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Managing Water in the West

Moving Forward: Agricultural Water Conservation, Productivity, and Water Transfers Workgroup

**SWCD
Annual Water Seminar
April 3, 2015
Durango, CO**



U.S. Department of the Interior
Bureau of Reclamation

Outline

- Colorado River Basin Study
- *Moving Forward*
- Agriculture Workgroup
- Publication Status

Colorado River Basin Water Supply and Demand Study

- **Study Objective**
 - Assess future water supply and demand imbalances over next 50 years
 - Develop and evaluate opportunities for resolving imbalances
- Study conducted by Reclamation and the Basin States in collaboration with stakeholders throughout the Basin
- Potential for significant future imbalances exists
- Portfolios of options can mitigate risks but not eliminate entirely

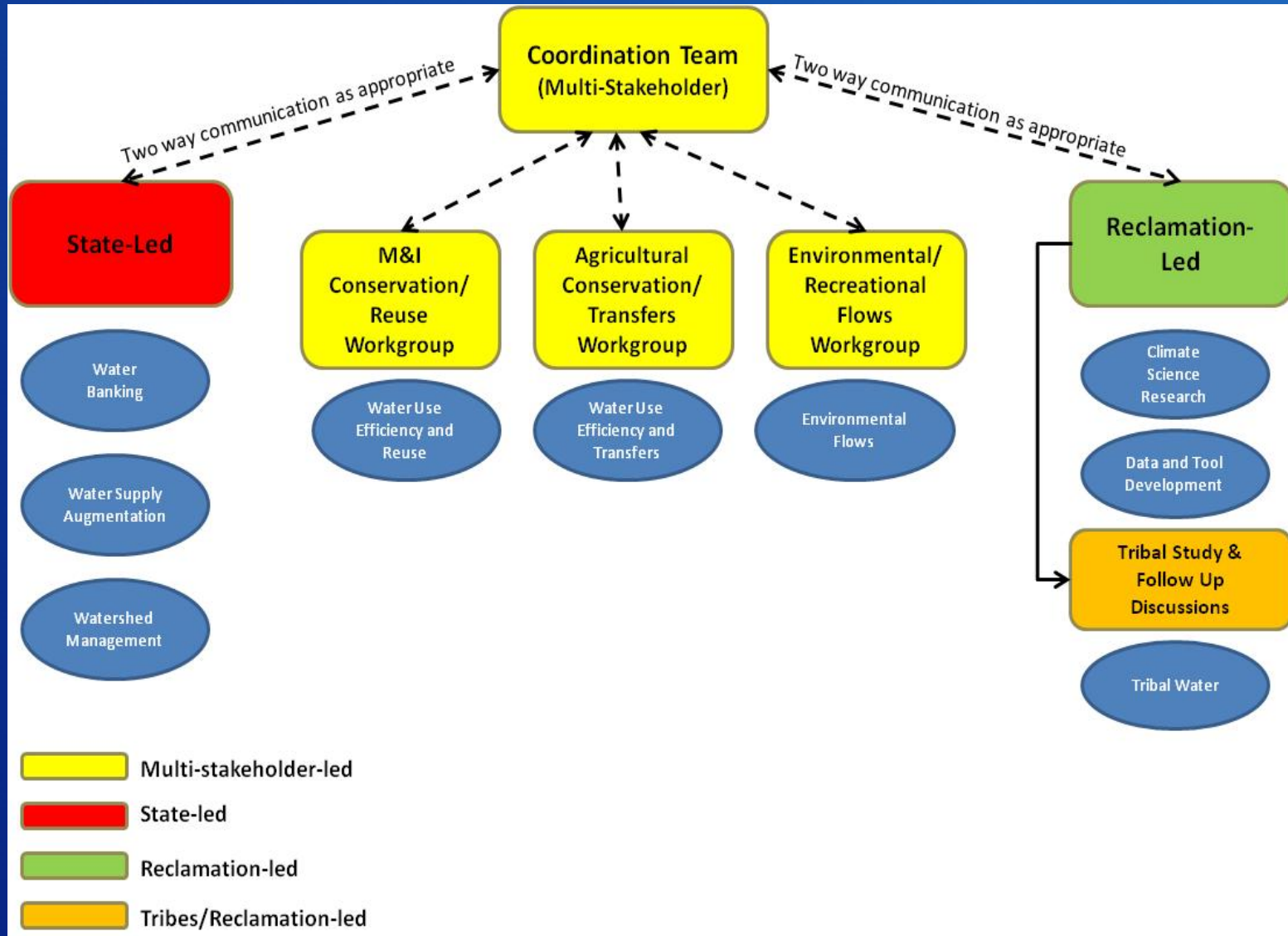


Agricultural Options

- 9 submitted options
- Classified into 6 categories
 - Advanced irrigation scheduling
 - Deficit irrigation
 - On-farm irrigation system improvements
 - Controlled environment agriculture
 - Conveyance system efficiency improvements
 - Fallowing of irrigated lands
- Computed potential Colorado River savings of 1 MaF/yr



Moving Forward



Moving Forward Workgroups

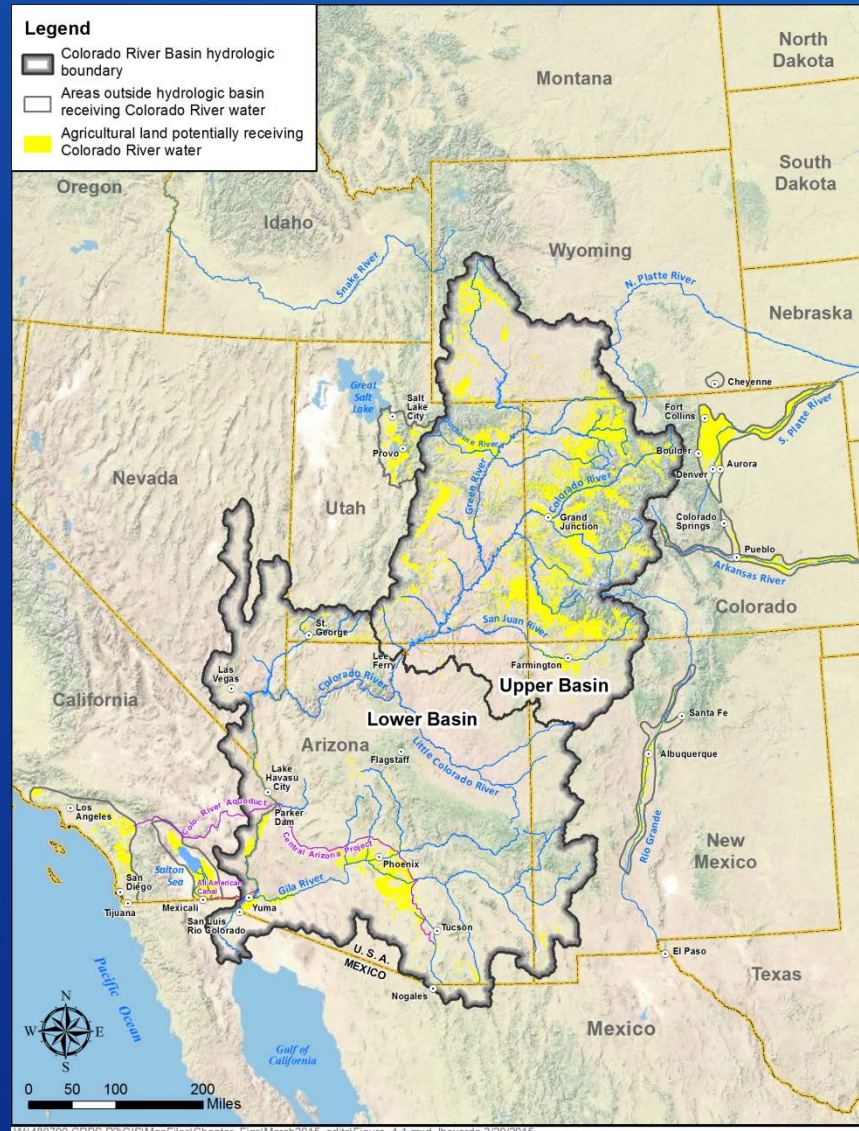
“...all that rely on the Colorado are taking initial steps — working together — to identify positive solutions that can be implemented to meet the challenges ahead.”

- **Brings wider stakeholder group with expertise to address topics identified in the Basin Study**
- **More detailed analysis and discussion than was considered in the Basin Study**

Workgroup Scope Summary

- Document agriculture conservation, efficiency, and transfers that have occurred to date
- Identify existing plans and agreements or potential opportunities for future conservation programs
- Document issues or challenges related to conservation and transfers

Agriculture Served by Colorado River Water



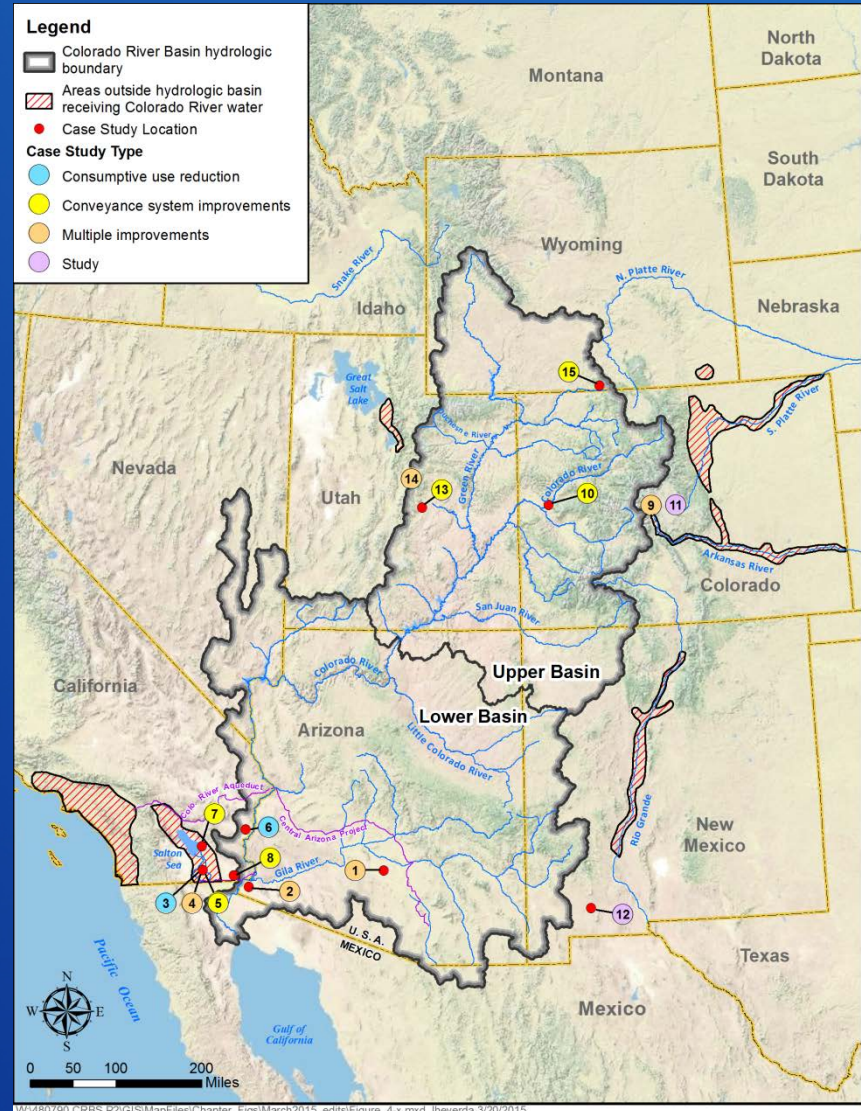
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Ag Water Conservation Meaning

- **Decreased crop consumptive use**
- **Improved irrigation application efficiency**
- **Increased crop water productivity**
- **Increased irrigation water diversion and delivery efficiencies**
- **Reduced water use or evaporation through adoption of conservation measures and new technologies**
- **Increased capture and utilization of precipitation**

Case Studies

- Objective
 - Highlight information
 - Projects
 - Partnerships
 - Funding
 - Scientific Studies



Key Message

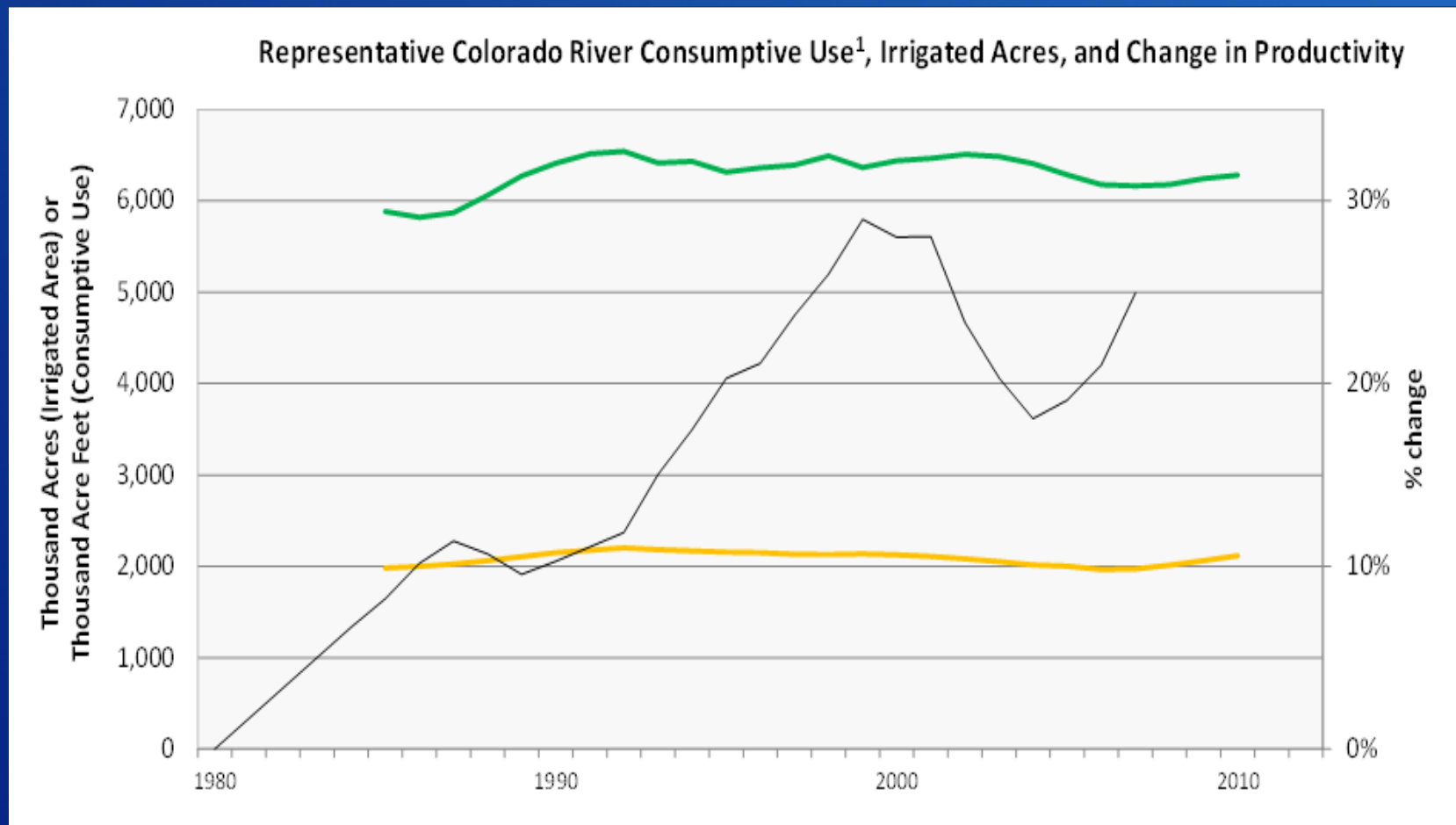
Available data demonstrate that producers have implemented a wide range of conservation and efficiency measures and often increased productivity as a result.

TABLE 4-4

Summary of Select Agricultural Conservation Programs with Quantified Acres and Water Savings

Type	Acres	Annual Water Savings ¹ (KAFY)	Unit cost (\$ per AFY) ²
Conveyance System Improvements	N/A	456	20–150
On-Farm Efficiency Improvements	362,227	124	285
Consumptive Use Reduction	73,601	400	30–246
Total		980	
Transfers	N/A	650	

Basin Productivity



— Consumptive Use (KAF), 5-year average — Irrigated Acres (thousands), 5-year average — Change in Productivity (%), 5-year average

Ag Water Challenges and Opportunities

- **Challenges**

- Legal
- Financial
- Environmental
- Political
- Social
- Data

- **Opportunities**

- Improved water quality
- Drought protection
- Conserved water for other uses
- Partnerships
- Financial benefits



Moving Forward Report Outline

- Executive Summary
- Chapter 1: Introduction
- Chapter 2: Background
- Chapter 3: Environmental and Recreational Flows
- Chapter 4: Agricultural Conservation, Productivity and Transfers
- Chapter 5: M&I Conservation and Reuse
- Chapter 6: Summary

Report Publication and Phase 2

- Reports currently in final stages of review
- Publication anticipated soon
- Phase 2 to follow publication



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For more information please visit:

<http://www.usbr.gov/lc/region/programs/crbstudy/MovingForward/index.html>

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Questions?

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