

MINUTE 323 KEY TERMS

July 21, 2017

This document provides a summary of Minute 323 (Minute) for use by the Colorado River Basin States and U.S. Domestic Agencies in lieu of the actual Minute when presenting information about Minute 323 to their governing boards. The Minute is a document between the United States and Mexican governments for continued cooperative efforts on the Colorado River in furtherance of the “United States-Mexico Treaty on Utilization of Water of the Colorado and Tijuana Rivers and of the Rio Grande” (1944 Water Treaty). The Minute is anticipated to be signed in the fall of 2017.

Term: 2017 – December 31, 2026. Provisions for projects and environment in Minute 319 remain in effect until December 31, 2017. Otherwise, Minute 323 sections supersede those of Minute 319.

Distribution of Flows Under High Elevation Reservoir Conditions

1. Maintains key terms of Minute 319 to provide additional volumes of water to Mexico at certain high elevation reservoir conditions as follows:

Lake Mead Elevation	Mexico Annual Increase
At or above 1,145 feet msl and below 1,170 feet msl	40,000 acre-feet (49 mcm)
At or above 1,170 feet msl and below 1,200 feet msl	55,000 acre-feet (68 mcm)
At or above 1,200 feet msl and flood control releases are not required	80,000 acre-feet (99 mcm)
When flood control releases are required, regardless of elevation	200,000 acre-feet (247 mcm)

2. A new element provides that prior to scheduling delivery of increased flows at high elevation reservoir conditions, the Commission will meet and each Section will consult with its respective stakeholders with regard to the impact to the basin of taking or not taking increased deliveries.
3. This Section differs from Minute 319 in that Minute 323 no longer requires Mexico to create a certain volume of Intentionally Created Mexican Allocation (ICMA) before being able to access additional volumes under high elevation reservoir conditions as Mexico will participate in Water Scarcity Contingency Plan if such a plan is effective in the U.S.
4. The provisions of Minute 323 will not affect the operation of Article 10(b) of the 1944 Water Treaty, which provides that additional waters of the Colorado River system may be delivered to Mexico up to 200,000 acre-feet for a total quantity not to exceed 1,700,000 acre-feet.

Distribution of Flows under Low Elevation Reservoir Conditions

1. Maintains key terms of Minute 319, requiring reductions to Mexico during low elevation reservoir conditions as follows:

Water delivery reductions to Mexico: 50,000 acre-feet (62 mcm) when the January 1 Lake Mead elevation is projected to be at or below 1,075 ft. and at or above 1,050 ft.; 70,000 acre-feet (86 mcm) when the January 1 Lake Mead elevation is projected to be below 1,050 ft. and at or above 1,025 ft.; and 125,000 acre-feet (154 mcm) when the January 1 Lake Mead elevation is projected to be below 1,025 ft.

2. Like Minute 319, allows Mexico to take delivery of its deferred waters to offset shortage, not to exceed a total annual delivery to Mexico of 1,500,000 acre-feet during shortage years. It differs from Minute 319 in that it no longer requires Mexico to create a certain volume of ICMA before being able to use ICMA to offset its shortage as it is assumed that instead Mexico will participate in a Water Scarcity Contingency Plan if such a plan is effective in the United States.
3. At elevation 1,045 feet, the Commission will meet to discuss further measures that could be undertaken, recognizing that reductions in both countries may need to increase.
4. Establishes a Binational Hydrology Work Group with federal and state participation to meet regularly during the course of the Minute to perform technical studies and analysis, and to explore potential future planning activities. This Work Group will review basin conditions and projections; prepare an annual report of activities; study data to enable both countries to engage in planning for the period after 2026; analyze the probability of reaching certain low elevation reservoir conditions; evaluate potential impacts of low reservoir levels on salinity and potential actions within the U.S. and Mexico to reduce the risk of certain low elevation conditions; and, study the impact on the Colorado River system of the U.S. and Mexico foregoing delivery of additional waters under high elevation conditions.

Binational Water Scarcity Contingency Plan (BWSCP)

The United States and Mexico share a common vision on a clear need for continued and additional actions to reduce the risk of reaching critical reservoir elevations at Lake Mead. To that end, Mexico will implement the water savings in the table below when the U.S. implements additional water savings pursuant to additional drought contingency operations:

Mexican Savings:

Projected January 1 Lake Mead Elevation (ft msl)	Mexico's Savings that Contribute to the Binational Water Scarcity Contingency Plan
At or below 1,090 and above 1,075	41,000 acre-feet (51 mcm)
At or below 1,075 and above 1,050	30,000 acre-feet (37 mcm)
At or below 1,050 and above 1,045	34,000 acre-feet (42 mcm)
At or below 1,045 and above 1,040	76,000 acre-feet (94 mcm)
At or below 1,040 and above 1,035	84,000 acre-feet (104 mcm)
At or below 1,035 and above 1,030	92,000 acre-feet (113 mcm)
At or below 1,030 and above 1,025	101,000 acre-feet (125 mcm)
At or below 1,025	150,000 acre-feet (185 mcm)

Mexico's savings under the BWSCP are in addition to the amounts described in the previous section (Distribution of Flows under Low Reservoir Conditions).

Implementing details of Mexico's participation will be identical with the Lower Basin Drought Contingency Plan for evaporation/losses, recovery timing and limitations, and the term for recovery to ensure parity and equivalent implementation; these details will be fully described in Principal Engineers' report within 100 days of the date the U.S. Commissioner notifies the Mexican Commissioner that the Lower Basin Drought Contingency Plan is effective. Implementation of this section does not take effect until the Lower Basin Drought Contingency Plan is effective in the United States.

Mexico's Water Reserve

1. Mexico's Water Reserve is identified as: 1) water deferred due to emergencies such as earthquakes; 2) water in a Revolving Account to replenish up to a volume of 366,136 acre-feet that was deferred in accordance with Minutes 318 and 319; and 3) ICMA, resulting from conservation and/or new water sources projects.
2. Mexico creates Mexico's Water Reserve by making a downward adjustment in its delivery schedule.
3. Mexico's Water Reserve maintains Minute 319 limitations. For example: 1) Mexico may create an annual maximum volume of Mexico's Water Reserve of 250,000 acre-feet, maximum delivered in any year is 200,000 acre-feet; 2) cumulative deliveries are capped

at 1,700,000 acre-feet annually; 3) no delivery occurs below Lake Mead elevation 1025 ft.; 4) no delivery if doing so would trigger one of the shortage tiers (1075, 1050, 1025); 5) 3% annual evaporation losses are charged in years at 1025 ft. or above; 6) 2% assessment on ICMA are charged for environmental purposes; and 7) a maximum accumulated balance of 1,500,000 acre-feet is permitted.

4. During flood control years, Mexico may not add to Mexico's Water Reserve. If flood control releases are foreseeable, U.S. and Mexico will cooperate so Mexico could potentially make use of the water. A Binational System Operations Work Group will explore options for beneficial use of this water. Parity of Mexico Water Reserve and ICS regarding spilling is required.
5. If volumes in excess of 1,700,000 acre-feet are released into the Colorado River, the two countries will cooperate and communicate regarding management of Mexico's Water Reserve such that Mexico may potentially make use of it.
6. Before delivering the water, the U.S. Commissioner, in consultation with the U.S. Secretary of the Interior, will review the Colorado River system's status and operational issues.
7. After the term of the Minute ends, delivery of Mexico's Water Reserve to occur only when Lake Mead elevation is greater than 1075 ft.

Salinity

1. Calculating salinity during creation and delivery of Mexico's Water Reserve and Water Scarcity Contingency Plan savings will use the formula developed by the binational Salinity Work Group, and documented by the Principal Engineers. This formula is consistent with the temporary emergency Tijuana delivery approach.
2. As in Minute 319, to minimize salinity impacts, Mexico may use the Wellton-Mohawk bypass drain, with this water chargeable to its Treaty allotment.
3. Existing cooperative efforts at the Southerly International Boundary (SIB) to improve the water quality to approximately 1,200 parts per million during four months critical for agriculture in Mexico (September, October, November, December), are documented in Minute 323.
4. U.S. will fund \$300,000 for sediment removal from the Sanchez Mejorada Canal to restore its carrying capacity to 220 cubic feet per second. Mexico to maintain this capacity thereafter. The U.S. delivery under Minute 242 of approximately 140,000 acre-feet at the SIB annually with a salinity substantially the same as waters customarily delivered there, is affirmed in Minute 323.

5. Establishes a Binational Salinity Technical Work group to modernize salinity monitoring equipment to provide for real-time monitoring and to make recommendations. U.S. to fund the monitoring equipment.

Measures Related to Variability of Flows Arriving in Mexico

1. Notes Mexico's ongoing concern about variability of daily flow of water that it receives from the Colorado River with respect to its demand. Maintains the Binational Flow Variability Work Group to consider joint actions to eliminate or reduce the variability.
2. Identifies the following immediate actions: 1) Commission shall analyze Treaty, Minutes, and current conditions with respect to the variability of the daily flow rate; 2) through the Commission, the Work Group will implement a pilot program to utilize existing storage capacity at Morelos Dam to reduce daily flow variability; 3) procedures to be implemented to schedule deliveries at midnight; and 4) U.S. and Mexico will review operating procedures in their countries with the goal of reducing variability in the daily flow rate to a tolerable limit for both countries, and have identified as targets controlling variability in daily flow rate within 3% of Mexico's daily request and limiting changes in Mexico's daily request to no more than 2 cubic meters per second (70.629 cubic feet per second).
3. Identifies the following mid-term actions (by end of 2019): 1) Work Group will consider regulatory storage options in Mexico; 2) U.S. will modernize operational technologies to provide real-time data; and 3) Work Group will analyze operational procedures and make recommendations.
4. Identifies the following long-term actions: 1) Binational Flow Variability Work Group to provide additional recommendations during the Minute; and 2) additional storage in Mexican territory is an important measure that could address the challenges of daily flow variability.

Environment

1. The Minute notes that the Environmental Work Group recommended an average annual volume of 45,000 acre-feet for the environment, and restoration funding of up to \$40 million dollars over the term of the Minute to expand the existing 1,076 acres of restored native habitat to 4,300 acres.
2. The U.S., Mexico and a binational coalition of nongovernmental organizations (NGOs) will share in generating water for the environment, with each anticipated to contribute 1/3 of the total. The three parties have an initial commitment to provide in equal parts a total of 210,000 acre-feet of water, \$9 million in funding for monitoring, and \$9 million in funding for restoration. Funding for restoration projects is expected to be provided within three years of the effective date of the Minute. The parties will seek to identify additional funding and water to meet the targets recommended by the Environmental

Work Group. The U.S. share of water for the environment will be generated by its investment in water conservation projects in Mexico.

3. The Binational Environmental Work Group will convene regularly to identify water sources and funding, develop an annual Water Delivery and Restoration Plan, prepare reports, conduct field verification, etc.
4. Non-federal funding may be provided directly to a Mexican entity carrying out work. U.S. Government funding to be provided to Mexico through the Commission.
5. The commitments of each of the two governments and the NGOs to provide environmental flow will be reduced in proportion to the reductions applicable to Mexico during shortage and during savings under the Water Scarcity Contingency Plan.

Investment and Projects

1. The Minute identifies possible conservation projects activities to include canal lining, on-farm conservation, fallowing, regulating reservoirs, and modernization of irrigation districts.
2. The U.S. will contribute a total of \$31.5 million dollars to Mexico that will generate 70,000 acre-feet of water to satisfy the U.S. commitment to provide water for the environment, 50,000 acre-feet in system water, and 109,100 acre-feet of water for use in the United States. Water for the U.S. environmental commitments will be provided in the first five years of the Minute. NGOs to provide \$1 million dollars to generate water for ongoing delivery into the Rio Hardy system for environmental purposes.
3. A general schedule of investment for water use in the United States (i.e., the referenced 109,000 af) is set as follows: total accumulated amount of not less than \$5 million through December 31, 2020, not less than \$10 million through December 31, 2023, and not less than \$15 million through December 31, 2026. Funding will not be provided until the funding and water transfer of Minute 319 are completed by December 31, 2017.
4. A simultaneous transfer of funds and water is required.
5. Binational Projects Work Group will meet at least twice per year with project funders and the Principal Engineers to review projects and to consider additional projects.
6. Additional projects recommended by the Work Group are permitted by an exchange of letters of the Commissioners.
7. The Projects Work Group is interested in further evaluating several potential new water sources projects: desalination plant at the Pacific Ocean, desalination plant in the New River, desalination plant in the Sea of Cortez, reuse of effluent from the Mexicali Valley wastewater treatment plants in wetlands or riparian restoration of the Colorado River,

reuse of effluent from the South Bay International Wastewater Treatment Plant. A new Minute would be required for the above projects.

8. A Binational Desalination Work Group is established to study potential projects, including the development of a study of water desalination opportunities in the Sea of Cortez, as proposed by the Arizona-Mexico Commission.
9. Mexico's interest in assessing feasibility of providing treated effluent to the United States in exchange for investment in water infrastructure in Mexico in Tijuana or wherever Mexico considers appropriate, is documented.
10. Analysis of discharge of additional Mexican effluent through the South Bay Ocean Outfall would be undertaken.
11. The potential for conserved waters to be provided to U.S. through direct delivery or exchange is noted. While water exchanges are included in this Minute, any direct deliveries would require a separate Minute.

All-American Canal

1. The Minute references the efforts of the Binational All-American Canal Turnout Project Work Group to examine a potential binational connection between the All-American Canal in the United States and Mexico's Colorado River Tijuana Aqueduct Pump Station PB0. The Commissioners observed that a number of matters still need to be resolved. A separate Minute of the Commission would be necessary to address all matters relating to the design, construction, operation, and maintenance of a binational connection.