

TAPPING THE COLORADO • Lake Mead & Lake Powell, 2021-22

Photography by Jamey Stillings

Taming and tapping the Colorado River has been vital to the development of the American Southwest. Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming depend on the river for their water supply, hydropower production, recreation, and fish and wildlife habitat. Both within and outside the river basin, over forty million people use the river's resources. Its waters irrigate 5.5 million acres of agricultural land.

Hoover Dam (completed 1936) and Glen Canyon Dam (completed 1966) form Lake Mead and Lake Powell, respectively. These reservoirs have a combined storage capacity of 55 million acre-feet. They are essential to storing and distributing this precious resource.

For a century, we have overestimated the Colorado River's ability to supply the demands of human development. Our ever-growing urban and agricultural expansion increases the gap. Further, the American Southwest is experiencing its worst drought in 1200 years, likely exacerbated by human-caused climate change.

In 2021-22, water levels at Lake Powell and Lake Mead dropped to record lows, between 22% and 28% of their stated capacities. If water levels continue to drop in the coming years, they may reach a catastrophic "dead pool" point, where Glen Canyon Dam and Hoover Dam can neither produce hydroelectric power nor transfer water downstream to keep the Colorado River flowing.

Tapping the Colorado uses a predominantly aerial perspective to document Lake Mead and Lake Powell at this precarious and uncertain period in the river's history.

Documenting Lakes Mead and Powell from an Aerial Perspective

In 2021 and 2022, as water levels in Lake Mead and Lake Powell dropped precipitously, I felt the need to document these key reservoirs of the Colorado River, which are crucial to the survival of the American Southwest. Small helicopters are my preferred way to photograph this region from an aerial perspective. Over a period of days between September 2021 and May 2022, I explored the intricacies of these reservoirs, seeking visual evidence of the impacts of an extended drought.

I flew with talented pilots in Schweizer S300 and Robinson R44 helicopters, each with the passenger door removed on my side for unobstructed views. My cameras were Fujifilm GFX100

bodies with a range of Fujinon lenses from 32mm to 200mm, stabilized on a hand-held Ken-Lab KS-6x6 gyro.

Two critical factors influenced my flights over Lake Mead and my photographic approach. First, wildfires in California sent thick smoke over the region. If I flew too high, smoke obscured the landscape. Finding altitudes that best reveal the landscape while acknowledging the duality of drought and wildfire was important. Second, as the helicopter had no floatation pontoons, we could not fly at low altitudes or spend extended time over the waters of Lake Mead. Thus, most views started over land and moved out to the water, limiting my range of perspectives.

While flying over Lake Powell, the helicopter's pontoons allowed for lower, more intimate views of the sandstone walls bounding the reservoir. We sometimes flew less than twenty feet above the water's surface. I could observe and photograph over the water or the land as it moved me. Smoke was less dominant at Lake Powell, though still a significant factor. Altitude, time of day, and angle of view to the sun continually impacted how I could photograph and interpret the scene.

We needed to cover long distances over Lake Mead and Lake Powell and carefully calculate our fueling options beforehand. Flight distances dictated that the times of day when I could photograph, preferably early and late, would only be ideal for some locations. As with most aerial work, we always balanced practical and aesthetic considerations.

I documented numerous sites that revealed the long-term impact of drought. Boat ramps had been lengthened multiple times until extending them further was impractical or impossible. A powerboat anchored near the white mineralized cliffs of Lake Powell dramatically showed a water level 177 feet below the reservoir's capacity. Hundreds of houseboats were effectively stranded. Natural arches drowned by the lakes' formation re-emerged and created secret new campsites. Communities were vacated without operational marinas, while evidence of communities abandoned when the reservoirs first formed reappeared as the waters receded.

Time and time again, I was reminded of the temporal and temporary nature of human existence. Indigenous peoples inhabited The American Southwest for thousands of years before the intrusion of Europeans intent on taming and transforming the land and its waters. Beginning in 1936 and 1966, the formation of the Lake Mead and Lake Powell reservoirs submerged the archeological records of our Indigenous heritage. We use the liquid power of the Colorado River to quench our thirst, grow our crops, power our industry, and indulge our recreational whims. Without the Colorado River, we would not have the Las Vegas, Phoenix, and Los Angeles we know today. And, without carefully conserving the precious resources of the Colorado River, in a few decades or a few centuries, the region will again be transformed.

– Jamey Stillings, August 2024