

# Lower Colorado River Water Quality Partnership

**The Colorado River** is a critical water supply for millions of residents, businesses, industries, farms and the environment in the southwestern United States and northern Mexico. Today, the Colorado River provides water that meets all applicable water quality standards, but the challenge in an era of drought is to protect and maintain that quality going forward. The Central Arizona Project, Metropolitan Water District of Southern California and Southern Nevada Water Authority work on a range of initiatives and programs to manage lower Colorado River water involving environmental protection, Lake Mead conservation, and safeguarding the quality of water that we deliver to our customers from the river. As part of the Partnership, the agencies are committed to:



- Identifying water quality challenges for the lower Colorado River Watershed
- Collaborating on research to find effective solutions, and
- Developing policies and programs to improve Colorado River water quality and ensure long-term sustainability of this resource.

## Finding Solutions for Complex Water Quality Challenges



### Salinity

Salinity affects municipal, industrial and agricultural water users. About half the salt in the river is naturally occurring and the other half results from human activities. Water conservation efforts can further impact salinity levels in water supplies. Salinity control measures that began in the 1970s through the Colorado River Basin Salinity Control Program have prevented over 1 million tons of salt from entering the river. Substantial economic damages, such as reduced crop yields and reduced useful life of municipal and industrial system infrastructure, have been avoided due to the reduction in salts.



### Nutrients

Excessive nutrients can lead to algae-related problems in water. Wastewater treatment plants, irrigated agriculture and septic systems are sources of nutrients in the river system. Historic levels of phosphorus from Las Vegas' wastewater effluent have been reduced by half due to improvements in wastewater treatment. In addition, sewer construction projects along the river have reduced the impact of failing septic systems.



### Invasive Species

Invasive species have invaded the entire lower Colorado River system. Quagga mussels, in particular, can clog pipes, intake structures and cooling lines. They can also impact the aquatic environment, creating conditions for algae blooms and aquatic plant growth. Various control techniques and mechanical maintenance practices are helping to ensure the reliability for the water system infrastructure.



### Industrial Contaminants

Legacy contaminants from past industrial production threaten water quality. Remediation measures near Henderson, Nevada have reduced perchlorate loading into the river by more than 90 percent. Interim measures near Topock, Arizona are controlling hexavalent chromium-contaminated groundwater from migrating toward the river while a long-term remediation plan is finalized. Uranium mill tailings are being removed from the river bank near Moab, Utah to avoid being washed directly into the river under a catastrophic flood event.

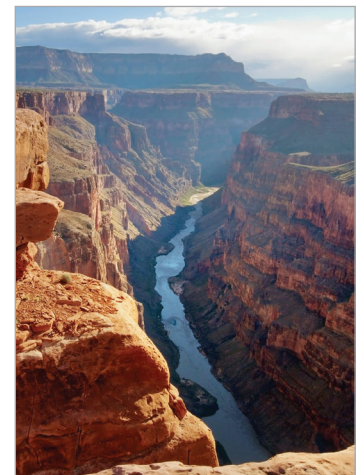
**The Colorado River watershed** encompasses parts of seven US states and the country of Mexico. Starting in the central Rocky Mountains, the river flows across the Colorado Plateau to Lake Powell, then through the Grand Canyon to Lake Mead on the Arizona-Nevada border. From Lake Mead, the river flows south to the international border. Recognizing the need for regional collaboration, the Lower Colorado River Water Quality Partnership was formed in 2011 to identify and recommend proactive and creative solutions to address water quality issues.



### The Lower Colorado River Water Quality Partnership

has closely monitored various remediation efforts throughout the Colorado River Basin and advocated for expeditious clean-up. The Partnership has also reviewed and commented on project proposals, including regulatory and legislative project developments, to minimize potential threats to water quality in the Colorado River.

The Partnership's continued efforts are critical to the preservation of the Colorado River's future water quality. Moving forward, the Partnership will continue to identify local and regional solutions to the challenges facing the Colorado River.



**Central Arizona Project**  
P.O. Box 43020  
Phoenix, Arizona 85080-3020  
<https://www.cap-az.com/>

**Metropolitan Water District of Southern California**  
P.O. Box 54153  
Los Angeles, California 90054  
<http://www.mwdh2o.com/>

**Southern Nevada Water Authority**  
1001 South Valley View  
Las Vegas, Nevada 89153  
<https://www.snwa.com/>

Together these agencies serve over 25 million people within California, Arizona and Nevada.