

## Moving Forward to Address the Challenges Identified in the Colorado River Basin Water Supply and Demand Study

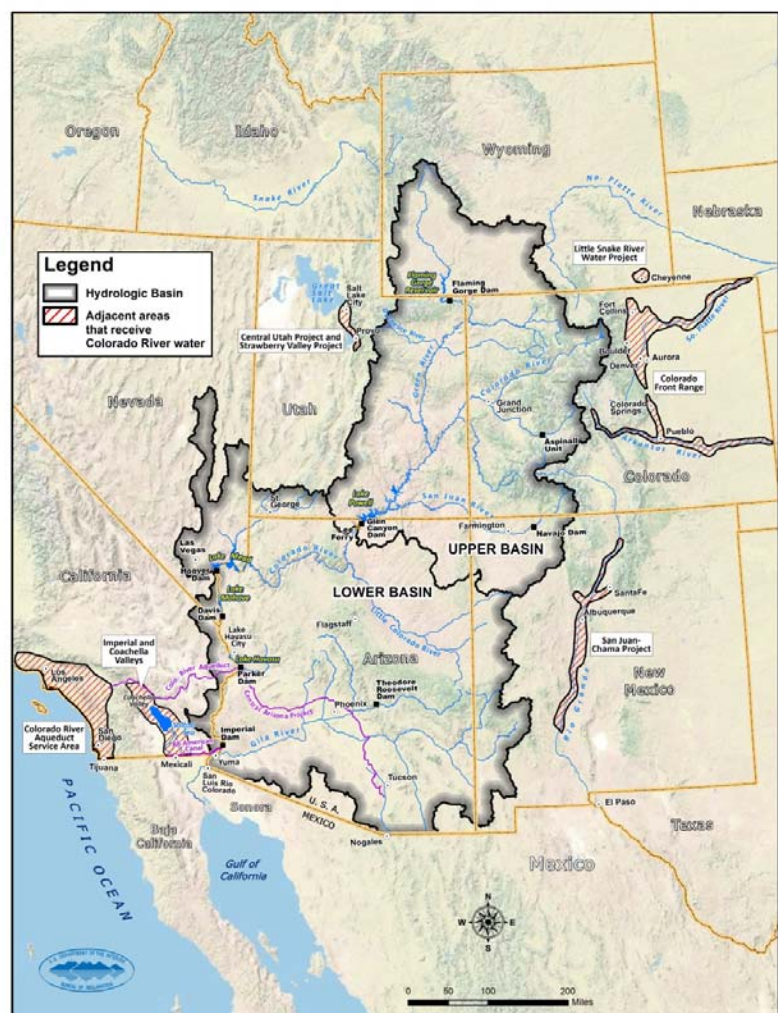
In 2012 the Bureau of Reclamation, in partnership with the seven Colorado River Basin States (Basin States), published the most comprehensive study of future supplies and demands on the Colorado River ever undertaken. The Colorado River Basin Water Supply and Demand Study (Study) confirmed what most experts knew: there are likely to be significant shortfalls between projected water supplies and demands in the Colorado River Basin (Basin) in coming decades.

Those that rely on the Colorado River and its tributaries are committed to approaching these future challenges with the same steadfastness that they have approached and overcome past challenges. Beginning today following the call to action of the Study and as a first step in that commitment, 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.

### Phase 1: Stakeholder Teams Working Together — Verifying Potential Strategies for Water Conservation, Reuse, Transfers, and Healthy River Flows

Groups representing Federal, State, Tribal, agricultural, municipal, hydropower, environmental, and recreational interests are all engaged in a coordinated way to examine in more detail both the challenges we face together and the potential solutions that will work in the Basin. This effort will require innovative thinking, integration of many viewpoints, and a commitment to work in a positive and collaborative spirit. By working together, we will improve public understanding of the challenges faced in the Basin and identify the potential solutions that can help reduce future uncertainties and meet the significant challenges ahead.

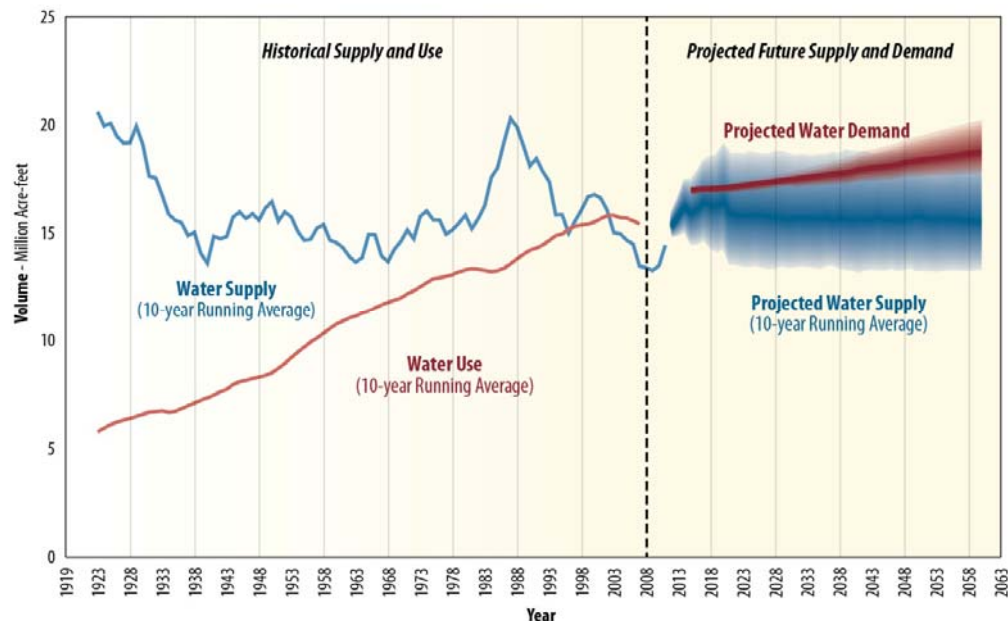
This document sets out the framework for the first phase of action following publication of the Study and is intended to complement other State and Tribal efforts that will be undertaken in parallel processes.



## Background

The Colorado River Basin Water Supply and Demand Study, conducted over the three-year period from January 2010 through December 2012, was an unprecedented joint effort by the Bureau of Reclamation (Reclamation) and the seven Colorado River Basin States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming and is the most comprehensive basin-wide analysis ever undertaken within the Department of the Interior. Conducted in collaboration with a diverse range of stakeholders, the purpose of the Study is to define future imbalances in water supply and demand in the Basin through the year 2060, and to develop and analyze options and strategies to resolve those imbalances. The Study, a compilation of seven technical reports and two overview documents, is available in its entirety at

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



The Study confirms that without future actions, the Basin faces a range of potential future imbalances between supply and demand. A wide range of future imbalances is plausible and each of those imbalances results in the decline in the performance of Basin resources including water deliveries, hydropower, water quality, ecological, and recreational resources.

The Study also demonstrates the implementation of a broad range of options that can reduce Basin resource vulnerability and improve the Colorado River system's resiliency to low and variable hydrologic conditions. The Study identifies a series of next steps that should be taken to begin to discuss what actions should be pursued to ensure the sustainability of the system.

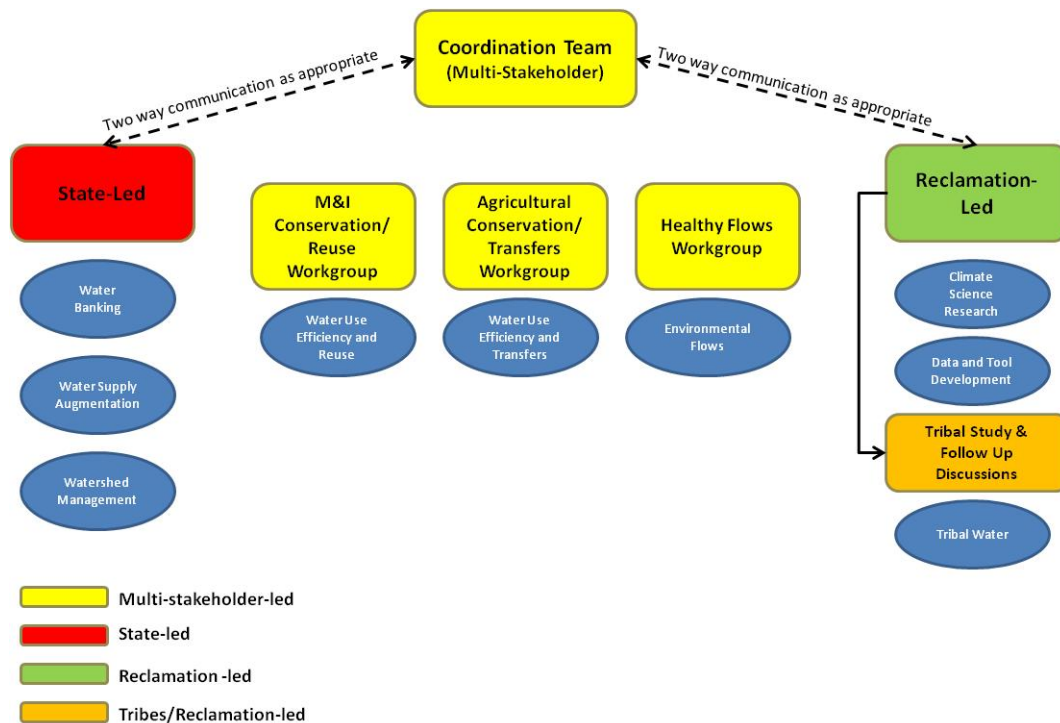
## Moving Forward

Addressing such imbalances will require diligent planning and collaboration that applies a wide variety of ideas at local, state, regional, and Basin-wide levels. With this in mind, a process has been designed to pursue the categories of next steps identified in the Study. Central to this process are partnerships and the recognition that pursuing these categories must be done collaboratively and continue to facilitate and build upon the broad, inclusive stakeholder process demonstrated in the Study.

These categories are:

- Water Use Efficiency and Reuse
- Water Banks, Water Transfers
- Water Supply Augmentation
- Watershed Management
- Tribal Water
- Environmental Flows
- Data and Tool Development
- Climate Science Research

Phase 1 of this process builds on findings for critical next investigations described in the Study and consists of the formation of three multi-stakeholder workgroups to investigate: 1) Municipal and Industrial (M&I) Conservation and Water Reuse, 2) Agricultural Conservation and Water Transfers, and 3) Healthy Flows to support ecological and recreational resources. Additionally, State or Reclamation-led activities will simultaneously pursue the other next step categories. For example, jointly with the Ten Tribes Partnership, Reclamation is pursuing a study related to tribal water use. This process is described in the following graphic. Categories named in the blue circles correspond with the categories described in the Study where next steps should be taken.



It is anticipated that Phase 1 will be completed within 2013, after which Phase 1 efforts will be reviewed, additional phases will be identified, and the process will be reassessed and modified as needed to facilitate anticipated further phases of work.

## Workgroups

Each workgroup consists of members with subject-matter expertise from various entities in an effort to bring important and different perspectives to the workgroup. Workgroup membership includes federal and state agencies, local municipalities, agricultural organizations and irrigation districts, Native American tribes and communities, non-governmental organizations, consultants, and other interested stakeholders. Each workgroup will be led by three co-chairs. A multi-stakeholder team (Coordination Team) will direct and review the efforts of the three workgroups. General descriptions of these groups’ major activities within Phase 1 are provided below.

### **M&I Conservation and Water Reuse Workgroup**

M&I conservation and water reuse were common options in the strategies explored in the Study in providing a cost-effective solution for resolving imbalances in the near-term. This workgroup will collect information from municipalities relying on Colorado River water and prepare a report that quantifies each municipality’s conservation and reuse savings from the initiation of conservation and reuse programs to date, documents

programs that have been successful to date, quantifies the amount of additional water savings each program estimates will be achieved by 2060, and estimates the anticipated impacts on Colorado River demands. From this baseline information, this workgroup will also propose Phase 2 activities to be conducted in 2014 to the Coordination Team.

#### ***Agricultural Conservation and Water Transfers Workgroup***

Agricultural conservation and voluntary water transfers can have many benefits and in particular promote flexibility in adapting to uncertain future conditions. This workgroup will collect information and prepare a report that quantifies agricultural conservation and transfers of Colorado River water (both in and outside of the Basin) that have occurred to date, documents programs that have been successful to date, lists any existing future plans for these types of activities, and estimates what potential savings could come from these existing plans. From this baseline information, this workgroup will also propose Phase 2 activities to be conducted in 2014 to the Coordination Team.

#### ***Healthy Flows Workgroup***

The Study recognized that future efforts should strive to better understand and quantify the needs of flow-dependent ecological systems and river recreation, better reflect those needs in a modeling framework, and further explore solutions that promote the protection and improvement of environmental and recreational flows. This workgroup will develop a report that, for areas found by the Study to be highly vulnerable, describes any uncertainties related to the representation of those areas in the modeling framework and the assumed flow needs. Additionally, this workgroup will explore opportunities to implement options that provide multiple benefits to improve flow and water-dependent ecological systems, power generation, and recreation. This workgroup will also propose Phase 2 activities to be conducted in 2014 to the Coordination Team.