

TUWaterWays

Water News and More from the Tulane Institute on Water Resources Law & Policy Authors: Christopher Dalbom, Mark Davis, Haley Gentry, and Ximena De Obaldia September 15, 2023

Allow Us to Divert Your Attention

This week at the annual convening of the <u>Mississippi River Cities and Towns Initiative</u> (MRCTI), local leaders from up and down the river <u>are looking to formalize protective measures</u>. The group will decide whether to support an interstate compact that would protect the river's waters from diversions away from its basin. While this represents an important first step towards unified management efforts, the process of creating an interstate compact is incredibly difficult and would require the consent of all ten corridor states as well as approval from Congress. Also during the convening, the <u>Red Lake, Leech Lake, and White Earth Nations signed an agreement with MRCTI</u> for the purpose of creating a partnership between MRCTI and tribal nations along the river. These measures comes at a critical time when low water levels are becoming increasingly common on the Mississippi River (and <u>other globally significant navigation channels</u>). 2023's low water season is unusually early, with <u>levels in Memphis lower than they were last year</u> at this time. Farther south, the saltwater wedge is again <u>moving upriver, threatening drinking water</u> in southeast Louisiana. It paints a <u>grim</u> outlook for agriculture, shipping, and public health.

At least those controversial proposals to send Mississippi River water west that have lurked <u>in the shadows</u> for decades have been thrown aside (at least for the moment) to make way for a new idea. A proposal to <u>fill Lake Mead by draining Lake Powell</u> has entered the chat, and with considerable controversy. Nevada has the smallest allocation of water among the Colorado River states. The city of Las Vegas, just 24 miles from Lake Mead, has been <u>undertaking several measures to improve water management and conservation</u> practices. But that can only do so much, and the question of Lake Mead's future is demanding answers.

"It" Was Literally Made Next to Cornfields West of Des Moines

What is "it" you ask? OpenAl's GPT-4 Language Model. While individuals like you and I may not have the foresight to move towards the Mississippi River basin to ensure future water security, big tech has definitely gotten the message. Amid all the controversy surrounding AI, recently the spotlight has been on the <u>vast quantity of water it uses</u>. Which raises the question of where all that water is sourced from. While those companies are often based in Silicon Valley or major financial centers, their data centers are not. A lot of them are west of Des Moines. These centers require intensive water use on a normal day, but as temperatures spike during summer months, more water is required for cooling. Last July, <u>Microsoft's water consumption constituted 6%</u> of the city's water consumption and almost caused a potable water crisis for the area. Local officials say something needs to be done. Yet in January, <u>Microsoft was granted permits to expand</u> their Des Moines operations.

Like Microsoft, Google's most water intensive data centers are located in Iowa. Both companies have made commitments to be water positive, with Google even saying it will replenish 120% of the water it uses by 2030. Yet between 2021 and 2022, Microsoft's water usage increased by roughly 34%. Google also reported a 20% increase in water usage in the same time period. Despite not knowing quite what "water positive" means, it seems positively impossible that such goals could be reached. And with all that water going to cooling, it stings even more when you

consider lowa's ongoing drought, which may force an early harvest this year. But don't worry, AI technology can help farmers better manage water. Or it can be used to co-write songs about water with Lupe Fiasco. Just don't ask it to analyze its parent corporation's water practices.

WOTUS the Point Anymore?

There are many hidden costs of climate change beyond disasters. A main one is degradation of water quality. A new study published in Nature looked at the impacts that flood events and prolonged drought have on rivers across the world. These conditions impact nutrient concentrations, microorganisms, and salinity, among other things. The study found that droughts and heatwaves impacted 68% of river water quality, while extreme precipitation and floods impacted 51% of the rivers studied. The researchers urged public officials to move quickly to implement water quality management strategies as these weather events become more common. Unfortunately, our water quality programs are in a deregulatory era. The new WOTUS rule that went into effect on September 8th removes federal protection for an estimated 63% of wetlands across the country. Many of those wetlands are critical to river systems, playing key roles in filtering water for quality and flood control. Whether those now deregulated wetlands will be protected by other levels of government depends on a number of factors, but inconsistency and confusion are guaranteed! From places like Colorado that want to fill gaps but are tied up in legislative and financial concerns, to North Carolina that just limited non-WOTUS wetland protections, to Indiana where wetlands are disappearing despite efforts to protect them, it's anyone's guess what the future holds.

This past week brought many significant natural disasters across the world, coming on the heels of a really tough summer. It's enough to bring doom and gloom to anyone remotely paying attention to what's going on in the world. So here's a switch up from normal climate coverage. A small town in Portugal had quite the experience with flooding this week, and not for reasons you'd expect. A flood of red wine, 2.2 million liters to be exact, poured out of burst storage tanks at a distillery and flowed through the town. Luckily, no injuries were reported and responders were able to prevent the wine from contaminating a nearby river (there's your water nexus). The distillery's chief executive assured the public that no bad smells lingered because it was high quality wine that spilled. There's a glass half full perspective for ya.

Coming Up:

Tulane Environmental Law Summit, New Orleans, February 23 & 24, 2024 (save the date!)

Water jobs:

Senior Associate, Ocean Governance; Pew Charitable Trusts; Washington, DC

Water Program Policy Specialist, Arizona; The Nature Conservancy; Phoenix, AZ

Associate Attorney; San Francisco Baykeeper; Remote



The Tulane Institute on Water Resources Law and Policy is a program of the Tulane University Law School. The Institute is dedicated to fostering a greater appreciation and understanding of the vital role that water plays in our society and of the importance of the legal and policy framework that shapes the uses and legal stewardship of water.

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