

TUWaterWays

Water News and More from the Tulane Institute on Water Resources Law & Policy Authors: Christopher Dalbom, Haley Gentry, Mark Davis, & Katie Moreland September 5, 2025

What leader will be the next to tackle the consequences of **Bienville's Dilemma**?

Water is the reason New Orleans exists. It's also the source of our greatest existential threats. Seems like the city's mayor should know what they're talking about when it comes to water. So, here is your weekly reminder that we are working with a coalition of organizations to put on the Mayoral Forum on Coast and Water for our city's mayoral candidates. It will be September 30th at the University of New Orleans. It's free to attend, and registration is right here!

What happens when the heat sink is already hot?

And not "hot" like Pedro Pascal hot, but "hot" like Pedro Pascal with yellow fever hot. Water has a really high specific heat capacity, and, given that it's the most abundant material on the planet, it's often the first place we look to when we need to get rid of thermal energy when we're doing really important things, like making electricity, or running data centers for AI, or making electricity to run data centers for AI. But when the water we want to use as a heat sink is already too hot, the problems begin to cascade. Given that it's the end of the summer in the Northern Hemisphere, it seems like a good time to check in on those problems. In the oceans, increased temperatures can be detrimental to marine life. It's happened at a massive scale off the North American Pacific Coast. Clownfish seem to have a shot at adapting to it, but the almost-as-charismatic benthic tunicates under Antarctic ice are in trouble. Some species, often invasive, take advantage of the changes. It's a good time to be a jellyfish, but not if you need the jellyfish-filled waters for anything else!

That warmer ocean water also fuels tropical storms more than ever, and we're lucky none have made it into the Gulf this year (yet). This country's (other?) third coast, the Great Lakes, are feeling greater heat waves, including Lake Erie this summer, where in other years the higher temperatures have combined with nutrient pollution to trigger toxic algal blooms that have made people sick where the Great Black Swamp once lay. Combine the heat and hazards with the outlook for industrial water use in the region from data centers, industrial-scale agriculture, and mining, and you've got yourself a Great Headache. Warmer water can affect people's health in a multitude of ways, too. In places where they're not prepared for higher heat (in the air, not just the water), thousands of people are dying from the heat. One of those places is Europe, where nuclear power supplies much of the electricity. Of course, nuclear power depends on cool water to absorb the plants' heat. Not enough cool water means not enough power. Ironic that an important source of carbon-free electricity is hamstrung by the carbon-fueled warming it was promised to help abate. Don't ya think?

Scientists observing the whole <u>magilla</u>, posit that there should be <u>water temperature regulations to balance</u> <u>biodiversity and energy security</u>. In the US and the EU, both, heat is a listed pollutant under clean water laws. And no wonder: besides all the harm to aquatic critters, water that is too hot can <u>increase the likelihood of spreading</u> <u>pathogens</u>, like <u>Legionella</u>, even in treated water. Of course, just having heat listed as a pollutant under the law doesn't end things. The laws can still be <u>over-permitted</u> and <u>under-enforced</u>.

Until we get a handle on regulating the causes of all this extra kinetic energy in the H2O molecules, <u>all the fish</u> will sing "<u>It's not the heat, it's the humanity</u>"

Coming Up:

Water jobs:

Mayoral Forum on Water & Coast; New Orleans, LA; September 30, 2025 Attorney IV; California Water Resources Control Board; Sacramento, CA

Editorial Director, Mississippi River Basin Ag & Water Desk; Columbia, MO

CRCL Coastal Stewardship Awards; Baton Rouge, LA; November 13, 2025



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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