



9 | Future Considerations and Next Steps

The Tribal Water Study is the outcome of a commitment between Reclamation and the Partnership Tribes to engage in a joint study that would build on the scientific foundation of the Colorado River Basin Water Supply and Demand Study (Basin Study) (Reclamation, 2012). Based on the information jointly developed in the Tribal Water Study and through collaboration with Reclamation, this Study highlights the following observations, concerns, and considerations:

- The Tribal Water Study revealed disparities among the Partnership Tribes, and between the Partnership Tribes and other water users in the Basin. These disparities have created barriers to the full development of federal Indian reserved water rights that include access to funding and capital markets for development, the lack of - *and poor condition of* - existing infrastructure, the number of tribal members and reservation residents without access to clean drinking water and adequate sanitation, and legal restrictions.
- Partnership Tribes have reserved water rights, including unresolved claims, to divert nearly 2.8 million acre-feet of water per year from the Colorado River and its tributaries. These rights are, in general, the most senior water rights in the Basin and therefore some of the most protected from shortage. However, some tribal lands and many people living on the tribal reservations do not have water security. Tribal communities are among the most economically depressed and impoverished in the Basin. Water is only one factor in this economic disparity, but when thousands of residents on tribal lands lack access to clean water and adequate sanitation, the path out of poverty is more difficult.
- *Chapter 5 – Assessment of Current Tribal Water Use and Projected Future Water Development*, documented each Partnership Tribes’ anticipated development and use of reserved water rights and identifies trends for full tribal water development. The different trends indicate the anticipated rate at which such development might proceed. None of the Partnership Tribes currently has the basic infrastructure or legal and administrative flexibility to fully use or realize the full economic value of its reserved water rights. It has been more than 50 years since the decision in *Arizona v. California*,¹ yet some Partnership Tribes still do not have their water rights fully quantified. However, the Partnership Tribes expect that all reserved water rights in the Basin will be recognized and resolved over time.
- The Tribal Water Study also provided a technical analysis of the potential effects of the full development of tribal water. The Partnership Tribes anticipate that this effort will promote cooperation and coordination with other Basin stakeholders as we address challenges related to growing demands and the potential for reduced supplies and imbalances in the Colorado River System. Government-to-government coordination among tribal, federal, and state governments and cooperation with other Basin water users are the preferred and most effective pathways to address these documented challenges and disparities in the coming years and decades.

¹ *Arizona v. California*, 373 U.S. 546 (1963).

- *Chapter 6 – Assessment of System Effects Resulting from Development of Tribal Water*, explains the methodology used to analyze the effects of the Partnership Tribes’ water development within the Basin, as applied in the Colorado River Simulation System (CRSS), the commercial software *RiverWare*TM, and the state of Colorado’s *StateMod* program. The goal of the modeling was to provide a sound technical basis and projection of the likely future scenarios for tribal development in the Basin.

Although many of the Partnership Tribes do not currently use all their reserved water rights and have not developed the yet unquantified water rights, such tribal water does not go unused. The Basin Study (Reclamation, 2012) confirmed that, in the absence of timely action, there are likely to be significant shortfalls between projected water supplies and demands in the Basin in coming decades. The full development of reserved water rights for tribal benefit will widen this gap; however, the modeling indicates that the effect of tribal water development in the Basin is not as significant as full development of the state apportionments in the Upper Basin and the projected effect of climate variability.

A decade ago, Reclamation and the Basin States recognized the need for flexibility in the operations of the system with the adoption of the 2007 *Record of Decision for Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead* (DOI, 2007). Mechanisms developed for Reclamation contractors and state-based water rights do not easily adapt to federal Indian reserved water rights held by Tribes. The Tribal Water Study demonstrates the need to develop flexible mechanisms for the use of tribal water throughout the Basin, such as off-reservation use of tribal water, particularly in times of shortage. Some Upper Basin Tribes have this flexibility through their water settlements, and the Quechan Tribe has a forbearance agreement with a California contractor. After review of the Tribal Water Study’s analysis, the Partnership Tribes strongly believe and conclude that all tribes need similar flexibility. Without such flexibility, other water users who currently rely on unused tribal water may be required to adjust to reduced supplies as tribes increase or fully develop their reserved water rights.

- *Chapter 7 – Challenges and Opportunities Related to Development of Tribal Water*, identifies challenges and opportunities for full development of reserved water rights. Addressing the administrative and legal constraints that create disparities in water development and use are priorities for the Partnership Tribes, as doing so holds the greatest potential to benefit the Partnership Tribes and other water users in the Basin.

The Partnership Tribes are committed to – and will – develop their water resources and explore opportunities to partner with the federal government, states and other water users as opportunities arise. Where the Partnership Tribes are unable to develop their water resources to receive the full economic benefit of their rights within existing laws, the Tribes will work with other Basin stakeholders to pursue policy, regulatory, and statutory changes.

Potential actions identified by Partnership Tribes to overcome the challenges to obtaining full development and use of each Partnership Tribe’s reserved water rights for the economic, social, and cultural benefit of the Tribe and its members are identified in Chapter 7.

Table 9-A identifies the Partnership Tribes’ priority actions to address the water use challenges identified in the Tribal Water Study. Potential future actions to fulfill Reclamation’s commitments to increase opportunities for tribes to develop, manage, and protect their water and related resources are also identified. Reclamation will work with the Partnership Tribes to identify near-term activities to help address the water challenges in the Colorado River Basin.

TABLE 9-A
 Opportunities for Potential Future Action Identified by the Ten Tribes Partnership and the Bureau of Reclamation
The ordering of these lists does not imply a priority

Category	Ten Tribes Partnership	Bureau of Reclamation
Recognition and Use of Federal Indian Reserved Water Rights in the Basin	<ul style="list-style-type: none"> • Fully adjudicate or otherwise secure full legal recognition of federal Indian reserved water rights in the Basin. • The Partnership Tribes will pursue appropriate legal, policy and regulatory avenues which allow tribes the flexibility to fully use their water and realize full economic benefit therefrom. 	<ul style="list-style-type: none"> • Work with agencies and tribes to prioritize the identification of legal, policy, and regulatory constraints to full use of tribal water. • Explore opportunities that enhance tribes' ability to put their water to full beneficial and economic use.
Continuous and Sustainable Funding	<ul style="list-style-type: none"> • Use existing studies and conduct additional economic and engineering assessments as needed to determine long-term tribal water infrastructure needs. • Explore options for generating dedicated revenue to finance infrastructure development and operation, maintenance and replacement costs. This could include: <ul style="list-style-type: none"> ○ Determining whether operation and maintenance (O&M) fees and project funding for tribal and BIA-managed facilities are adequate to maintain irrigation facilities; and ○ Evaluating opportunities to increase tribal management and oversight of BIA Indian irrigation projects. • Enhance access of Partnership Tribes to WaterSMART and other federal funding programs, including establishing tribal waivers for cost-share matching funds. 	<ul style="list-style-type: none"> • Conduct comprehensive outreach to ensure that tribes are informed of Reclamation's technical assistance programs and WaterSMART funding opportunities. • Partner with other federal agencies to understand and communicate funding opportunities available to tribes to develop the expertise, funding and/or resources for comprehensive water management planning and implementation. Facilitate enhanced coordination among existing programs, such as with U.S. Department of Agriculture. • Explore ability to build tribal capacity regarding grant writing to increase competitiveness when applying for federal assistance.
Environmental Water Uses	<ul style="list-style-type: none"> • Work with state and federal partners to ensure that environmental flows are included in water management plans to help protect ecosystems and cultural values. • Work with federal partners to address the Partnership Tribes' preferred approach of including existing Indian reserved water rights and future settlements in the environmental baselines developed as part of Endangered Species Act Section 7 consultations with the U.S. Fish and Wildlife Service so tribes are not disproportionately burdened with further compliance. 	<ul style="list-style-type: none"> • Investigate opportunities for tribes to participate in water management for the protection or restoration of flows for environmental, recreational, and cultural purposes.

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Partnerships	<ul style="list-style-type: none"> • Establish mechanisms with federal partners to include tribes in the formal and informal discussions among the Basin States and between the Basin States and DOI concerning the management and operation of the Colorado River. • Work to obtain tribal participation with the Upper Colorado River Commission. • Work to obtain greater tribal input in Reclamation’s long-term planning for the Lower Basin. • Work with federal, state and local governments to include tribal representation in water management agencies. • Foster and strengthen stakeholder relationships with non-governmental organizations working within the Basin. • Foster and strengthen stakeholder relationships to facilitate local and regional planning as future tribal water development occurs. • Create model programs for tribal development in cooperation with neighboring communities and entities. 	<ul style="list-style-type: none"> • Build on the momentum and dialogue of the Tribal Water Study to increase the effectiveness of partnerships when new challenges and opportunities arise. • Facilitate planning efforts among Basin water users, stakeholders, and tribes to develop regional and local water management solutions, thereby reducing the likelihood of conflict. • Facilitate tribal involvement with DOI/Reclamation and Basin States discussions concerning management and operation of the Colorado River System. • Continue to improve relations with tribes at a regional and local level with respect to water issues of mutual concern. • Foster and strengthen stakeholder relationships with non-governmental organizations working within the Basin.
Conservation and Drought Management	<ul style="list-style-type: none"> • Develop and implement on-reservation conservation measures consistent with protecting the full extent of Indian reserved water rights for tribal benefit. • Develop tribal drought management plans including response actions consistent with tribal priorities for the use of their water rights. 	<ul style="list-style-type: none"> • Continue to include tribes as additional drought mitigation tools are explored in the Basin, including infrastructure improvements. • Explore opportunities to assist tribes in water conservation efforts and system efficiency improvements, including targeted outreach and partnerships. • Increase the integration of water/energy-efficiency programs and resource planning.

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Data Collection and Tools for Water Management	<ul style="list-style-type: none"> • Seek to implement state-of-the-art technology for collecting tribal water supply and use data. • Develop coordinated and accurate water accounting systems among Partnership Tribes, state and federal entities in the Upper Basin. • Refine CRSS to account for water use by the Partnership Tribes on a finer spatial resolution and to improve the understanding of the specific areas of the Basin likely to experience effects of future state and tribal water development. • Work with state and federal partners to install additional stream flow gages using cost-sharing agreements among the Partnership Tribes, U.S. Geological Survey, Reclamation, BIA, and state entities to further the understanding of the effects of changing water supply on Partnership Tribes and future water development to non-tribal users. 	<ul style="list-style-type: none"> • Explore developing or revising models to incorporate a finer spatial resolution than is currently represented in CRSS, which would more accurately locate tribal diversions. • Explore developing the capability to track senior priority federal Indian reserved water rights of the Partnership Tribes and their use on a per-user basis. • Facilitate coordinated and defensible water accounting throughout the Basin. • Assist tribes to develop state-of-the-art technology to help with monitoring and measuring water supply and use data.
Educational Opportunities	<ul style="list-style-type: none"> • Seek venues to educate all Basin stakeholders about Indian reserved water rights and development. • Partner with existing educational programs or develop new programs to teach or enhance farming and ranching techniques, and create related job opportunities. • Partner with existing programs or develop new programs to encourage and train tribal participants in operating, monitoring, maintaining and replacing agricultural irrigation systems and municipal sanitation and distribution systems. Existing programs include: <ul style="list-style-type: none"> ○ WaterOperator.org ○ Native American Water Masters Associations (NAWMAs) ○ BIA Water Resources Technician Training Program • Establish an online mechanism to provide a central location for Partnership Tribes to learn about educational and funding opportunities. 	<ul style="list-style-type: none"> • Assist tribes to increase their capacity in water management, including partnering with other federal agencies providing water-related training and services for tribes.