

TUWaterWays

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

The boundaries of one's property rights can be complicated and controversial. To make matters worse, there is a consensus in the legal community that likening these property rights to a metaphorical bundle of sticks is the best way to help make things less confusing. The metaphor is intended to help us imagine different property rights that we have as one stick in the bundle of sticks. For example, as a home owner, your right to exclude people from your property, your right to transfer your property, and your right to be free from unreasonable nuisance on your property each constitute one stick. (Why is it is stick? Don't overthink it, but don't get stuck humming [Stairway](#), either.) You don't, however, have a stick that allows you to prevent the police from entering your property in an emergency nor do you have a stick that allows you to violate the law on your property.

When it comes to our private property, the government, and floodwater, what rights do we have? The U.S. Court of Federal Claims has issued [a ruling](#) about it and has ruled that landowners may pursue takings claims against the Army Corps of Engineers for flooding in the Missouri River Basin caused by changes in water management intended to protect endangered species. A second phase of litigation will determine the extent of landowners' losses and whether the government has a viable defense against the claim that it took private property without just compensation. By nature, the Missouri River is wide and meandering, with flooding common and widespread due to spring and summer snowmelt and rain. But beginning in 1967, the Army Corps began controlling the river with six dams and reservoirs. As part of its management scheme, the corps installed structures such as pilings and rocks to direct water toward the center of the river. The actions had the effect of narrowing and deepening the main channel, and extending dry land into what was previously the watery river's edge. While the Army Corps' actions made navigation easier, the agency also degraded habitat for fish and wildlife. So, after action by Congress and litigation by nonprofit groups aimed at forcing the government to address the ecosystem damage, the Corps in 2004 and 2006 issued master manuals that changed its management of the river. The management changes allowed the Corps to keep more water in reservoirs for wildlife, modify water-control structures and reopen previously closed chutes to create more shallow-water habitat. But those actions also raised water levels during periods of high flow.

Issues of flood water, property damage, and government flood control projects are here to stay. While the property law of takings is

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:

March 27-28, 2018

[The 12th Annual Louisiana Water Conference](#)

Baton Rouge, LA

Water jobs:

[Coordinator](#)

Raise the River Coalition
Not location specific

[Environmental Program Manager](#)

Apple
Santa Clara, CA

[Wisconsin Water Resources Science-Policy Fellow](#)

Society for Freshwater Science
Madison, WI

[Water Policy Analyst](#)

Kyl Center for Water Policy
Phoenix, AZ

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not the only path to restitution for those who are injured, it does seem to be super-duper [popular](#) right now.

[Moisture Recycling](#)

From the research team that coined the term “precipitationsheds” to refer to a watershed of the sky that identifies the origin of precipitation falling in a given region, comes a [new study](#) showing that 19 of the 29 largest cities in the world depend on evaporation from surrounding lands for more than one-third of their water supplies. The study explored the various changes taking place in the precipitationsheds of these cities and exposed vulnerabilities that come with dependency on moisture recycling. Moisture recycling occurs when water evaporates from the land and rises up into the atmosphere. This moisture then flows along prevailing wind currents through the atmosphere, falling out as precipitation elsewhere. Cities that are most dependent on this type of recycling include Karachi, Pakistan, and three cities in China: Shanghai, Wuhan and Chongqing. At the opposite end of the scale, the research team found the cities with the least vulnerable moisture recycling include Cairo, Egypt; Paris, France; and Chicago, United States. This study highlights that what we do on land influences a whole branch of the water cycle. When we change the amount or timing of evaporated water that flows up into the atmosphere in one place, we may be impacting other places and people.

Tony Stark’s Water Management Style

Seven years after the nuclear disaster, Fukushima still has a big contamination problem. For the past eight months, Tokyo Electric Power Co has been operating an “[ice wall](#)” that is intended to protect groundwater resources from the radioactive melted fuel at the Fukushima Dai-ichi nuclear plant. Although reminiscent of a [comic book solution](#), the “ice wall” is actually a one mile long and one hundred feet deep frozen soil barrier. Unfortunately, this wall was not as effective as many had hoped and an average of 141 metric tonnes a day of water has seeped into the reactor and turbine areas. It is estimated that the ice wall is reducing water flows by about 95 tonnes a day. The toxic water must be pumped out, decontaminated and stored at Fukushima however, this storage space will likely run out by early 2021. Maybe some sort [vibranium](#) tech out of [Wakanda](#) will help us preserve these groundwater resources.

12th Annual Louisiana Water Conference

March 27 and 28. The place Baton Rouge, Louisiana. The venue, LSU’s Energy Coast and Environment Building. The reason? The 12 Annual Louisiana Water Conference, of course. Cap off your month with a trip to the Red Stick and hang with some of coolest kids on the block and learn something to boot. Click [here](#) for more information.