TUWaterWays

Water News and More from the Tulane Institute on Water Resources Law & Policy

November 14, 2019

Why is the **Rum** Water Gone?

The western part of the United States is not exactly known for being rich in water resources, and consumptive water use for hydraulic fracturing (fracking) can contribute to that strain on water resources even more. This industry's consumption has gone from about one billion gallons of water in 2011 to 84 billion gallons in 2018. And, because of the major fracking increase in recent years, population in some of these water-deprived areas has risen significantly, causing even more water resource usage. So, naturally, cities like Midland, TX and Odessa, TX are selling their waste water to these oil and gas companies, thus creating a market for wastewater. For example, Pioneer Natural Resources spent \$130 million to upgrade Midland's water treatment facility in order to purchase waste water from them for up to 40 years. This could be a good solution, as that water is unfit for human consumption, and this allows the industries to rely less on deep aquifer water use (though what was the utility doing with the water before? Injecting it back into the aquifer?). But the oil and gas companies still need more water than cities are selling them; that waste water makes up only about five of 21 million gallons of water used daily just by Pioneer for fracking. Further, it still can affect the water cycle because it's still removing that treated municipal waste water from the system. So, what's next? No, we're really asking.

Skol, Southwest!

Perhaps one solution for the lack of water in the western states is to sell groundwater on the free market. Wait a minute, we've seen a similar idea fairly recently... Either way, last week a Minnesota corporation submitted a proposal to the state's Department of Natural Resources ("DNR") to pump groundwater from the Mt. Simon-Hinckley aguifer and transport it via railroad to be sold in western states. The corporation proposed to install two pumps on property that it owns, which would pump and sell up to 500 million gallons of water annually. However, Minnesota DNR stated that, although the proposal is in very early stages, it very likely will not be permitted, because it will not meet statutory restrictions on use of the aguifer. These restrictions limit pumping of the aquifer only for drinking water (drinking water for anyone or only for Minnesotans?), and only when there is no other feasible source. However, the DNR's deputy commissioner stated that if the corporation modified their proposal to change the source of the water (to the Mississippi River, perhaps) it could make it more likely to be permitted, but as it stands, the commissioner sees, "virtually no scenario" in which the permit would be granted as the proposal is currently written.

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:

Anthropocene River Campus: The Human Delta November 10-16; New Orleans, LA

<u>Seventh Annual HBCU Climate Change Conference</u> November 13-16; New Orleans, LA

ResCon Session Proposal Deadline; November 15

<u>Virginia Coastal Policy Center Resilience Conference</u> and <u>Virginia Aquaculture Conference</u> November 15 and 16, 2019; Williamsburg and Newport News, VA (respectively)

A Studio In The Woods FORESTival: A Celebration of Art and Nature

November 16; Algiers, LA

Oyster Shell Bagging November 16; Buras, LA

GNO's Water Fall Fest: A Climate Solutions Festival November 23; New Orleans, LA

Water jobs:

Attorney

State Water Resources Control Board; Sacramento, CA

Postdoctoral Fellowship in Climate Change Law; The Sabin Center for Climate Change Law at Columbia University; New York, New York

<u>Project Associate</u> or <u>Project Manager</u>
Washington Water Trust; Seattle & Ellensburg, WA
(respectively)

Postdoctoral Fellowship

National Socio-Environmental Synthesis Center (SESYNC); Annapolis, Maryland

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From Six Feet Under to Buried at Sea

Climate change and the projected sea-level rise that accompanies it affect even those in the afterlife. An incredibly <u>macabre</u> implication of sea-level rise and storm strengthening is <u>cemetery flooding</u>, including in Louisiana where caskets stored above ground have already displayed the capability to <u>float away</u>. (And, understandably, not everyone is as into this idea as <u>Jack Gellar</u>). We've seen <u>buyouts</u> and <u>relocations</u> for particularly vulnerable communities; but what are the options for communities who are literally voiceless and entangled in a complicated legal and social web with seemingly no viable solutions? And how should we deal with them? Louisiana isn't the only place where this is a problem; flooding and sea-level rise cause erosion which uncovers graves all over the U.S. and the world.

According to *Scientific American*, "a unique blend of legal, financial, and social issues all but doom any solution." Changes for new cemeteries and burials may be the only options, as it's probably too late for older ones. Cemetery relocations would cost an exorbitant amount of money and would be extremely logistically and socially difficult. Some Louisiana cities have begun the switch to using underground graves (although that will come with its own set of problems, but they can be hidden away for future generations to deal with), and South Carolina is exploring stricter regulations for cemetery operators (such as requiring deeper grave sites). Singapore, one of the most densely populated countries in the world, began incentivizing cremation over burials in the 1970s to save land for the living. And, here in the United States, cremation can incorporate the sea for those who may want it, as long it fits within the EPA's guidelines! As coastlines shrink, land mass is lost, and flooding events increase we will need to explore more viable solutions for the dead, along with those for the living. After all, we wouldn't want any spookiness to be unearthed.

Closed for Cleaning

On a livelier note, the Faroe Islands, a collection of volcanic islands known for outdoor tourism (because, well, look at them), will be closed off to tourism for a weekend in 2020 (April 16-17) to focus on conservation and environmental clean-up. The Islands will still allow tourists in if they are willing to volunteer with the clean-up efforts. Hotels will stay open and flights will still run, but all of the usual touristy areas will be closed off, and the islands will only take in 100 volunteers to visit those areas. Most of the 2020 projects relate to clean-up around hiking paths and marking paths more clearly to keep the surrounding wildlife and environment safe, but there are also some cute ones like initiatives to improve the livelihood of puffins (whose numbers on the Islands have dwindled in recent years due to hunting and sea temperature increases) and other birdlife in the area. Last year was the first time the Islands "closed off" for a conservation clean-up, and it was so popular and successful that they have decided to do it annually. Thousands of applications were submitted to volunteer last year, so if you're interested in being one of the 100, you should get on it!