

TUWaterWays

Water News and More from the Tulane Institute on Water Resources Law & Policy
May 29, 2020

PFAS is the New WOTUS

Not so PFAS! Nothing can replace WOTUS in our hearts and minds. But, it does seem like every week we are talking about PFAS or WOTUS (or both if you're lucky) because both topics are so important. This week is no exception. The moment you have all been waiting for has arrived: [we are publishing a paper about PFAS to provide background information on PFAS and the EPA's recent proposal to regulate two types of PFAS—PFOA and PFOS](#). As a reminder, public comments on the EPA proposal are due by June 10, so we encourage you to review our handy-dandy PFAS primer for inspiration and then [submit your own public comments](#).

It's the Most Worrisome Time of the Year

In addition to serving as [National Olive Day](#) (who knew?), June 1 marks the official start of hurricane season, which runs until November 30. However, hurricanes apparently do not care about sticking to our schedule: Tropical Storm Arthur already passed along the North Carolina Coast on May 18 — a full two weeks before the official start of hurricane season. Additionally, Tropical Storm Bertha [made landfall](#) in South Carolina on Wednesday! This marks the sixth year in a row that a named storm has formed in the Atlantic Ocean before June.

On May 21, the National Oceanic and Atmospheric Administration (NOAA) released its [forecast](#) for this year's hurricane season, which predicts a 60% chance of an above-normal season, a 30% chance of a near-normal season, and only a 10% chance of a below-normal season. Specifically, NOAA expects a range of 13 to 19 named storms (winds of 39 mph or higher), of which 6 to 10 could become hurricanes (winds of 74 mph or higher), including 3 to 6 major hurricanes (category 3, 4 or 5; with winds of 111 mph or higher). NOAA provided several factors for its prediction of an above-normal season. Specifically, Pacific ocean sea surface temperatures are expected to either remain neutral or to trend toward La Niña (the cold phase), which means that there will not be an El Niño (the warm phase) present to suppress hurricane activity. Additionally, in the Atlantic Ocean and Caribbean Sea, warmer-than-average sea surface temperatures are coupled with reduced vertical wind shear, weaker tropical Atlantic trade winds, and an enhanced west African monsoon season. According to NOAA, such conditions have been producing more active hurricane seasons since the current high-activity era began in 1995.

Of course, being in the midst of a global pandemic will further complicate this year's hurricane season. Recently, the Federal Emergency Management Agency ("FEMA") released the "[Pandemic](#)

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 less stewardship of water.

Coming up:

[Public Comment Deadline re: DEQ Proposed Portland Harbor Source Control Decision](#); May 29

[Public Comment Deadline re EPA's Proposed 2020 NPDES General Permit for Stormwater Discharges Associated w/ Industrial Activity](#); May 31

[Strategic Communications: H2O Virtual Event](#); June 1-2

[ELI Summer School Webinar: An Introduction to Careers in Environmental Law and Policy](#); June 2

[Recovery & Resilience in Puerto Rico and the U.S. Virgin Islands: Federal Support & Local Action](#); June 2

[Recovery & Resilience in Puerto Rico and the U.S. Virgin Islands: Resilient Housing & Communities](#); June 3

[Neotectonics and Subsidence Expert Panel with Dr. Frank Tsai, LSU](#); June 3

[Dealing with Disruption: Operationalizing Resilience in the Water Sector Webinar](#); June 3

[CPRA Facebook Live Webinar: River Reintroduction into Maurepas Swamp](#); June 3

[Recovery & Resilience in Puerto Rico and the U.S. Virgin Islands: Sustainable, Democratic Energy and Public Health](#); June 4

Water jobs:

[Attorney Adviser](#); EPA; Seattle, WA

[Program Coordinator](#); Internet of Water at Duke University's Nicholas Institute for Environmental Policy Solutions; Durham, NC

[Policy Specialist](#); Massachusetts Rivers Alliance; Cambridge, MA

[Senior Legislative Counsel/ Representative](#); Earthjustice; Washington, D.C.

[Senior Manager, Flood-Prepared Communities](#); Pew Charitable Trusts; Washington, D.C.

[Staff Attorney](#); Waterkeepers Chesapeake; Takoma Park, MD

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[Operational Guidance for the 2020 Hurricane Season](#),” which is designed to help emergency managers and public health officials prepare for disasters during COVID-19. The guidance document differs from typical FEMA advice, which urges evacuations. Instead, the guidance document states: “Due to limited space as a result of COVID-19, public evacuation shelters may not be the safest choice for you and your family. ...Only evacuate to shelters if you are unable to shelter at home or with family or friends.” Further, the guidance document suggests: “Unless you live in a mandatory evacuation zone, it is recommended that you make a plan to shelter-in-place in your home, if it is safe to do so.” If all of this were not stressful and biblical enough, in addition to the appearance of giant murder hornets in the Northwest U.S. earlier this month, news has broken this week that millions of [cicadas](#) are expected to emerge after 17 years underground. This is shaping up to be a [cruel summer](#), a [cruel summer](#) indeed.

[Don't Eat the Yellow Green Snow](#)

After gathering satellite data and on-the-ground measurements in Antarctica between 2017 and 2019, scientists have created the first large-scale map of green snow algae and their movements. In a [study](#) published in the journal *Nature Communications*, the scientists explain that green snow alga is microscopic when measured individually. Yet, when the organisms grow simultaneously, they turn the snow bright green, and they can even be spotted from space. While the algae need wet snow to grow, the researchers warn that the organisms will be able to expand as global temperatures increase, such that the warming temperatures might create more “habitable” environments for the algae. The concern surrounding the algae’s spread is that an increase in the blooms could result in further snow melt in the region. As the lead scientist [explained](#), the algae is “very dark -- a green snow algal bloom will reflect about 45% of light hitting it whereas fresh snow will reflect about 80% of the light hitting it, so it will increase the rate of snow melt in a localized area.”

In other algae-related news, for the first time in nearly twenty years, the EPA has issued [draft recommendations](#) regarding the nation’s ambient water quality criteria recommendations for nutrients in lakes and reservoirs. Instead of setting a single numerical limit for nitrogen and phosphorous, the draft recommendations provide models of total nitrogen and phosphorus concentrations in lakes and reservoirs to protect aquatic life, recreation, and drinking water. The EPA said that states, territories, and tribes may consider adopting the criteria from the draft recommendations into their water quality standards. Excess nitrogen and phosphorus in water depletes oxygen, which harms aquatic life and can result in fish kills, and it can also stimulate the excess growth of nuisance algae, such as cyanobacteria that are toxic to animals and humans. The EPA’s issuance of the recommendations kicked off a 60-day public comment period, which ends on July 21, 2020. Don’t be shy—[submit comments!](#)

Knowledge is Power

A new [study](#) published in *Science Advances* states that [Louisiana’s wetlands have passed a tipping point](#): the remaining 5,800 square miles of Louisiana’s coastal wetlands in the Mississippi River delta will disappear due to increasing rates of sea level rise fueled by global warming. The study finds that the only remaining question is exactly how soon the wetlands will disappear. At rates of 3 millimeters of sea level rise per year, it would take a few centuries. The average global rate of sea-level rise between 2006 and 2015 was about 3.58 millimeters a year, but that does not include local subsidence rates along Louisiana’s coast. One of the authors of the study, Tulane’s own Torbjörn Törnqvist, does not believe it is a reason to give up. Rather, our actions, such as reducing greenhouse gas emissions and executing Louisiana’s Coastal Master Plan, can keep wetlands destruction in check to at least slow the rate of loss. In fact, Bren Haase, executive director of the state’s Coastal Protection and Restoration Authority, said that the 2017 update of the Coastal Master Plan estimated sea level rise alone through 2067 would range from a low of 8.6 mm per year to a high of 16.6 mm – higher than the assumptions the paper uses. Moreover, he said that the state already has begun work on the 2023 Master Plan update, and the new study will be considered in that effort. Knowing what is happening and preparing are huge steps in the right direction, so keep a glass half full attitude!