## **TUWaterWays**

Water News and More from the Tulane Institute on Water Resources Law and Policy October 19, 2016

#### The Hurricane and the Damage Done

Has anyone learned anything? Will anyone? Last year, a massive rainstorm fell on South Carolina, and widespread flooding and water infrastructure failures followed (sound familiar, Louisiana?). So, one year later, how did South Carolina's dams and infrastructure fare during and after Hurricane Matthew? Not great, Bob! At least 25 dams cracked, ruptured, and failed during the storm. This is after the legislature increased funding for the Department of Health and Environmental Control's dam safety program, but lawmakers failed to actually empower the program to exercise greater oversight and control of the state's dams. And so, the state continues to pay for decades of dam building and maintenance without regulation or oversight. As one Columbia, SC lawyer put it, "there's no education in the second kick of a mule," so it might be unwise to anticipate a redoubling of efforts to solve the state's dam problem.

Although South Carolina might not have learned fast enough from its dam failures, emergency planners are crediting <u>lessons learned</u> from Hurricane Katrina with improving the response to Matthew across the several states it impacted.

Maybe after this storm, states and their citizens will learn a few things about coal ash ponds and animal farms and how to keep them away from flood waters. Thousands of hog, chicken, and turkey farms in eastern North Carolina were flooded by Matthew. As a result, thousands of pigs and millions of birds drowned, and countless gallons of waste from lagoons spilled out of their ponds and mingled with floodwaters. In addition to the excrement, bacteria, and chemicals from the farms, floodwaters also washed out at least one coal ash pond.

Whether or not Matthew was "climate change powered" is a difficult connection to make, though during the storm the Atlantic was warmer than in the past, and rising sea levels do increase the height and extent of storm surges. What is clear is that Matthew hit Haiti in a much, much worse way. What is also clear is poorer countries, like Haiti in this case, are expected to take the brunt of climate change's worst impacts.

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 stewardship of water.

## Coming up:

## **CPEX 2016 Louisiana Smart Growth Summit**

Baton Rouge, LA November 1-2, 2016

The 19<sup>th</sup> Annual Conference on Litigating Takings Challenges to Land Use and

**Environmental Regulations** 

New Orleans, LA November 4, 2016

RAE/The Coastal Society Summit on Coastal

and Estuarine Restoration

New Orleans, LA December 10-15, 2016

## Water jobs:

Water Program Senior Research Associate
The Pacific Institute
Oakland, CA

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#### Water's Rising Even When Rain Isn't Falling

Sunny day floods. It's not an <u>indie rock</u> band, but an increasingly common phenomenon where things like winds and king tides inundate infrastructure and buildings. <u>Areas of South Florida</u> just recently spared the worst of Hurricane Matthew have flooded this week thanks to that big, bright <u>hunter's supermoon</u> and the <u>king tide</u> it brought with it. Miami is scrambling to build the infrastructure necessary to keep up with the rising tide, but every year it's getting worse. Tidal flooding has increased by 400% in the last decade. Meanwhile, sea level rise means that king tides and strong winds have led to sunny day floods all around the country at a rate never before recorded. So before your next trip to the coast, check the lunar calendar, not just the weather. And those of us in the coastal zone better pay attention to the lunar calendar every month from here on out.

#### Islands Might Lose Their Freshwater Before The Salt Water Overtakes Them

Within an island, out in the ocean, rainfall gets absorbed into the island's rock/sand/soil where it sits above the surrounding and/or underlying saltwater. So, when sea level rises, it rises the level of the saltwater within the island, as well. According to a new <u>study</u>, when that happens the freshwater can get pushed to the surface where it evaporates much more quickly, leaving the island with even more limited freshwater supplies – dried out like a forgotten piece of bread pudding left on the counter overnight.

## Going All In on Water – This is Nothing Like The Concentrated Frozen Orange Juice in Trading Places, Right?

Dr. Michael Burry is known for two things: being one of the first investors to see the housing bubble coming, and playing some sweet, sweet, heavy metal drums. While he's no longer betting on housing, he is now heavily investing in water (presumably, he's still pounding the skins). What does that even mean? Well, water being a highly regulated and often public thing, it's a bit different than investing in other things on the commodity market. Investors have identified three ways of investing in water: buying water rights, owning a stake in infrastructure, and investing in water industry technology. In Europe, there are already nine water-focused funds, and one is being launched in the US soon. Oddly, none of these funds seem to be investing in this Institute.

### **One Last Call for Infrastructure Songs**

We will be unveiling our latest water-themed playlist next week. A couple of months ago we asked for all your favorite songs featuring dikes, dams, canals, levees, and more. You've suggested several and we've found loads more. For instance, did you know that songs about the Erie Canal are a whole thing unto themselves? Neither did we! If you've got any last-minute additions, we'd love to get them at <a href="mailto:cdalbom@tulane.edu">cdalbom@tulane.edu</a>. We look forward to sharing the playlist next week.