

TUWaterWays

Water News and More from the Tulane Institute on Water Resources Law & Policy Authors: Christopher Dalbom, Mark Davis, and Haley Gentry May 19, 2023

Nutrient-Rich Reading

Do you find yourself pondering the dead zone in the Gulf of Mexico? Still searching for the perfect beach read for Memorial Day weekend? Look no further than this brand new white paper from the Tulane Institute on Water Resources Law & Policy! If you've been reading this newsletter for a while, you know that nutrient runoff and hypoxia are global issues, with the Mississippi River and Gulf Hypoxic Zone being somewhat of a poster child for the issue. The Mississippi River Basin drains 41% of the continental United States, including all or part of 31 states, as well as the country's most agriculturally productive lands. This large-scale problem requires a large-scale solution. As such, the paper explores potential avenues for interstate collaboration to reduce nutrient loads in the Mississippi/Atchafalaya Basin. So, while you sit on the beach and wonder what the future holds, you can take comfort in knowing there's a chance to make a better Gulf.

The Glass is Half Empty. The Glass is also Overflowing.

A <u>new study</u> found that water storage has declined in over half of the world's lakes. These <u>lakes and reservoirs</u> <u>store the majority of Earth's freshwater</u>, spelling <u>trouble</u> for pretty much everyone. Researchers also estimate that a quarter of the world's population lives in the basin of a drying lake. For anyone searching for a <u>silver lining</u>, some of this trend is offset by storage increases in areas getting more precipitation, like the <u>Upper Mississippi</u>.

<u>Last week's WaterWays</u> reported on the rare overabundance of water in the West. Record precipitation and snowpack levels have provided temporary relief from drought for parts of the region. But you know what they say, what goes up must come down. Now instead of record breaking precipitation, <u>it's record breaking temperatures</u> sending this melted snow down in cascades (and not just in The Cascades). <u>In Utah, officials are scrambling to prepare</u> for worsening flood conditions expected in late May into June. Various regions of the state are already at critical points in terms of soil saturation, and officials worry that more flooding will cause landslides. Earlier this week, state lawmakers convened for a <u>special legislative session where they set aside millions in funding</u> to monitor conditions and address damages.

Over in California, <u>Chevron's Bakersfield oil operations pose a toxic threat</u> to the surrounding area. The 10,000+ acre oilfield is sited on low-lying lands near Lake Isabella, a reservoir holding large amounts of water from Sierra Nevada snowpack. The Army Corps of Engineers is administering emergency releases of water to prevent the reservoir from <u>overflowing</u>. So far, the releases have not been large enough to cause issues, but as melting rates intensify, larger releases could flood parts of the oil field. When a flood inundates active oil and gas operations, wells and pipelines can be destroyed, which can lead to crude oil and other chemicals contaminating floodwaters. The risk for contamination is high, and the scope is expansive. One could hardly call the unfolding situation lucky, but flooding events don't often come with such advance <u>warning</u> giving time to mitigate worst-case scenarios.

Knowledge is Power

<u>In this economy</u>, it should probably go more like "access to information is power." Businesses are incorporating climate risk into investment and operations decisions. However, the trend of privatizing critical information often

leaves those who need it most in the dark. MIT just launched the STRESS tool which calculates and displays risk combinations for a wide range of factors, like air pollution, flood risk, and water quality, through the lens of various environmental equity metrics. It identifies areas that face greater economic hardship in the transition from fossil fuels. Spoiler alert—these areas are largely concentrated along the lower parts of the Mississippi River.

Yet when we have the necessary information, there often isn't a pathway to execute a plan. And the threats from sea level rise and subsidence on coastal communities are not hypothetical. In England, a rapidly eroding eastern coast threatens to destroy thousands of homes sitting on disappearing cliffs. Beach houses in North Carolina are literally falling into the ocean. Some propose moving the houses further back from the shore; others propose more rounds of beach nourishment in the hopes of slowing erosion. A less popular option? Create a buyout program and retreat from the outer banks. Many state and local governments now have programs dedicated to buyouts and voluntary acquisition—but nowhere near the size and scale needed to move communities out of harm's way. On top of that, the growing rate of people moving to risky flood plains in Florida and Texas makes you wonder if we will ever learn to plan ahead. Recent trends in population movement underscore the need for climate data to be treated as a public good, as well as the need for legal pathways to address emerging issues. However, convincing coastal residents to relocate will likely prove to be one of the more difficult challenges in the climate crisis. Which makes this plan to relocate Indonesia's sinking capital all the more ambitious.

Coming Up:

2023 State of the Coast Conference; May 31-June 2; New Orleans, LA

River Days of Action; June 8-18; Mississippi River

Water jobs:

Staff Attorney, Clean Water Program; Environmental Integrity Project; multiple locations

Multiple Associate Positions, Mitigation Program; Georgetown Climate Center; Washington, D.C.

Policy Coordinator; The Water Collaborative; New Orleans, LA

Legislative Director, Healthy Communities; Earthjustice; Washington, D.C.

Drinking Water Policy Coordinator; National Wildlife Federation; various Great Lakes offices

Lead Policy Advocate; James River Association; Richmond, VA



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.

> 6325 Freret Street, 1st Floor New Orleans, LA 70118 504-865-5982

> > tulanewater.org









