Option Submittal Form

Contact Information (optional)

Contact Name:	Title:
Affiliation:	
Address:	
Telephone	E-mail Address:
Date Option Submitted:	

Option Name:

Tribal Efficiencies and Voluntary Water Transfers

Description of Option:

This option proposes to create improvements in the utilization of the Basin water supply by enhancing system flexibility to better meet demands in the future. This will occur by recognizing that water legally available to Indian tribes within the Colorado River Basin can be incorporated into the Colorado River system management so that tribal water rights can serve the demands of other water users in the Basin, as well as the tribes themselves.

The option is based on the premise that BOR must protect water legally available to tribes and is developed to facilitate providing benefits to tribes for any use of their undeveloped water by others. The option would support and implement public and private discussions of specific possibilities for use of tribal water in voluntary water transfers that increase the efficiency of the Colorado River system management, as well as recognize tribal water in the management of the system so that the use of tribal water, and any water transfers, can be tracked. The water transfers are expected to include, but not be limited to, water banks, water marketing, and forbearance agreements. The tracking of water is expected to include incorporation of tribal water in CRSS by individual tribes, and also as part of a greater tribal accounting pool.

Ideally this option would be implemented on a state-by-state basis that protects compact allocations and would be consistent with federal law, state law, compacts and the United States' trust obligations to tribes.

This option is largely conceptual at this time. The Southern Ute Indian Tribe expects to develop more specific details as discussions among involved groups proceed over time.

Location: Describe location(s) where option could be implemented and other areas that the option would affect, if applicable. Attach a map, if applicable.

Conceptually, voluntary tribal water transfers could occur essentially anywhere in the Basin if the proper agreements are put into place. At the current time there may be limitations to some types of transfers but the potential exists for such transfers to occur in ways that protect compact allocations and are consistent with federal law, state law, compacts and the United States' trust obligations to tribes. There are currently successful water transfer arrangements in place in the Colorado River Basin involving tribal water and non-Indian communities.

Quantity and Timing: Roughly quantify the range of the potential amount of water that the option could provide monthly over the next 50 years and in what timeframe that amount could be available. If option could be implemented in phases, include quantity estimates associated with each phase. If known, specify any important seasonal (e.g. more water could be available in winter) and/or frequency (e.g. more water could likely be available during above-average hydrologic years) considerations. If known, describe any key assumptions made in order to quantify the potential amount.

A range of tribal water quantities that might be available as supply under this option could be developed by using the already quantified rights of some tribes identified in the course of this Study combined with quantity ranges developed by BOR in coordination with those tribes with unquantified tribal water rights. The range of the potential amount of water that this option could provide would then be the combined total of quantified rights and the best estimates of as yet unquantified rights. Since tribal water rights can, in general, be viewed as the most senior in the system, they can be assumed as having significant flexibility relative to the seasonality of availability and/or the frequency of availability. As with any voluntary water transfers, the structure of agreements will determine seasonality and frequency of availability.

Additional Information

Technical Feasibility: Describe the maturity and feasibility of the concept/technology being proposed, and what research and/or technological development might first be needed.

There should be no technical constraints to creating increased efficiencies in management of the Colorado River system from utilizing tribal water under voluntary water transfers. From a technical perspective, the option depends largely on accurate accounting, some level of shepherding water within the system, and recognition of the availability of water for diversion from the system at various points.

Costs: Provide cost and funding information, if available, including capital, operations, maintenance, repair, replacement, and any other costs and sources of funds (e.g. public, private, or both public and private). Identify what is and is not included in the provided cost numbers and provide references used for cost justification. Methodologies for calculating unit costs (e.g. $/acre-foot or $/million gallons) vary widely; therefore, do not provide unit costs without also providing the assumed capital and annual costs for the option, and the methodology used to calculate unit costs.

Estimates of the costs resulting from implementing this option are not possible at this time. It would be expected that the costs would largely be related to legal work associated with the development of agreements and technical evaluations of hydrology, water availability, accounting, etc. The option will not depend significantly on new capital expenditures.

Permitting: List the permits and/or approvals required and status of any permits and/or approvals received.

Significant permitting requirements are not expected under this option.

Legal / Public Policy Considerations: Describe legal/public policy considerations associated with the option. Describe any agreements necessary for implementation and any potential water rights issues, if known. Indicate any known proponents or opponents of the option.

The legal/policy considerations are likely to be the most significant challenges to implementing this option. Development of agreements that respect and protect compact allocations and that are consistent with federal law, state law, compacts and the United States' trust obligations to tribes will take significant work. However, various agreements have already been developed in recent years that create increased flexibility in management of the Colorado River system while addressing these concerns. Consequently, it is clearly possible to accomplish this option.

Implementation Risk / Uncertainty: Describe any aspects of the option that involves risk or uncertainty related to implementing the option.

There does not seem to be significant risk associated with implementing this option since it is dependent on voluntary water transfers and any such transfers cannot be accomplished in the absence of agreements developed with the cooperation of involved parties. In contrast, there would seem to be some risk associated with not pursuing implementing this option since to do so would increase the likelihood of tribes believing litigation would be necessary for the protection of their water rights.

Reliability: Describe the anticipated reliability of the option and any known risks to supply or demand, such as: drought risk, water contamination risk, risk of infrastructure failure, etc.

This option would be highly reliable. It is not dependent on infrastructure and does not include risk of water quality impacts. Because it depends on some of the most senior water rights in the system, it would limit the risk from drought more than other potential options.

Water Quality: Identify key water quality implications (salinity and other constituents) associated with the option in all of the locations the option may affect.

There should not be any water quality implications.

Energy Needs: Describe, and quantify if known, the energy needs associated with the option. Include any energy required to obtain, treat, and deliver the water to the defined location at the defined quality.

Energy Required	Source(s) of Energy
No additional energy demands should result from this option.	

Hydroelectric Energy Generation: Describe, and quantify if known, any anticipated increases or decreases in hydroelectric energy generation as a result of the option.

Location of Generation	Impact to Generation	
	Positive impacts to hydroelectric production may be possible depending on the terms of agreements.	

Recreation: Describe any anticipated positive or negative effects on recreation.

Location(s)	Anticipate benefits or impacts.
	The option should be largely neutral to recreation.

Environment: Describe any anticipated positive or negative effects on ecosystems within or outside of the Colorado River Basin.

Location(s)	Anticipated benefits or impacts.
	There may be opportunities for environmental enhancements resulting from voluntary water transfers.

Socioeconomics: Describe anticipated positive or negative socioeconomic (social and economic factors) effects.

The primary socioeconomic benefits that could be expected from this option include:

1. Increased water use efficiency from increased flexibility in system management
2. Economic benefits to Indian tribes
3. Potential increase certainty in meeting non-Indian water demands
4. Potential reductions in conflicts among water users on the Colorado River system
5. Reduced conflict related to the United States meeting its trust obligations to tribes
6. Potential enhancement of environmental conditions

Other Information: Provide other information as appropriate, including potential secondary benefits or considerations. Attach supporting documentation or references, if applicable.