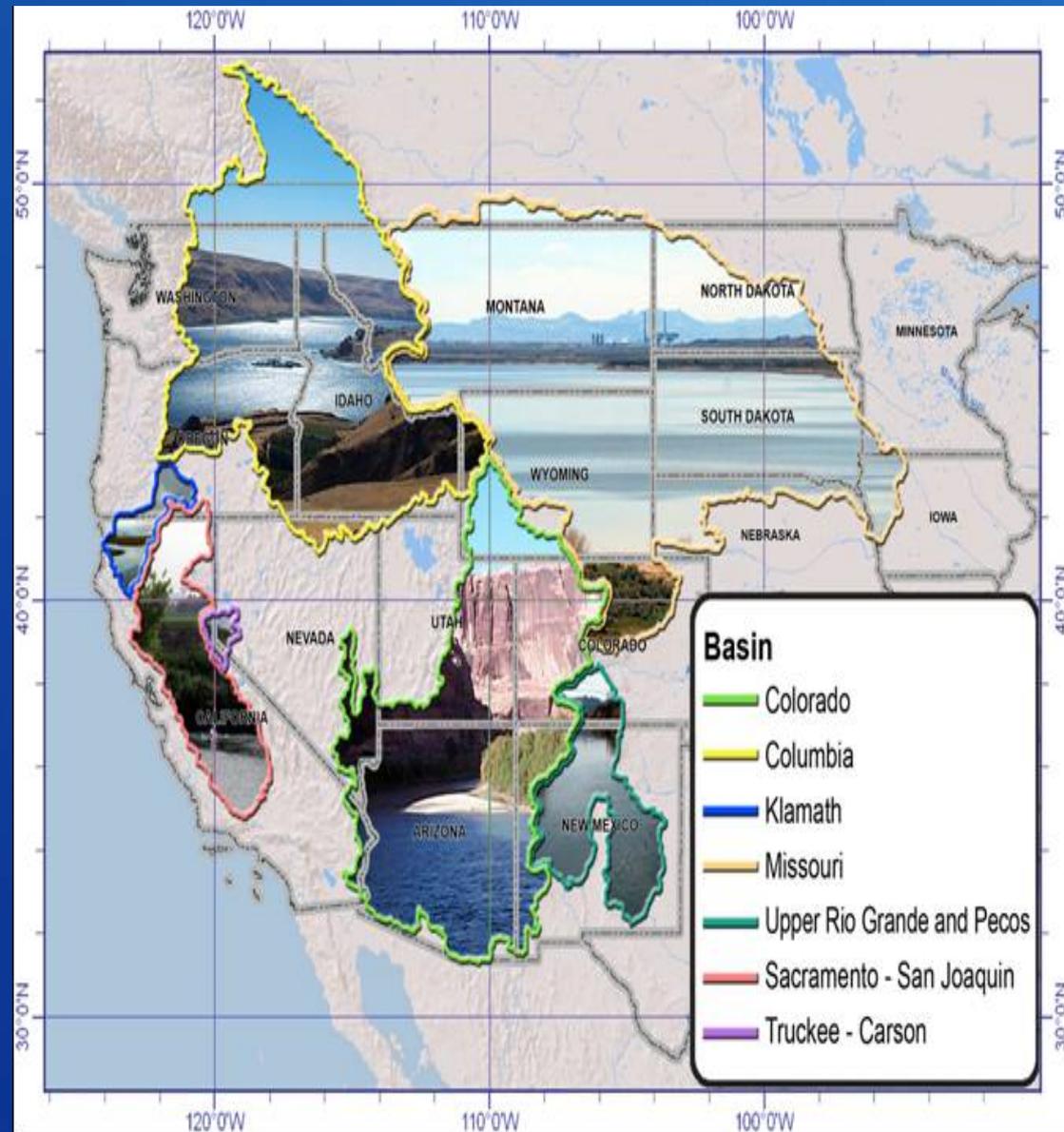
- **West-Wide Climate Risk Assessments**
- **Basin Studies**
  - Basin Studies
  - Secure Water Feasibility Studies
- **Landscape Conservation Cooperatives**



# West-Wide Climate Risk Assessments

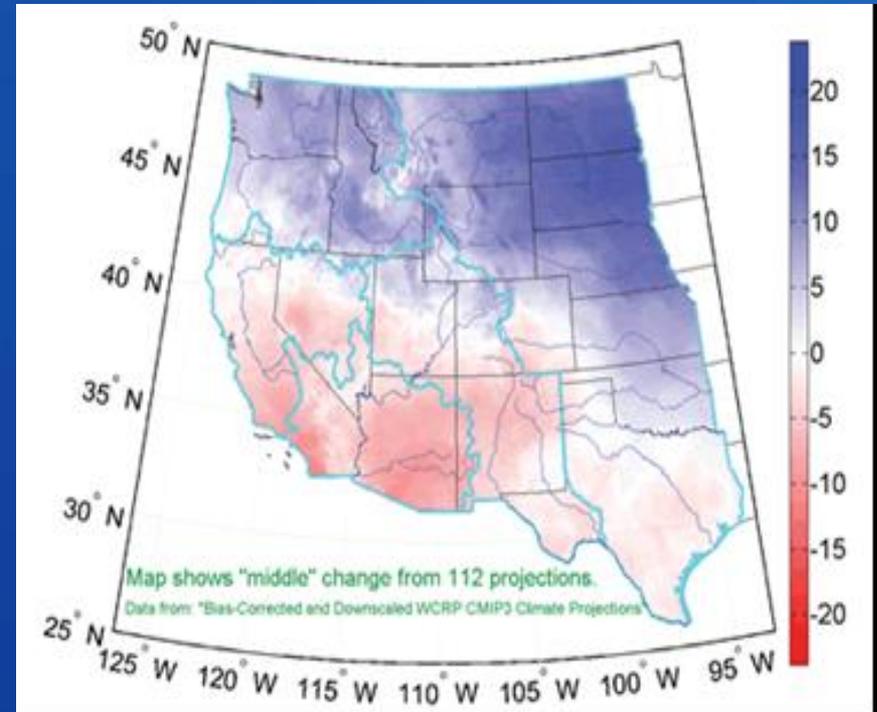
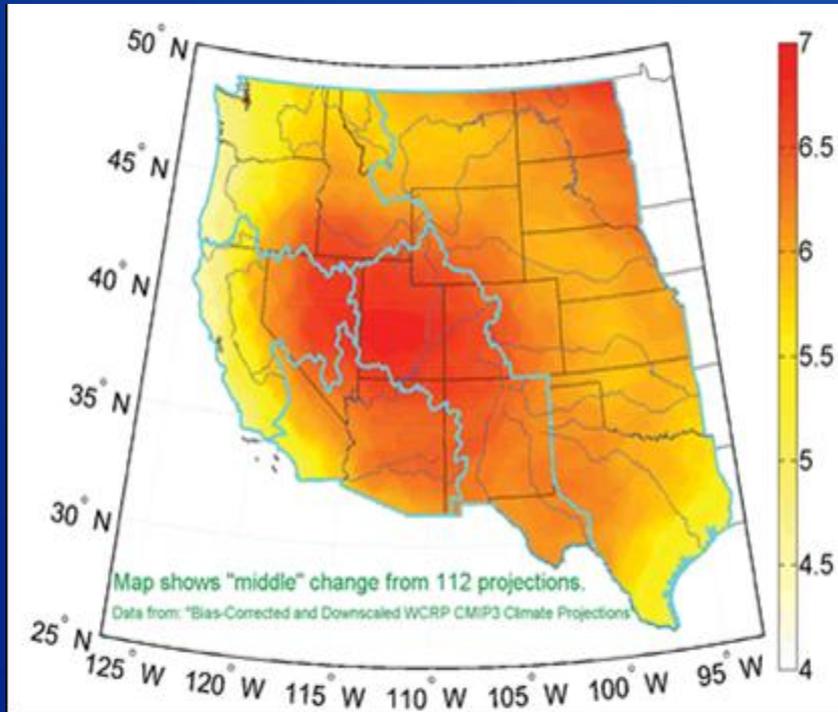
- **Conducted by Reclamation**
- **Reconnaissance-level water supply and demand analyses in eight Reclamation river basins**
- **Projections of climate change impacts to water supply and demand and baseline risk assessments to evaluate impacts of climate change to water uses**
- **Baseline for more in-depth analyses performed through Basin Studies**

**SECURE Water  
Act Section  
9503(c) –  
Reclamation  
Climate Change  
and Water –  
April 2011**



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# SECURE Water Act Section 9503(c) – Reclamation Climate Change and Water – April 2011



Projected median temperature ( $^{\circ}$  F) and precipitation (%) changes at the end of 21<sup>st</sup> century (2070–2099) relative to historic conditions (1950–1979)

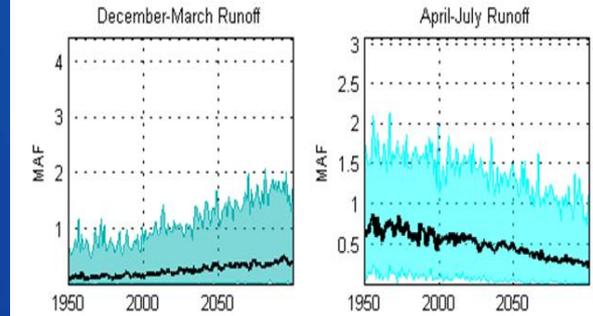
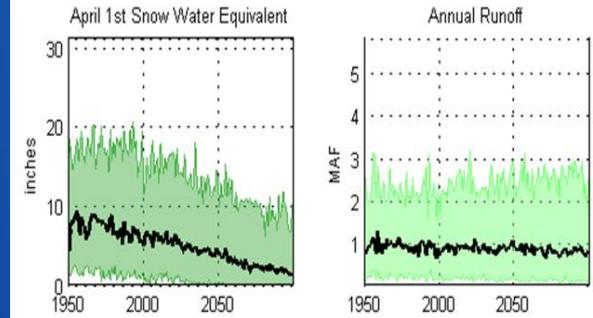
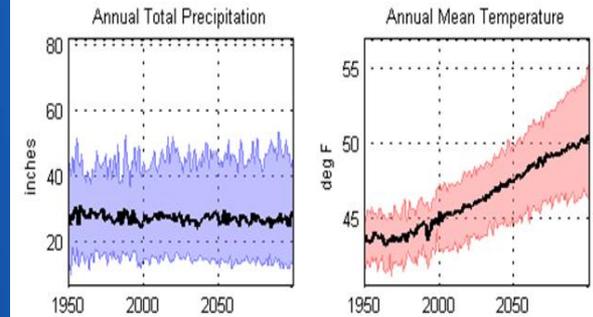
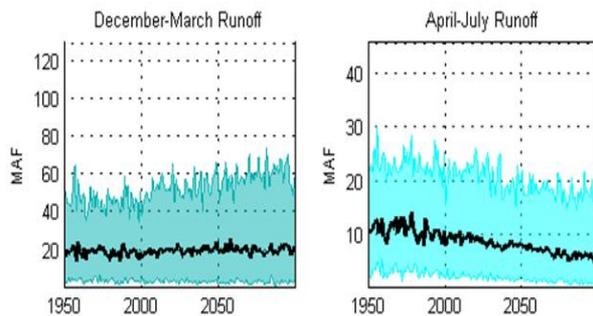
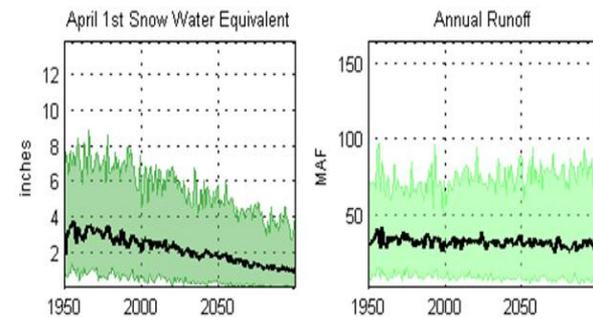
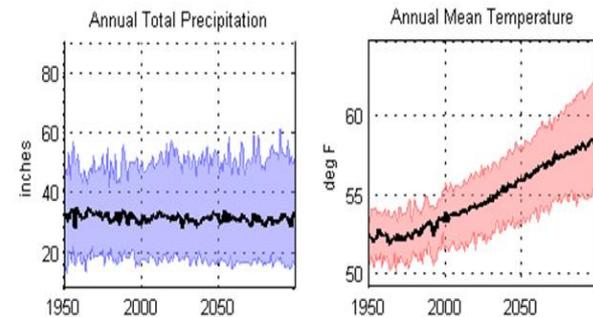
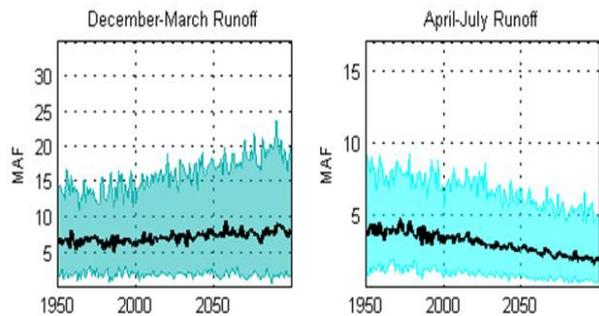
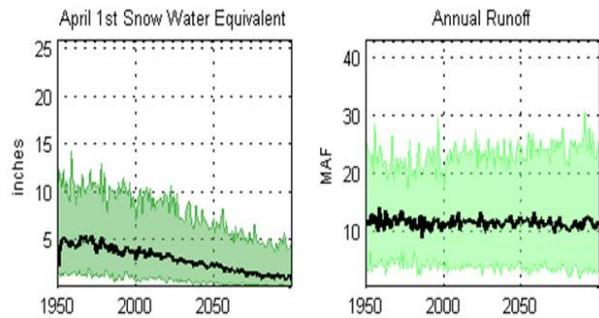
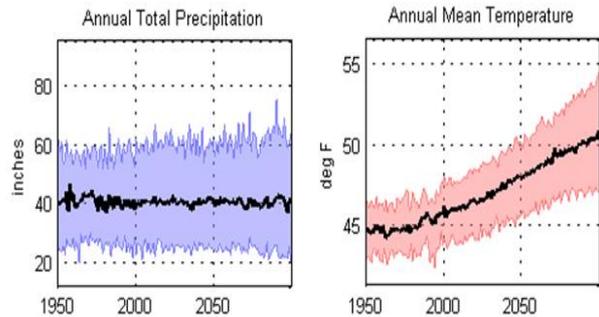
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# Mid-Pacific Region Hydro-Climate Projections

## Klamath Basin

## Sacramento-San Joaquin Basins

## Truckee-Carson Basins



Note: Runoff scales vary by basin

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# Basin Studies

- **Purpose**

- Work with state and local partners in 17 Western States to evaluate future water supply and demand imbalances in a changing climate

- **Basin Studies Include:**

- Assessments of the risks and impacts of climate change on water resources, and
- Development of potential mitigation and adaptation strategies to meet future demands
- Propose Feasibility-Level Investigations

# Basin Study Elements

1. Assessment of existing & future supplies and demands, including impacts of climate change
2. Analysis of how basin's existing water and power operations and infrastructure will perform in response to projections of future water supplies and demands
3. Development of options to improve operations and infrastructure to supply adequate water in future
4. Trade-off analysis of options identified, findings, and recommendations for adaptive responses to changes identified
5. Recommendations for Future Feasibility Studies



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# Basin Study Partners and Stakeholders

- **Cost-Share Partners include Reclamation, DWR, Stockton East Water District, Calif Partnership for San Joaquin Valley**
- **Seeking additional non-federal partners to support full cost of study; consistent with IRWM Regions; 50/50 cost share required**
- **Complements and builds on other ongoing studies, information, and outreach (e.g., DWR's Water Plan 2013 process, Reclamation's Central Valley Project – Integrated Resources Plan, BDCP, DHCCP)**
- **Includes public involvement and outreach**

# Sacramento - San Joaquin Basins Study

- **Phase 1 Plan of Study Proposal**

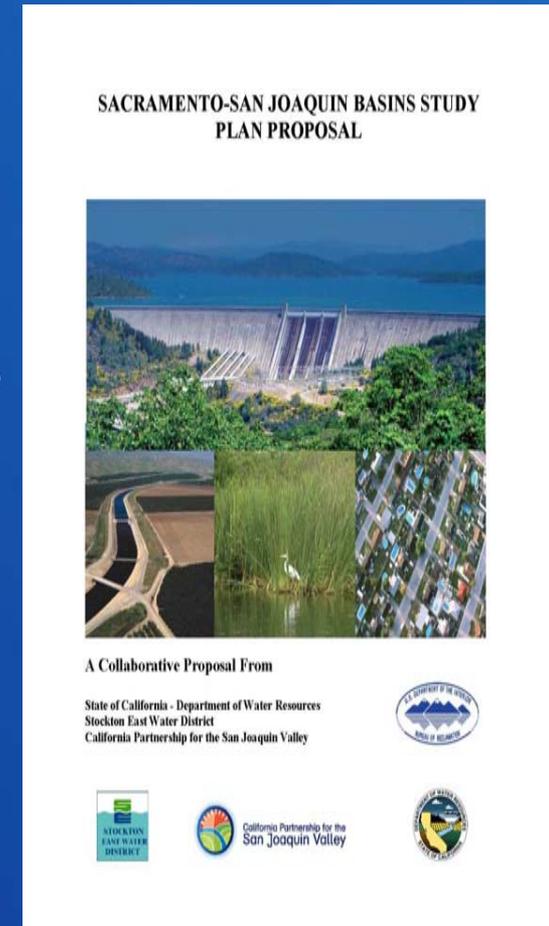
- Phase 1 Awarded in August 2011
- Completed Plan of Study October 2011

- **Phase 2 – Basin Study**

- Application Process / Letters of Interest due from non-federal partners by 11/30/2011
- Basin Study Funding Proposal – Feb 2012
- Funding Announced – March 2012

- **Basin Study Timeline**

- Partners complete MOA in June 2012
- Study start about October 2012
- Complete within 24 months



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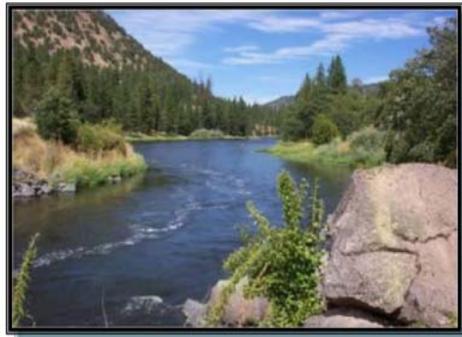
# Mid-Pacific Region- Basin Studies

## KLAMATH BASIN STUDY PROPOSAL

A COOPERATIVE PROPOSAL SUBMITTED BY

STATE OF OREGON – WATER RESOURCES DEPARTMENT

STATE OF CALIFORNIA – DEPARTMENT OF WATER RESOURCES



## Truckee River Basin Study

Climate Change and Water Resources Assessment

Plan of Study



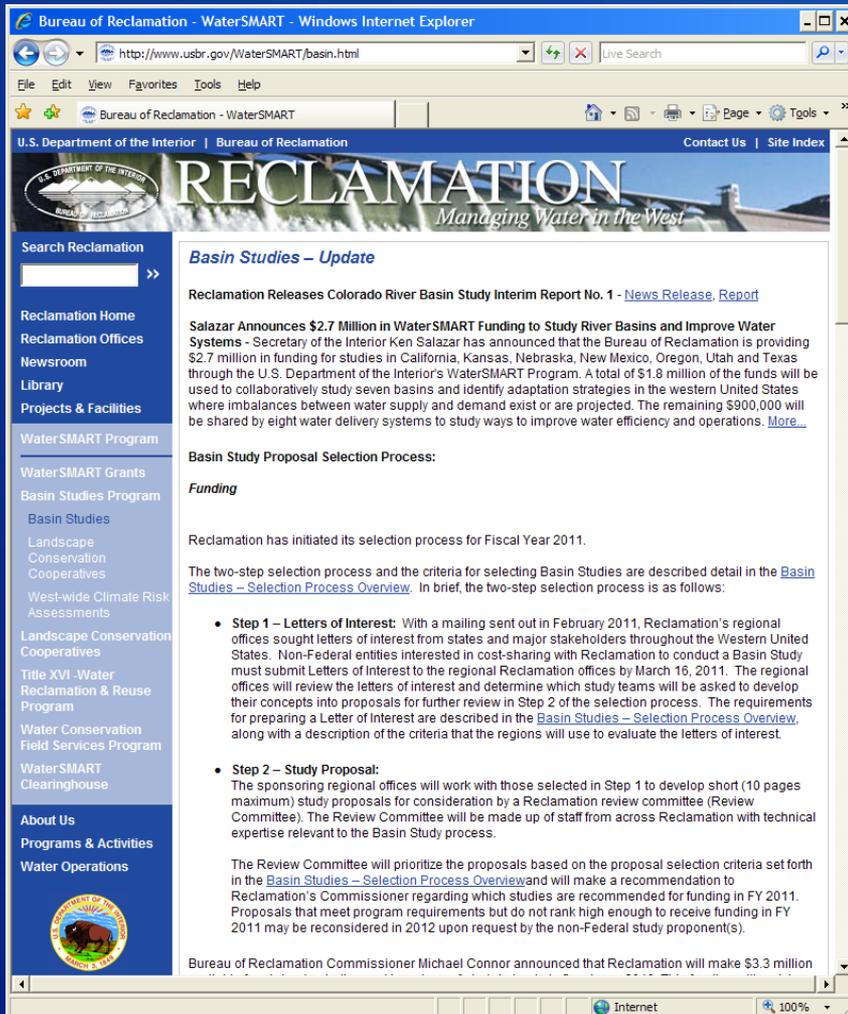
With Cost-Share Participation by these Major Study Partners:



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# Basin Study Information

<http://www.usbr.gov/WaterSMART/basin>



The screenshot shows a Windows Internet Explorer browser window displaying the Bureau of Reclamation's WaterSMART website. The page title is "Basin Studies - Update". The main content area features a news release titled "Salazar Announces \$2.7 Million in WaterSMART Funding to Study River Basins and Improve Water Systems". The text of the release states that Secretary of the Interior Ken Salazar has announced that the Bureau of Reclamation is providing \$2.7 million in funding for studies in California, Kansas, Nebraska, New Mexico, Oregon, Utah and Texas through the U.S. Department of the Interior's WaterSMART Program. A total of \$1.8 million of the funds will be used to collaboratively study seven basins and identify adaptation strategies in the western United States where imbalances between water supply and demand exist or are projected. The remaining \$900,000 will be shared by eight water delivery systems to study ways to improve water efficiency and operations. A "More..." link is provided at the end of the paragraph.

**Basin Study Proposal Selection Process:**

**Funding**

Reclamation has initiated its selection process for Fiscal Year 2011.

The two-step selection process and the criteria for selecting Basin Studies are described detail in the [Basin Studies - Selection Process Overview](#). In brief, the two-step selection process is as follows:

- **Step 1 - Letters of Interest:** With a mailing sent out in February 2011, Reclamation's regional offices sought letters of interest from states and major stakeholders throughout the Western United States. Non-Federal entities interested in cost-sharing with Reclamation to conduct a Basin Study must submit Letters of Interest to the regional Reclamation offices by March 16, 2011. The regional offices will review the letters of interest and determine which study teams will be asked to develop their concepts into proposals for further review in Step 2 of the selection process. The requirements for preparing a Letter of Interest are described in the [Basin Studies - Selection Process Overview](#), along with a description of the criteria that the regions will use to evaluate the letters of interest.
- **Step 2 - Study Proposal:** The sponsoring regional offices will work with those selected in Step 1 to develop short (10 pages maximum) study proposals for consideration by a Reclamation review committee (Review Committee). The Review Committee will be made up of staff from across Reclamation with technical expertise relevant to the Basin Study process.

The Review Committee will prioritize the proposals based on the proposal selection criteria set forth in the [Basin Studies - Selection Process Overview](#) and will make a recommendation to Reclamation's Commissioner regarding which studies are recommended for funding in FY 2011. Proposals that meet program requirements but do not rank high enough to receive funding in FY 2011 may be reconsidered in 2012 upon request by the non-Federal study proponents(s).

Bureau of Reclamation Commissioner Michael Connor announced that Reclamation will make \$3.3 million

## Contacts

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