

TUWaterWays

Water News and More from the Tulane Institute on Water Resources Law & Policy March 10, 2023

Nutrients: Can't Live With 'Em, Can't Live Without 'Em

Phosphorus, a chemical element fundamental to life on Earth, <u>could very well lead to our demise</u>. It is a critical component of crop yield and is literally in our DNA. However, unlike other essential elements, phosphorus exists in limited quantities—and we very well might run out of it in the foreseeable future. On the flip side of scarcity is the threat of excess phosphorus in our waterways, as evidenced by the increase of harmful algal blooms and <u>growing dead zones</u>, like the one in the Gulf of Mexico. Scientists warn that, without action, our current practices could lead to a planet-wide marine dead zone. Which is cause for <u>alarm</u>, given that federal law does little to address nutrient runoff, and also given <u>current efforts to roll back clean water protections</u>.

We can't stop phosphogedden overnight, but we can arm ourselves with knowledge—which is why we're sharing all these phosphorus facts in the first place! Let us present... the Nutrient Pollution Case Tracker!! This new site is a project of our Institute and provides an up-to-date collection of case law on nutrient pollution legal strategies in the Mississippi River Corridor. If reading litigation documents isn't your thing, the site has various resources for anyone, anywhere, interested in reading up on the issue. It's even got science! If you see something missing on there, let us know & we'll be happy to add it!

It's Sedimentary, My Dear Watson

Time for a Marsh Madness challenge: can you guess which human activity has contributed most to land loss in Barataria Basin? A <u>new study</u> of the area explores the respective contributions of three human activities on coastal land loss—damming rivers, building levees, and extracting resources. Spoiler alert: resource extraction tops the list. That probably comes as <u>no surprise</u>, but other findings caught our attention. Modeling data suggested that damming rivers has had much less of an impact than previously thought.

This finding potentially alleviates concerns regarding the future of the Mississippi River Delta. To build land, there must be enough suspended sediment flowing with the water, so insufficient sediment availability has been a limiting factor in planning costal restoration projects. This is still true, but it may be less of an obstacle than we once thought. Now that the final <u>funds have been approved for the Mid-Barataria sediment diversion</u>, we'll see just what Mississippi River sediment can do to rebuild the Basin.

High Stakes on the High Seas

Don't panic, we're not referring to sea-level rise (at least this time around)! In a big win for oceans, a majority of countries agreed on language for a <u>United Nations treaty aimed at protecting ocean biodiversity</u>. Until now, there hasn't been a mechanism to protect waters beyond national boundaries, commonly called high seas, which extend about 200 nautical miles offshore. The legally binding agreement will set up a framework to manage marine life in designated protected areas and require environmental reviews in advance of commercial activities in international waters. Negotiating the language wasn't easy, and individual countries still must adopt and ratify it. Still in the mix

are discussions of <u>deep sea mining</u> and which nations get access to valuable ocean resources if discovered. Once in motion, the treaty will be essential to achieving goals set at the <u>Biodiversity COP15 back in December</u>, namely protecting 30% of oceans by 2030.

Wondering why protecting the <u>ocean</u> is so important? First is the fact that <u>oceans absorb excess heat and carbon dioxide</u> from the atmosphere. While softening the blows of climate change for the rest of us, oceans have become warmer and more acidic, which threatens delicate ecosystems. And the effects aren't contained to the remote ocean. Many of our familiar coastal species spend a considerable amount of time in the high seas, meaning fisheries and habitats will be impacted by the health of our oceans. It's all connected.

From the depths of the sea to galaxies <u>far far away</u>, water defines our past, present, and future. Ever wonder how old Earth's water is or where it came from? Astronomers have made big strides in piecing together the origin of Earth's water. <u>Recent findings</u> strongly suggest that our water comes from <u>interstellar</u> dust grains—meaning our <u>water might be older than the Sun</u>. As it turns out, the answer really was in the stars—Orion's belt, to be precise. A gaseous cloud surrounding a young star over 1,300 light-years from Earth provided the missing link in the chain of water history. Now with a completed lineage from ancient <u>galactic</u> bodies to water, H₂O's origin story can be made into a blockbuster hit.

Feeling Lucky?

The <u>28th Annual Tulane Environmental Law & Policy Summit</u> is just around the corner! The Summit will feature 14 panels over 2 days and a Friday evening <u>keynote speech by Ryan RedCorn</u>: artist, comedian, and screenwriter for the FX series *Reservation Dogs*. We hope to see you at Tulane Law School March 17 and 18. <u>Haven't registered yet</u>? Not to worry! In addition to <u>good times</u>, CLE credit is available. <u>St. Patrick</u> might try, but he can't top everyone's favorite student-run environmental law conference.

Coming Up:

Cookoff for the Coast; March 11; New Orleans, LA

28th Annual Tulane Environment Law & Policy Summit; March 17-18; New Orleans, LA

Blue Carbon Law Symposium; May 17-18; Athens, GA

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

Water jobs:

Coastal Organizer; Healthy Gulf; Multiple Locations

<u>Assistant General Counsel – Water</u>; Sandia Resort & Casino; Albuquerque, NM

<u>Associate Attorney, Senior Attorney, and Paralegal</u>; Earthjustice; Multiple Locations

Legal Fellow; Bayou City Waterkeeper; Houston, TX

Policy and Partnerships Manager; Bayou City Waterkeeper; Houston, TX

Legal Director; Orange Country Coastkeeper; Costa Mesa, CA

Program Director; Restore America's Estuaries; Long Island Sound

Governor's Fellows Program; Baton Rouge, LA



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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