

TUWaterWays

Water News and More from the Tulane Institute on Water Resources Law & Policy
October 21, 2022

[On Thin Ice and In Hot Water](#)

When it comes to climate change, we tend to be more concerned with—or at least more vocal about—water level than water temperature. Perhaps this is because, by 2050, there are projected sea-level changes of about 20 inches, while ocean temperatures may only change by less than 3 degrees. If your bath water changes by 3 degrees, you'll likely go unbothered; whereas if it changes by 2 feet—in either direction—you're having a completely different experience.

But when it comes to major waterbodies, even minor changes in temperature can have significant impacts distinct from water levels. For example, increasing [ocean temperatures are credited with more intense storms](#) like Hurricane Ian. And just this week, Alaska [canceled its snow crab season](#) after the [population suddenly declined by several billion](#) due to warming waters in the Bering Sea. Snow crabs require a cold water habitat to survive, but warming temperatures will also impact marine life habitat by altering ocean currents and raising [water acidification levels](#) (someone should let John Carpenter know the [scariest thing that can be released from ice](#) is actually carbon dioxide). This is especially true in places like the [Arctic that are warming at a much faster rate](#) than elsewhere and more rapidly than we had previously predicted. Unfortunately, the Arctic isn't in a position to [negotiate based on disproportionate climate impacts](#), although the rest of the planet would surely be on board if it wanted to withhold ice until the rest of us sort out a better solution.

And inland waterbody temperatures are essential too—[this summer we wrote about](#) Europe's struggles to keep nuclear power plants operating when rivers were too low and hot to provide adequate cooling. At least it was a learning experience, right? Based on [Louisiana's plans to keep building new projects that might only mask existing problems and require loads of cool water](#), it doesn't seem so.

Clean Water Act Turns 50

Can you believe it's been a whole 50 years since Congress thought, "We might have a water quality problem" when the Cuyahoga River caught on fire [for the umpteenth time](#)? They grow up so fast. In 1972, the Clean Water Act was passed to [restore and protect waterways that had served as waste receptacles for the Industrial Revolution](#), and in that sense, it has been largely successful at regulating the type of pollution that its drafters viewed as the greatest threat. But as CWA regulations have whittled away at industrial and municipal pollution from point sources, non-point sources have emerged as enduring threats. It's easy to view the [contamination of 83% of our rivers by "forever chemicals"](#) or the

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.

Coming Up:

[Restore America's Estuaries, 2022 Coastal and Estuarine Summit](#); December 4-8; New Orleans, LA

Water jobs:

[Project Manager, Louisiana Political Affairs](#); Environmental Defense Fund; Remote

[Assistant Professor of Marine Affairs: Fisheries Management and Policy](#); University of Rhode Island; Kingston, RI

[Restoration Programs Director](#); Coalition to Restore Coastal Louisiana; New Orleans, LA

[Regional Watershed Coordinator](#); Capitol Region Planning Commission; Baton Rouge, LA

[Water Quality Technician](#); Pontchartrain Conservancy; Metairie, LA

[Clinical Instructor](#); Tulane Environmental Law Clinic; New Orleans, LA

[Associate Attorney, Senior Attorney, and Paralegal](#); Earthjustice; Multiple Locations

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string of [eutrophic](#) patches along the Mississippi River culminating in a massive hypoxic dead zone in the Gulf of Mexico as failings of the CWA—except the CWA wasn't passed with those sources in mind. And while the CWA's purpose is not limited to regulating point source pollution, the context in which it was passed inevitably reflects limitations of its mechanisms.

Threats to the nation's waterways have changed with the times; for example, experts are now concerned that [climate change is going to lead to additional contamination from agricultural runoff](#). Apparently extra chemicals usually lay cold and dormant in frozen winter soils which then thaw out in the spring when plants are able to absorb last season's excess fertilizers and pesticides. However, less ice and more rain (as opposed to snow) will cause the ground to release these chemicals before any plants are [awake to suck them up](#). Is this a threat the CWA could address? Maybe. But perhaps what the problem really demands is a government that's [willing and capable of creating laws](#) for today's problems, instead of taking the same law and endlessly remodeling it until we're all just confused and basically right back where we started (*ahem* we're looking at you WOTUS...although now that we think about it, perhaps *Sackett* is just the CWA's [midlife crisis](#)).

A small fire on the Cuyahoga River prompted the passage of sweeping environmental legislation with nearly complete bipartisan support—impacts to industry be damned (thanks for doing your part, Cleveland!). With the U.S. facing massive ecological and public health challenges with increasing regularity and all too often no governmental response, it begs the question: How serious of an environmental catastrophe would have to occur for today's Congress to pass the CWA?

Grave Impacts

The Mississippi River is unprecedentedly [low](#). Low enough to create [foot paths to unique rock formations](#). Low enough to reveal [19th century shipwrecks](#). And low enough to expose [previously submerged human remains](#). You may recall earlier this year when human remains were also [discovered amidst the receding waters of Lake Mead](#). So, the lesson is that in an age of climate change, rivers are [unreliable places to dispose of bodies \(not that they were ever ideal\)](#).

But as it turns out, more traditional methods of burial aren't safe from climate change either. This is a harsh reality [Louisiana](#) and [Alaska](#) have been dealing with for years, and one that [Pakistan recently, after a summer of devastating floods](#), has lamentably become acquainted with. So, whether its due to not enough water or too much, climate change may soon force us to reconsider how we lay the dead to rest. And that might be a good thing, because the old system was never faultless. First of all, if overpopulation of the living is an issue, consider that there are an [estimated 15 dead people for every 1 living person](#). And even if there was unlimited space for burials, researchers have called out [cemeteries as a seriously problematic source of metal contamination](#) in soil. Plus, if you think cremation is a viable alternative, keep in mind that a single cremation releases [equivalent levels of carbon dioxide as a 500-mile road trip](#).

This wouldn't be the first time humans [altered funerary customs in response to environmental change](#). And while on the one hand our burial practices are often noted as a key [distinguisher between humans and other species](#), maybe distinguishing ourselves too much from nature, and halting natural processes, is a big part of what has gotten us into such hot water in the first place.

Tulane Environmental and Energy Law Summit—[It's Baaaaack!](#) Mark Your Calendars, March 17 and 18, 2023

Spring was less spring-like since COVID-19 relegated America's favorite student-run environmental conference to being a mostly virtual affair. Those were still great and there is much to be said for doing things virtually but there is no substitute for doing some things in person. So, write it down and make plans to be at hand. More details to follow.