

**COMMITTEE ON NATURAL RESOURCES SUBCOMMITTEE ON WATER, OCEANS, AND WILDLIFE REMOTE
OVERSIGHT HEARING**

October 20, 2021 11:00 a.m. ET

**Oversight Hearing on “Colorado River Drought Conditions and Response Measures – Day Two.”
Questions for the Record for Mr. Adel Hagekhalil, General Manager, Metropolitan Water District of
Southern California**

Questions from Rep. Mike Levin (CA-49)

1. Mr. Hagekhalil, in your testimony you describe the Colorado River Basin Salinity Control Program, which has helped reduce salinity for years. However, as you acknowledge, that Program is facing challenges associated with continued operations of its largest individual salinity control project, the Paradox Valley Unit. I've also heard from constituent water agencies who are concerned about increased salinity in Colorado River water. Can you describe the costs of increased salinity levels and some policy options we should consider to address salinity challenges?

The Salinity Control Program has been a success on the Colorado River, reducing salinity levels by more than 100 mg/l at our intake. However, the Program is facing implementation challenges. The Colorado River Salinity Control Forum's 2020 Triennial review estimated that economic impacts from elevated salinity levels in the Colorado River will grow from \$353 million per year to \$670 million per year without further investments.

Higher salinity in water supplies affects many sectors, from reduced crop yields in agriculture, to increased cooling costs in the commercial and industrial sectors, and to homeowners from the reduced useful life of water heaters, clothes washers, and plumbing fixtures. Of particular concern, rising salt levels impair water recycling operations and reduce the ability to recharge the groundwater with lower-salinity supplies. Water recycling and groundwater replenishment are two cornerstones of Southern California's One Water approach to reliability.

Metropolitan encourages the Bureau of Reclamation to resume operation of the brine injection well at Paradox Valley, Colorado at a safe level while working on a long-term solution. Additionally, Reclamation should implement long-term solutions for other hyper-saline springs such as Pah Tempe in southwestern Utah. In the near term increased federal funding for the Colorado River Salinity Control Forum programmatic efforts is also needed. Long term, local funding for salinity control on the Colorado River is threatened by reduced power generation at Lake Mead. The parties involved are working on negotiating a solution. Congressional authorization will be needed to amend the funding agreement and sustain the current level of salinity control efforts. Additionally, salinity control and brine management research are also needed to help manage salts on the Colorado River. Metropolitan supports reauthorization of the Water Desalination Act of 1996.

2. Why is it preferable to address salinity issues before that water reaches us down in California?

Salinity entering the Colorado River basin comes about equally from naturally occurring and human-caused sources. Metropolitan has studied desalting our Colorado River supplies in the past and found it is expensive and energy intensive. It is more cost effective to manage salinity through blending supplies with our other imported water from Northern California and investing in the Colorado River Salinity

Control Forum. For example, salinity control efforts for alternatives at Paradox Valley range from \$60 to \$90 per ton of salt removed whereas costs for removing salinity in recycled water ranges can be an order of magnitude higher.

3. Mr. Hagekhalil, in your testimony, you point to water conservation and the development of local supplies as being critical to the water portfolio of the Colorado River Basin as a whole. Why should drought-prone communities that rely heavily on imported water be taking steps to enhance local supplies, not only through water recycling projects like the ones you describe in your testimony, but also desalination projects where appropriate?

Though the region's economy will continue to rely on imported supplies for the foreseeable future, a One Water approach to the water reliability challenges we face in the Southwest fosters unique solutions. Imported supplies, recycled water, stormwater capture, groundwater recovery, and desalination – these are all part of the same system. The One Water approach calls for local resources to be selected by individual communities according to their unique needs and opportunities. Because local supplies such as recycling and seawater desalination are largely disconnected from the normal swings of hydrology and drought, they provide a level of certainty each year that snowpack-derived supplies cannot always deliver. However, these alternatives also come at a cost that is higher than our traditional supplies, which is why the funding programs we have discussed are so important.

4. How can investments in the development of local water supply sources promote resilience at the Basin-wide scale?

About 25 percent of all drinking water in Southern California comes from the Colorado River, so it's an extremely important source. Between climate change and severe drought, the Colorado River looks likely to be remain in shortage for years to come. Diversifying the resource mix of individual communities in Southern California and across the basin benefits all the committees and tribal entities that rely on the Colorado River.

In 2007, Metropolitan and other Colorado River partners entered into an Intentionally Created Surplus (ICS) agreement with the U.S. Bureau of Reclamation to create, store, and later deliver conserved water in Lake Mead. This agreement allows Metropolitan and local agencies to incentivize local resource development such as water recycling, groundwater desalination, and groundwater recovery and store that water in Lake Mead. All basin states benefit from California's ICS program because it provides a powerful common incentive to keep this conserved water in Lake Mead when possible. As an example, with about 1.3 million acre-feet of ICS water stored behind Hoover Dam, Lake Mead is now 18 feet higher and much more resilient because of Metropolitan's local resource projects and conservation.