

Western water coverage peaks over the summer

Scanning Colorado River shortage news

Introduction/Methodology

For this scan of recent media coverage of Western water supply, we wanted to pay particular attention to coverage of the Colorado River's federal shortage declaration. Using Cision and Meltwater, the Water Hub tracked the volume of coverage using the same water supply search from our <u>previous media scans</u> and took a closer look at the summer's Colorado River stories. Using automated text analysis, we honed in on key themes in coverage, what solutions stories are being told and how the media is connecting the dots between drought and climate change. Lastly, we checked in on the social media conversation, identifying top-shared articles, hashtags and keywords driving the online conversation.

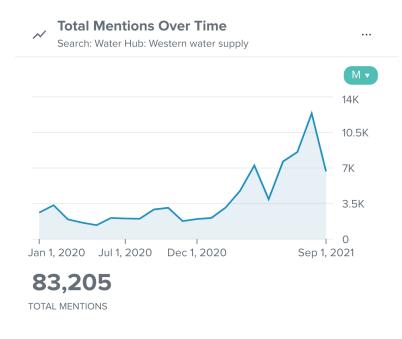
Historic water challenges drive unprecedented volume of news

In a typical month, <u>our scans</u> pick up 2-3,000 news stories covering Western water supply.¹ This year, we detected a stark increase in the volume of coverage beginning with more than 7,000 media mentions in April 2021 and growing to a high of more than 12,000 news stories in the month of August 2021.

Our past analysis has found coverage spikes around major studies, snowpack and reservoir reports and extreme weather events. This summer was no different and the ongoing negotiations around federal water infrastructure investments and climate action and the United Nations IPCC report, added additional context and storylines.

¹ The specific keywords we searched for included: (water supply, water shortage, water source, water use, water allocation, water demand, drought contingency plan, or drought plan) and (river, reservoir, aquifer, groundwater, lake, stream, flow, precipitation, rain, snowpack). We were looking exclusively at news covering Arizona, California, Colorado, Nevada, New Mexico, Utah, or Wyoming.

In April, <u>California snowpack</u> was 41% below peak, <u>drone footage exposed</u> <u>alarmingly dry reservoirs</u> and reports of <u>Lake Mead's low water levels</u> began to make headlines in anticipation of the first-ever federal cuts on the Colorado River.



Dire new

milestones drove continued coverage throughout the summer. Lake Mead <u>hit a</u> <u>record low</u> in June, Governor Newsom <u>expanded California's</u> <u>drought declaration</u> throughout the summer and news outlets like CNN used <u>satellite footage to visualize</u> the extreme conditions in California's reservoirs. In August, the <u>United Nations</u> <u>Intergovernmental Panel on</u>

<u>Climate Change</u> report was released, painting a scary picture for the West's water future.

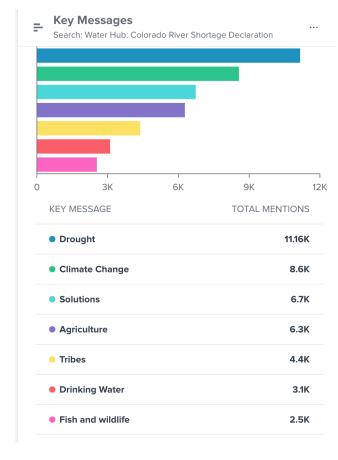
Colorado River shortage declaration drives spike in media coverage

From the period of June through September 2021, there were just over 35,000 media stories on Western water supply in our search. More than 1 in 3 of those stories was about the Colorado River,² so we looked more closely at coverage specifically about the Tier 1 shortage declaration.³

² California water accounted for about half of the Western water supply coverage during this same time while other issues that popped to a lesser extent include, the <u>water shortage on the Rio Grande</u>, <u>toxic</u> <u>algae</u> and drought impacts on the <u>Great Salt Lake</u> and other local waterways.

³ We searched for news stories about the Colorado River from June 1 through September 30, 2021 that also included at least one of the following terms: Bureau of Reclamation, federal water agency, mandatory cuts, water shortage, declared shortage, shortage declaration, Tier 1 shortage. We looked at news coverage in Arizona, California, New Mexico, Utah, Wyoming, Colorado or Nevada.





Explainers on the Colorado River, <u>Western drought</u> and the <u>impacts of climate</u> <u>change</u> on the Basin started teeing up the

expected U.S. Bureau of Reclamation cuts early in the summer.

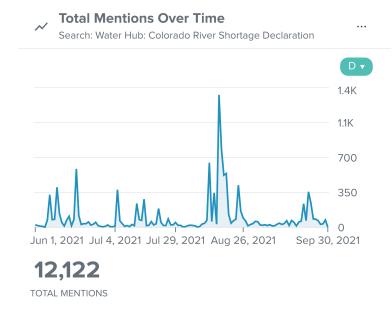
More than 1,200 news stories were published about USBR's announcement of the first ever federally-declared cuts on the Colorado River on August 16 alone. Nearly every <u>major news outlet</u> reported the news and used the announcement <u>as a jumping</u> <u>off point</u> to further explore how the shortage impacts the region and country.

As agriculture accounts for 70% of Colorado River water allocations, and Central Arizona

farmers will be hit especially hard by the initial cutbacks, it's not a surprise that coverage often centered the impact on <u>the region's farmers</u>. Over half of news stories on the water shortage mentioned agriculture, farms or irrigation, including in-depth coverage from the <u>Arizona</u> <u>Republic</u>. Several stories acknowledged that the cuts will <u>increase reliance on Arizona's</u> <u>shrinking aquifers</u>, but we also saw a number of articles that touched on more sustainable solutions, including <u>demand management</u>, fixing ditches and canals to reduce water loss and <u>drip irrigation</u>.

Coverage from the leading news outlets in the Colorado River Basin states (<u>Colorado Public</u> <u>Radio</u>, the <u>Las Vegas Sun</u> and <u>the Santa Fe New Mexican</u>, for example) tended to focus on the impacts and ramifications for each state.





Native news outlets like

the <u>Navajo</u>

<u>Times</u> are covering the Colorado River's shrinking supply, and we've also seen more coverage this summer in mainstream news outlets on <u>the challenges</u> and <u>perspectives of Native</u> <u>communities</u> in the Basin, including Tribal Nation's critical <u>role in solutions</u>.

But, less than 40% of Colorado

River shortage declaration coverage this summer mentioned Tribes. This is especially important as Tribes push to exercise their water rights and ensure that <u>Native voices</u> are part of the decision-making process in future interstate negotiations.

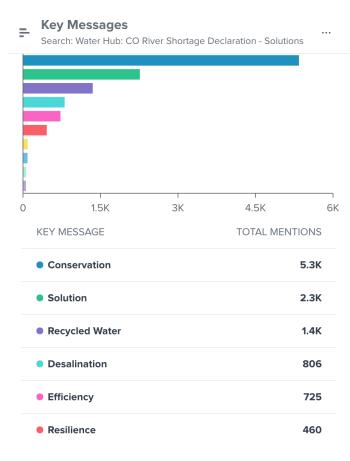
Most stories make the climate connection

The story of the Colorado River is the story of climate change. In past analysis, we included "drought" as one of the key words in our text analysis to determine whether Western water supply media stories are covering climate change. In this search, we separated "drought" and "climate change" to better understand how journalists are covering the issue.

Not surprisingly, we found nearly all stories about the cuts talked about drought. More than 7 in 10 news stories on the Colorado River in this time period mentioned <u>climate change</u>, examining how Western states will have to plan for a future river system that is only getting drier and less predictable. <u>CNN's Rachel Ramirez</u> has been connecting the dots between climate change, drought and water in the West all summer long. In June, <u>PBS NewsHour</u> did a deep dive into climate, drought and how cities and states are working to conserve water for the future. <u>Abrahm Lustgarten's long-form analysis</u> for the New York Times and ProPublica scrutinized both the

impacts of climate change on the Colorado River and how a hundred years of inequitable water policy has set us up for today's "uncharted territory."

Solutions are a key part of the story



A majority of

stories on the water shortage looked ahead at how states, water users, states and individuals will need to adapt to a future with less water. The <u>Christian</u> <u>Science Monitor report</u> on the shortage declaration is a great example of framing up solutions, from upcoming negotiations and needed collaboration between states and Tribes, between Mexico and the United States to conservation and water recycling.

The shortage announcement also came as Congress and the White House are <u>debating billions in investments</u> in Western water, including funding to address water access for Tribal Nations, natural infrastructure and climate

resilience. Local and state news outlets looked to success stories in their communities like <u>Tuscon's conservation measures</u> and the effort to make much of the grass in the <u>Las Vegas</u> <u>desert</u> a thing of the past.

Solutions stories also came from commentary by Colorado River advocates. The Environmental Defense Fund's Kevin Moran and Nancy Smith with The Nature Conservancy <u>wrote about the importance of climate resilience in The Hill</u>. Other op-eds pushed for policies that <u>prioritized</u> <u>water conservation, efficiency and reuse</u> over new pipelines. <u>On the Navajo Nation</u>, investing in infrastructure is making safe water available to residents who have been without running water.

Recycled water and desalination were both mentioned, often in the context of funding allocated to the Colorado River Drought Contingency Plan in the <u>Senate-passed infrastructure bill</u>. The

Washington Post's Michael Birnbaum <u>wrote about desalination</u> as a potential false solution to our water and climate crisis given the technology's expense and potential harm to the environment compared to investments in conservation. And the <u>Salt Lake Tribune</u> covered the summer release of the <u>Ten Strategies</u> report, a look at climate resilience strategies for the Colorado River Basin.



Megadrought emerges as new top lingo

We're always searching for the right words to describe the water shortage crisis worsening in the Colorado River Basin and across the Western U.S., so we scanned the keywords journalists are using in Western water supply news stories. Scientists seem to agree that <u>drought is no</u> <u>longer sufficient nor accurate</u> to describe the kind of long-term and permanent changes in the West's climate and hydrology. Reporters are grappling with this question in stories asking, as higher temperatures and a drier climate persist, are <u>California</u> and the West in a megadrought? While <u>aridification</u> may be the most accurate term — describing the gradual and permanent change from a wetter to drier climate — the term showed up in just 380 news stories compared to megadrought's more than 4,000 media mentions between June and September. The sharp uptick in the use of the term megadrought stems from research out of <u>Columbia University</u>. We posit the simple, easy to grasp language is what has led to its adoption this year by journalists covering climate and water in the West, an important reminder that we need to think carefully about words that are quick to convey a concept and will stick in peoples' minds just as much as scientific consensus.

What are people saying on social media?

For this analysis, we used Meltwater's social listening tool to quantify the news stories on the Colorado River drought that were shared most widely across Facebook, Twitter and Reddit. Over the last 12 months, social chatter around Western water earned more than 90,000 mentions with the biggest spike happening on August 16, 2021, closely following the trend we saw in our media scan.

Reuter's June 2021 story on Lake Mead levels and it's attention-grabbing headline, <u>Hoover Dam</u> <u>reservoir hits record low, in sign of extreme western U.S. drought</u>, reached nearly 40 million readers and was the most shared story on Facebook between May - September 2021. Other top shared stories were reported by national outlets like <u>NPR</u> and the <u>LA Times</u> in July, ahead of the official federal shortage declaration. Rebecca Solnit's July op-ed for the Guardian on our climate turning point centered on the historic low water levels in Lake Powell and reached an audience of more than 40 million, earning more than 20,000 engagements on Facebook. Another interesting finding? The June 2021 CNN story on Lake Mead levels was re-posted on <u>AZ Family</u> and had more than 20,000 engagements on Facebook. A national story syndicated through a trusted local broadcaster was widely shared, demonstrating the weight local media carries with a lot of readers.

In addition to looking at the top shared stories, we also compared the top keywords in the Western water supply conversation on social media. Unsurprisingly, we saw a big uptick in posts about water use, water shortages and water drought in the same time period as our media scan. "Water shortage" was the top keyword with nearly 20,000 mentions across all social media platforms and used by more than 7,000 unique Twitter authors, with national news organizations like the New York Times pushing out their stories popping as the top Twitter authors.



US officials are expected to announce first-ever mandatory water cuts on the Colorado River — which supplies water to more than 40 million people — as climate change-fueled drought pushes Lake Mead level to unprecedented lows. Will keep story updated here:



cnn.con

First-ever water cuts declared for Colorado River in historic drought Additional cuts — each tier with worsening impact on agriculture and municipal water — are expected if Lake Mead continues to fall.

1:39 PM · Aug 16, 2021 · Twitter Web App

20 Retweets 5 Quote Tweets 35 Likes

We also noticed something new: an increase in social conversation around climate change. Top reporters shared their stories from their personal accounts and made the connection between the shortage declaration and climate impacts. #ClimateChange was the second most used hashtag in Western water social posts in this time (after #News and ahead of #drought and #megadrought). The term "climate change" earned 8,300 mentions in social media posts about Western water supply in 2020-2021 compared to just 1,800 mentions in 2019-2020, a marked increase.