Dear Regional Director Fulp, Ms. Jerla, and Mr. Wilson:

On behalf of the 17,500 members of the San Carlos Apache Tribe (the “Tribe”) and the San Carlos Council, the Tribe’s governing body, I submit the following comments to the Bureau of Reclamation (“BOR”) on the Section 7.D. Review of the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead.
Dr. Fulp, Ms. Jerla, and Mr. Wilson
Re: 7.D. Review
November 25, 2020
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I am sure you are generally aware of the severe burden that the COVID-19 pandemic has placed on the Tribe. The Tribe’s operations remain shut down and staff has been placed on administrative leave since early March. In fact, all of the Tribe’s resources have been completely dedicated to devising and implementing a wide range of mitigation measures to fight this deadly disease. We have had to close our gaming enterprise hotel and resort, put our employees on administrative leave, enforce a stay-at-home order, and institute checkpoints at our borders – actions that have brought our Tribe’s government services to a near standstill.

While these measures have kept the virus at bay on our Reservation over the last nine months, just in the last week some 294 cases have developed of which 16 are hospitalized, bringing our total to 2,644 positive and 45 deaths among members of the Tribe. Some 14,471 have been testedWith our small population, we are at this point deeply threatened and nearly overwhelmed.

We recognize that the timing of the BOR 7.D. Review is retrospective and is on a very tight schedule. We ask you to respect the fact that our ability to provide comprehensive comments in this context has been severely limited.

By the comments made by others in the letters which we incorporate, and by the comments made in the virtual meeting that BOR conducted with interested parties on Thursday November 19, 2020, it should be apparent to you that our Tribe and others were excluded from meaningful involvement in the development of the 2007 Interim Guidelines and were even more severely restricted in participation of the development for the Drought Contingency Plan
Consultation between the Tribes and BOR has been limited in the past; however, we recognize that under your leadership, there has been a shift towards a policy of tribal inclusion in the activities related to the Colorado River. We ask that you officially recognize the deficiency in tribal participation in these processes and affirm the commitment to fully engage the Tribe in the future processes leading to the decisions related to the revision and adoption of formal guidelines to manage the Colorado River by 2026. We have avoided the restatement of these deficiencies here by the adoption of the statements of others referenced above.

By the definition of the 2007 Interim Guidelines and the limitations of retrospective comments on the performance of BOR under those guidelines, it has again “boxed” comments in a way that still provides no forum to express our concerns. Nevertheless, the draft report on the guidelines is well-written and generally responsive to the specific items within the narrow scope of these comments. Deficiencies and questions related to the draft comments are expressed adequately in the letters which we have incorporated. We now respectfully request that BOR adopt a paradigm shift in its approach to tribal consultation for the future activities related to the management of the Colorado River. First, we respectfully point out here that the use of the term “stakeholders” is not adequate to express the legal status of the Tribe in the context of management of the Colorado River. Not all stakeholders are created equal. The previous deference to a preference by BOR to allow states to work out proposed compromises, likewise, does not adequately recognize and honor the unique status that the Tribe has in its relationship to the waters of the Colorado River and to the United States.

The Tribe has a contract directly with the Secretary of Interior for 64,145 acre-feet of Central Arizona Project (“CAP”) water. Such contracts with tribes were ratified by Congress as trust assets of the Tribe and held in trust by the United States. In this context, the states have no legal jurisdiction or legal authority to make commitments and decisions which may adversely affect the Tribe’s CAP water rights in any manner. For these reasons, we request that BOR insist on the right of the Tribe to participate in interstate negotiations among the states concerning river management recommendations to the Secretary of Interior, and we ask that BOR recognize that the authority of the states to affect the Tribe’s CAP water rights must be limited by the states to the Secretary concerning decisions which may impact the Tribe.

We have a number of general suggestions concerning the future development of environmental impact statements under the National Environmental Policy Act (“NEPA”). In the past Environmental Impact Statement, there was no consideration of the potential impact of the 2007 Interim Guidelines on CAP water delivered to the tribes directly or by exchange. Such impacts are not limited to simply whether tribes may experience a reduction in the delivery of CAP water under their contracts, but also both the economic impact on the value and quality of water delivered both to the Reservation and to CAP water lessees.

We also request that the future environmental impact process include an evaluation of the potential operation of guidelines as they will impact the estuaries of the Colorado River delta as it
merges into the Sea of Cortez. The delta and its wetland environment are one of the primary nurseries and foundation of fisheries of aquatic life for the western Pacific basin. The importance of the quantity and quality of the water delivered to support the productive health of the Colorado River delta and its estuaries cannot be overstated. The consideration of the Colorado River delta is not simply limited to discussions with the Republic of Mexico and the treaty commission concerning the quantity and timing of the water to be delivered to water users in Mexico, but is also an important part of the total environment of the Colorado River which should be considered in decision making concerning management of the River.

In addition, it is our view that the environmental impact analysis on the Colorado River upstream from the international boundary is insufficient in its analysis of the possible impacts on the Topock marsh area of the River. Its value in support of migratory waterfowl on the western flyway under the international migratory waterfowl treaties with Canada and the Republic of Mexico is critical.

**Hydropower**

The analysis of hydropower in the draft report was inadequate, at least as to the impact on certain tribes within the jurisdiction of the Western Area Power Administration (“WAPA”). A number of federally recognized Indian tribes, including the San Carlos Apache Tribe, have succeeded in working with WAPA to develop an allocation of hydropower and a contractual relationship concerning distribution and benefits of the use and sale of such power. The use and benefits of hydropower are very important to meet the overall electrical power needs in the west, including for tribes, which largely are without access to electrical services because of a lack of transmission and distribution lines on the reservations. The ability to generate hydropower is currently in place on the Colorado River system and should be carefully managed to maximize the benefits to the tribal contractors while protecting the environmental interests and water releases from the dams and meeting water storage and delivery requirements. Hydropower should be used to meet the needs of power distribution during periods when green energy such as solar and wind are unavailable. Furthermore, with hydropower, the requirement to oxidize carbon compounds to generate heat for steam generated electricity will be reduced.

**Water Quality Protection and Improvement**

Water quality of the Colorado River is of critical concern to the Tribe, and various scenarios concerning storage of water on the watershed in both the upper and lower basins clearly have an impact on water quality. Water stored upstream in reservoirs in the upper basin declines in quality as a result of evaporation and exposure to sediments and other drainage which accumulates and concentrates in the waters, which may later be released into the mainstream. Mining waste and other industrial contaminants migrating into the tributaries and carried downstream in the mainstream to the lower basin states and into central and southern Arizona by the CAP mechanisms are of imminent concern. To cite just a few examples, radioactive materials
escaping into the Animus and Rio Puerco rivers south of Durango Colorado, the mining waste spills from Silverton Colorado into the Animus River, and the leakage and failure of mine waste storage ponds will have an ever-increasing cumulative impact on the health of the water working its way downstream on the River. The uptake of those contaminants into the food chain ultimately will impact public health. Many of the contaminants are cumulative in many organisms and in human beings who consume those organisms and/or drink the water.

**Accountability**

We also are concerned about accountability for consumptive use and losses. We recommend that a system of absolute transparency be developed for the accounting for the consumptive use of waters destined for the Colorado River be developed in the upper basin so that all storage facilities are identified and the annual consumption by diversion, evaporation losses, and bank seepage, be accounted to determine the total share of the Colorado River basin allowable under *Arizona v. California*, 376 U.S. 340 (1964), be annually identified. It must be recognized that water retained on the watershed in the Upper Colorado Basin, to be later released to the Colorado River declines in quality as a result of evaporation during storage.

Likewise, the evaluation of the impacts of storage on water quality in the lower basin must be properly recognized and quantified. For instance, the consequences of intentionally created surplus (“ICS”) are not adequately addressed by the simple reduction of a one-time 3% charge against that storage that may, depending on the total surface area exposed to the air, at various elevations of storage at all probability, consistently understate losses to evaporation and does not seem to recognize the decline in total water quality, which will result from the concentration of dissolved solids and other contaminants in the stored water. A 3% one-time charge to ICS does not seem to recognize the quantity of water lost to “bank storage” in the major sandstone and limestone structures in which the reservoirs are situated. Losses to bank storage will not necessarily be recovered in equal quantities or in a timely manner to justify a lack of consideration of this process. Furthermore, the quality of bank discharge will be degraded by compounds of calcium, sodium, potassium, iron, and other soluble compounds which are constituents in the geologic formations. Accountability for parties attempting to create ICS must be a high priority.

ICS must be created, if at all, from waters over which the entity proposing to create the ICS account has legal authority. It must also recognize that under most western water law that the right to divert and use water on rivers, including tributaries to the Colorado River, is usufructuary, and if the party holding that right fails to divert and use it, the downstream users are entitled to its use, including users on the Colorado River. Therefore, the law pertaining to the proposed water right from which the ICS would be created must be analyzed and confirmed.

Great care must be taken to avoid the “gaming” of ICS by schemes of creative accounting and timing on both the deposit and withdrawal of the ICS.
Water Recovery, Conservation, and Enhancement

The largest supply of Colorado River water, which may be recovered in Arizona, is associated with losses in the CAP canal and other canals which transport and deliver CAP water. CAP water is owned by the Bureau of Reclamation under the Reclamation Act. The losses from the canals occur from two primary functions in transportation and delivery: evaporation from the water surface in the canal, and leakage and seepage from the sides and bottom of the canal. Seepage occurs through the canal lining itself, and leakage, through cracks and joints created in segments during the canal construction. The losses from the canal from these two sources in a year when the canal transports approximately 1.4 million acre-feet of water annually are approximately 80,000 acre-feet to evaporation from the surface and approximately the same amount from leakage and seepage.

Perhaps the simplest means of recovery for such canals can be the development of wells in proximity to the canals, which can recover the water and pump it back into the canal at critical low points in the supply where there is room for offline storage such as at Lake Pleasant, or in surface water storage facilities at various locations in Arizona. Those interests who have laid claim to the recovery of CAP water lost to seepage and leakage want to pump the CAP water associated with canal losses and use the canal systems to wheel the water through the system to deliver to others for a profit. They should not be allowed to recover water owned by the federal government and then sell the water back to it. The ownership and recovery of the CAP water rests in the United States, and all such waters, both conserved and recovered should be used to meet the requirements of existing CAP contracts by priority. BOR must control the allocation of any additional CAP water unnecessary to meet the requirements of existing contracts.

BOR should continue to explore methods for controlling the loss of CAP water to evaporation. The rate of evaporation loss from the canal is directly proportionate to the total surface area of the water exposed to the atmosphere in the canal. Since the cross section of the canal is largely a V-shape, the greater the canal load, the larger the surface area is that is exposed to evaporation. Therefore, some reduction in evaporative losses can be achieved through managing the canal delivery through use of the minimum volumes required to meet the delivery and storage schedules.

Another option to reduce evaporation losses is to cover the canal. Of course, covering the canal to stop evaporation loss is a very expensive proposition, and is more or less so based upon the type of cover developed and the lifespan of the material used, ranging from hard semi-permanent covers to lightweight and easily transportable and repairable covers. One method that may deserve some consideration is the use of a benign, monomolecular layer of lightweight oil substance such as vegetable oil, which is spread across the canal water surface to develop a semi-permeable membrane, which would reduce evaporation by interceding between the surface of the water and the atmospheric surface. At points of delivery, the oil molecules could be skimmed off.
and recycled for reuse. The conservation of water by this method must be studied to weigh the functional benefits of the oxidation of organics and chemical compounds by dissolved oxygen by water being transported in the canal with the benefits of water conservation by the reduction of loss to evaporation.

For reservoir surfaces, the monomolecular layer is likely to have an environmental impact which would reduce the oxygen content of the stored water and harm aquatic life and fisheries which exist in reservoirs. The primary source of dissolved oxygen for marine life is developed at the interface of the surface of the water through contact with the atmosphere, which would be impaired by a monomolecular layer.

The primary source of enhancement to the flow of the Colorado River exists in carefully modeled and controlled weather modification. The development of climate and regional weather models is advancing rapidly, and BOR should consider the development of localized models to take advantage of the cumulative predictive data contained in the large-scale models in order to harvest precipitation strategically for runoff into the Colorado River system.

Finally, a note on the Tribe and its experience with its Central Arizona Project water contract and rights. A few days from now, December 11, 2020, will be the 40th anniversary of the signing of the contract with the United States for the construction and delivery of CAP water to the Tribe. After 40 years of effort, we still have no CAP water delivery infrastructure. The apparent disregard of Tribal water rights which have been decreed to the mainstream river Tribes for which contractual water commitments have been made to CAP contract Tribes must be forthrightly and candidly recognized. Other parties who covet the CAP Colorado River water which is subject to these decreed and contract rights have no legal authority to impair, degrade, or decrease the delivery of the CAP water for its use by the Tribe.

By now you must realize that it is hard for us to conclude that the resistance of the construction of the Tribe’s CAP water delivery and distribution system for 40 years is simply benign on the part of other interested parties. We respectfully request that the delivery and use of the Tribe’s CAP water be recognized as a reality in the future Interim Guidelines. We request that BOR take immediate good-faith effort to construct the new facilities to deliver our CAP water to the Reservation. We find ourselves, 40 years after our CAP contract, located on about 2 million acres of Reservation lands through which two of the major rivers in Arizona flow and a CAP delivery contract for 64,145 acre-feet of water. And yet, the Tribe has no means of receiving CAP water to even meet our minimum requirements for life. We ask that you join with us to fulfil the obligations of the United States to the Tribe in an expeditious and good-faith manner.

As we say in our Apache language, Ahi’ yi’ e (thank you) in advance for your review and consideration of this comment.
Dr. Fulp, Ms. Jerla, and Mr. Wilson
Re: 7.D. Review
November 25, 2020
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Sincerely,

SAN CARLOS APACHE TRIBE

Terry Rambler
Chairman

Exhibits A-F

Cc: Tao Etpison, Vice Chairman
San Carlos Council Members
Water Rights Team
A.B. Ritchie, AG, DOJ
Chrono