



Raise the River – Backgrounder/FAQs

March 2025

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1. ABOUT 'RAISE THE RIVER':

Raise the River is a unique partnership of six U.S. and Mexican non-governmental organizations committed to reconnecting the Colorado River to the sea through a network of restored sites in its delta region. Managed water flows have been proven to support habitat restoration along this river corridor. Members include the [National Audubon Society](#), [Pronatura Noroeste](#), [Restaremos el Colorado](#), [Sonoran Institute](#), [The Nature Conservancy](#), and [The Redford Center](#). The coalition has worked with policymakers, water agencies, and governmental representatives from the U.S. and Mexico since 2012 to cooperatively create historic change for the Colorado River Delta.

Raise the River has worked collaboratively with the governments of Mexico and the United States to demonstrate the Colorado River Delta's tremendous resilience. Through a combination of limited water deliveries and on-the-ground work to restore natural habitat, native vegetation is sustaining a great diversity of life in these restored sites. At the same time, local communities have renewed their relationships and engagement with the river, encouraging its stewardship into the future.

2. THE COLORADO RIVER

The Colorado River is one of the most critical sources of water in the West, supplying water to 40 million people and 5.5 million acres of agricultural land in seven states in the U.S. and two states in Mexico [**U.S.:** *Arizona, California, Colorado, New Mexico, Nevada, Utah, and Wyoming*. **Mexico:** *Baja California and Sonora*].

More than 20 years of drought, climate change, and overallocation have diminished the reliability of the Colorado River water supply, putting an enormous population and economy at risk of disruptive water shortages. Proactive investments in water conservation, paired with agreements among Colorado River water users about how to share when the water supply is limited, are contributing to the certainty needed to ensure that the region's economies continue to thrive. Reducing the uncertainty of a reliable water supply is a prerequisite to making progress on ensuring a reliable water supply for nature.

The Colorado River Delta used to stretch over 2 million acres, with vast wetlands, forests, and waterways extending from the southernmost point of the Arizona-California border to the Gulf of California in Mexico. The Colorado River has been dammed and diverted to supply a growing population in both the United States and Mexico, causing flows to the Delta to dwindle, and near-complete desiccation of the region. Today the Colorado River rarely, if ever, reaches the sea.

While there are still pockets of native habitat in the Delta that support fish and wildlife, much of the Delta's vast stretches of riparian and wetland areas have disappeared or been taken over by non-native species, such as salt cedar. These degraded areas do not provide good quality habitat for most wildlife, including the many species of birds that use the Delta year-round or as a migration stop on the Pacific Flyway. Marine life in the Gulf of California, including fish and shrimp, has also declined.

How has the dry delta affected the people who live along the Colorado River?

Not only have plants, animals, and marine life been hard hit, but it has also had a severe impact on the culture and livelihood of the residents of this region. The Native Americans who have lived on the lands of the Delta region for thousands of years — the Cocopah (also known as the *Cucapá* in Spanish) – have been deprived of the landscape and river they have depended on for hunting and fishing. These activities are central to their communities, not just for sustenance, but also to honor their cultural identity.

3. CLIMATE CHANGE IMPACT ON THE COLORADO RIVER

The Colorado River is already fully used, and its flows have dwindled by 20 percent compared to the last century. Scientists have determined this trend is principally the result of climate change. More than half of the decline in the river's flow is connected to increasing temperatures, and as warming continues, the risks of severe water shortages are expected to grow. Some decrease in the flow is likely no matter what actions are taken, but without

any cuts to emissions, the river's discharge could shrink from today's average volume by 19% - 31% by the middle of this century.

After more than two decades of drought, Colorado River reservoirs are significantly depleted, prompting unprecedented actions from federal managers to protect the viability of the system, and triggering unprecedented shortages for water users in the Lower Colorado River Basin and Mexico.

We cannot depend on weather conditions to fix the problem of reduced flows of rivers and streams that depend on snowmelt, but through binational cooperation combined with investments in smarter water conservation, more flexible water management, and increased protections for healthy rivers, we can reach solutions that work for everyone.

Mexico and the United States have both agreed to conserve Colorado River water to reduce the probability of catastrophic shortages. In 2020, Mexico and the Lower Colorado River Basin states conserved more than 240,000 acre-feet of water pursuant to their existing commitments. In 2022 the Lower Colorado River Basin states and Mexico will reduce uses according to shortage provisions. These actions reflect several legal agreements, including the 2019 U.S. Colorado River Basin states' Drought Contingency Plans that create legally binding commitments to conserve water, and the U.S. – Mexico Minutes, described below.

4. BI-NATIONAL AGREEMENTS AND THE COLORADO RIVER

As the Colorado River is shared by both the United States and Mexico, it is subject to various binational agreements extending back to the 1944 *Water Treaty for the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande*.

The International Boundary and Water Commission (IBWC) and its Mexican counterpart (CILA) are the U.S. and Mexican federal agencies that negotiate and implement binational water treaties and water allocations. In 2012, the IBWC and CILA successfully negotiated Minute 319, an agreement that helped the two countries better implement the 1944 U.S.-Mexico Water Treaty (these types of supplementary treaty agreements are referred to as 'Minutes'). The result of this extraordinary binational collaboration, Minute 319, provided multiple benefits for water users on both sides of the border. It broadly provided for the United States and Mexico to share surpluses in times of plenty and reductions in times of drought and provided for water flows for the environment. The agreement also served to recognize the Colorado River Delta as a place of ecological significance for both countries.

At the conclusion of Minute 319, a new agreement was implemented, Minute 323. In addition to promoting a more secure water future, it supports and expands the ongoing environmental restoration projects in the Colorado River Delta.

Minute 319

In addition to the water flows for the environment, it more broadly has provided for the U.S. and Mexico to share surpluses in times of plenty and reductions in times of drought, offered incentives for leaving water in storage, and conserved water through joint investments in projects from water users in both countries.

Following the signing of Minute 319, Colorado River stakeholders and a multinational, multidisciplinary, multi-organizational science team worked for over a year to prepare for the implementation of the Minute, including designing the pulse flow and establishing the monitoring program to assess its hydrologic and ecological responses. From March 23 to May 18, 2014, 105,392 acre-feet (130 million cubic meters [mcm]) of water was released from Morelos Dam into the dry Delta, flooding more than 4,000 acres of riverbed landscape, and once again – briefly – the river met the sea for the first time since 2001.

Following the pulse flow, small amounts of water known as *base flows* were periodically released into the delta to maintain and augment the pulse flow's effects and maintain existing and restored habitat. A total of 57,621 acre-feet (71 mcm) of base flow deliveries were made during the five-year term of the Minute, ending December 31, 2017.

What was Raise the River's role under Minute 319...what was accomplished?

Raise the River played a significant role in implementing Minute 319, the U.S. – Mexico Colorado River agreement that covered the term of 2012 to 2017. Our activities included planning water deliveries for environmental benefit, implementing habitat restoration projects, monitoring the hydrologic and ecological impacts of these actions, and coordinating community environmental education and employment opportunities.

Following the signing of Minute 319, Raise the River raised \$10 million dollars to meet its obligations under the Agreement. The majority of these funds were used to provide water for the Colorado River Delta through the Colorado River Delta Water Trust, matching each country's commitment to providing water for the Colorado River Delta. Water rights were acquired from willing sellers in the Mexicali Valley to provide the water needed to implement habitat restoration in the region and sustain these restoration sites.

Our work demonstrated that with strategic timing and placement of the water, only a small amount of water – less than 1% of the Colorado River's historic flow to the delta – is sufficient to restore crucial habitat for the birds and wildlife that previously lived in the delta.

Specifically, this water and our active management resulted in the restoration of over 1,000 acres of riparian habitat along the river's main channel, where more than 230,000 native cottonwoods and willow trees were planted.

Scientific Monitoring

An important inclusion of the Minute was the requirement for ongoing scientific monitoring of results to help inform more effective applications of environmental water in the future. This work was conducted by a binational team of scientists led jointly by the University of Arizona, Sonoran Institute, The Nature Conservancy, and El Colegio de la Frontera Norte (COLEF). Included among the researchers were environmental experts from The Nature Conservancy, Pronatura Noroeste, and the Sonoran Institute -- three organizations that are members of *Raise the River*.

The final study results published in November 2018 detailed the changes in birds, plants, and groundwater in the delta since the pulse flow, and confirmed that these ongoing water

flows in the Colorado River Basin are helping to restore the native environment and bring back native flora and fauna to the arid Colorado River delta.

Not only was this the first-ever scheduled delivery of water by the United States or Mexico into the Colorado River in its delta dedicated to improving the environment, but it was also the first time that a formal monitoring program was in place to measure the ecosystem response.

Minute 323

Minute 319 concluded in December 2017, and in September 2017 government officials, researchers, and coalition members of *Raise the River* successfully negotiated a successor agreement, Minute 323, to support continued cooperative work between Mexico and the U.S., covering a nine-year period through 2026. Minute 323 commits the United States and Mexico to work together to address potential Colorado River water shortages and to meet new water conservation and storage objectives. It represents the joint efforts of local, state, and federal governments of both countries to set a course for a more secure water future for the more than 36 million people who rely on the Colorado River in the United States and Mexico.

Water for the environment

Under Minute 323, the United States and Mexico will each provide water and funding for continued habitat restoration and scientific monitoring in the Colorado River Delta through 2026, with *Raise the River* contributing matching amounts.

The Minute mandates the delivery of 210,000 acre-feet (259 mcm) of water from the United States, Mexico, and a binational coalition of NGOs, each responsible for 1/3 of the total volume over the term of the Minute.

While Minute 323 commits water for delivery to the environment it does not prescribe a pulse flow. An environmental water delivery plan has been developed based on lessons learned under Minute 319, specifically that the most efficient use of water for restoring vegetation, bringing back wildlife, and giving local residents opportunities to experience the river is actually more targeted, smaller flows to specific areas.

General provisions

The accord continues provisions for Mexico to store water in U.S. reservoirs and establishes reductions in water usage for both Mexico and U.S. water users in the event of a Lower Colorado River shortage. These provisions help to shore up water supplies needed to get through drought years. Specifically, this will help to increase the elevations of Lake Mead and Lake Powell.

Minute 323 also provides binational funding for infrastructure and conservation programs in Mexico which will save water. This saved water benefits water users in both countries. It's an example of what can be achieved when we work cooperatively together. Under Minute 323, U.S. water managers have committed to invest \$31.5M in water efficiency projects in Mexico that will result in savings of more than 200,000 acre-feet of water. In return, the U.S. entities will receive a one-time water exchange, and over the long term, Mexico will benefit by

generating additional water from these conservation programs and the improved infrastructure. Potential water-efficiency projects in Mexico include canal lining, on-farm conservation, fallowing, regulating reservoirs, and modernization of irrigation infrastructure.

What about the drought? Shouldn't the water be conserved in case there's a shortage, instead of going to the delta?

We worked with federal officials from the United States and Mexico to understand how delta restoration might take place without harming the interests of other water users. Both Minute 319 and Minute 323 are cooperative, binational water-sharing agreements that include benefits for people and nature alike. Minute 323 includes water conservation and infrastructure programs, which frees up additional water resources. Mexico has – and continues to – store conserved water as a hedge against shortage.

5. RESULTS

Raise the River's successful habitat restoration under Minute 319 helped lay the foundation for Minute 323. Between 2013 and 2017 Raise the River provided active management of restoration sites, including *base flows* – smaller, periodic releases of water – to restore over 1,000 acres of riparian habitat along the river's main channel, where more than 230,000 native cottonwoods and willow trees were planted. Raise the River was also an active participant in the scientific monitoring of the results of these environmental water flows.

In addition to these restoration results, Raise the River established a water trust in Mexico that permanently acquired water rights from voluntary sellers in the Mexicali Valley to support their commitments. This was funded by raising more than \$10M for restoration and water acquisition from US and Mexico foundations, corporations, federal agencies, and individuals.

Over the years, Raise the River has engaged thousands of local residents, school children, and volunteers from around the world in on-site restoration work and environmental education programs, as part of our ongoing community engagement programs.

6. LOOKING AHEAD

Raise the River's primary goal is to bring water and life back to the Colorado River Delta, and in doing so, create a model for future trans-national river restoration efforts throughout the world. We are currently working to fulfill our commitments under Minute 323 with regard to ongoing water acquisition, restoration groundwork, scientific monitoring, community educational programs, and operations. In meeting our goal, we will rebuild the habitats that support local communities and wildlife.

How can the public get involved?

By raising awareness, funding, and – ultimately – the water level of the river, we will restore the wetlands of the Colorado River Delta. The Delta is the most broken reach of the Colorado River. If we can fix the Delta, we can demonstrate that no place is beyond hope.

Join us in rewriting history. You can get involved by joining in our efforts. Visit our [website](#) to learn more. Join our active [Facebook community](#) and become a part of the solution.

ABOUT 'RAISE THE RIVER':

Raise the River is a unique partnership of six U.S. and Mexican non-governmental organizations working to revive the Colorado River Delta through activities that support environmental restoration for the benefit of the people and the enhancement of wildlife in the Delta. Members include the [National Audubon Society](#), [Pronatura Noroeste](#), [Restaremos el Colorado](#), [Sonoran Institute](#), [The Nature Conservancy](#), and the [Redford Center](#). The coalition has worked with policymakers, water agencies, and governmental representatives from the U.S. and Mexico since 2012 to cooperatively create historic change for the Colorado River Delta. The Raise the River coalition is also referred to as *Alianza Revive el Río Colorado* in Spanish communications and within Mexico.

raisetheriver.org

ReviveElRio.org

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