# **TUWaterWays**

Water News and More from the Tulane Institute on Water Resources Law and Policy November 24, 2015

#### Thankful for Water

Let's talk turkey. Did you know that a 20 lb bird requires about 10,000 gallons of water to produce? Or that one single stick of butter requires 100 gallons of water? If you're following Paula Deen's Thanksgiving recipe, that's over 1,000 gallons just for butter. Another major culprit is that can of cranberries, grown in bogs that require abundant water. All told, a typical Thanksgiving meal can require 20,000 to 40,000 gallons of water to produce. As you sit down to enjoy Thanksgiving dinner with your loved ones this Thursday, remember to give thanks for all the water that went in to making the meal possible.

#### **How Green Was My Wave**

School spirit runs high at the Tulane Institute on Water Resources Law and Policy, where the Tulane Green Wave rolls. But this week we have to give a big tip of the cap to another (unaffiliated) GreenWave that's making a splash. Bren Smith, executive director of GreenWave, recently won the Fuller Challenge with a proposal for the world's first multi-species ocean farms. The Fuller Challenge is hosted by the Buckminster Fuller Institute, named after the architect, author, and Mensa president who was a visionary and innovator in the 20th century. Smith is a lifelong fisherman whose disillusionment with commercial fishing pushed him to "reimagine the role of the fisherman from hunter-gatherer to ocean entrepreneur growing food, fuel, and fertilizer for local communities." GreenWave's 3D ocean farms grow seaweed, scallops, and mussels on floating ropes tethered to oyster and clam cages below. These species naturally filter ocean water and the farms produce valuable crops while restoring ecosystem functions. GreenWave's farms can produce food, fertilizer, animal feed, even biofuels and pharmaceuticals, all while providing habitat for marine species. Additionally, kelp is believed to have better carbon sequestration potential than land-based plants. Basically, growing food is better down where it's wetter (take it from me). GreenWave hopes to usher in a new global era of sustainable aquaculture. They've made their model available, through open-source manuals, to potential ocean farmers around the globe.

#### **Thankful for American Ingenuity**

Americans have invented plenty of great and wondrous things over the years. We've also come up with some pretty inane

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:

State of the Coast: Call for Abstracts and Session Proposals

Open until Nov. 30, 2015

## Water jobs:

Clean Water Advocate

**Environment America** 

### **Habitat Restoration Program Coordinator**

Coalition to Restore Coastal Louisiana Baton Rouge, LA

#### **Virginia Energy Attorney**

Southern Environmental Law Center Charlottesville, VA

#### **MRD & Natural Infrastructure Economist**

(Two Year Postdoc Position)
Environmental Defense Fund
Washington, DC, New York City, or Boston, MA

<u>Tennessee Clean Water Network Staff Attorney</u> Knoxville, TN

#### **CWPPRA Public Outreach Coordinator**

USGS Wetland and Aquatic Research Center Lafayette, LA

# Tulane Institute on Water Resources Law & Policy

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and goofy items (looking at you, <u>snuggies</u>, <u>cat wigs</u>, and <u>Ctrl+Alt+Del wands</u>). Somewhere along that spectrum is <u>skarping</u>, the latest watersport craze. If necessity is the mother of invention, skarping comes from a different branch of the family tree, maybe the offspring of boredom? Or maybe we didn't know how much we needed it until now. A skarper waterskies behind a boat while wearing a football helmet, uses a net to catch leaping Asian carp, and dunks them into a basketball hoop, also being towed by the boat. Nathan Wallick, the "<u>Godfather of Skarping</u>" came up with the idea after he and his friends kept getting beaned by jumping carp while waterskiing. They started out using bats and pitchforks to swat the fish away, and it evolved into this competitive sport of kings. One point for dumping the fish from the net into the hoop, two points for a dunk, <u>America wins</u>. (Editor's note: upon further review, <u>cat wigs are fantastic</u>).

#### In Hot Water

I ran to the sea, it was boiling. OK, not really, but pretty close. A band of water in the central Pacific registered 85.5 degrees Fahrenheit, 5.4 degrees warmer than average for this time of year. Warm water in the equatorial Pacific fuels moist air that sets off a pattern of extreme weather known as El Nino. That 5.4 degree gap between average and current temperatures marks a new high since they started recording the variation 25 years ago. The previous record was set in 1997, when oceans 5.1 degrees warmer than average precipitated record rainfall in the 1997-1998 El Nino. Storms that season caused 23,000 deaths and \$35 billion in damages around the world. In the United States alone, "severe weather events included flooding in the southeast, an ice storm in the northeast, flooding in California, and tornadoes in Florida." Every kind of rain there is can be expected across the country this time around. For California, the precipitation could be a godsend in the midst of a historic drought. It might also be disastrous if the precipitation comes as winter rain and not snow. Snowpack in the Sierras is stored and released in manageable amounts as spring sun thaws the slopes. Warmer rain, however, comes rushing down all at once, causing floods. This year, there's also an acute potential for severe mudslides, as record wildfires have depleted slope vegetation that would otherwise lock soil in place. The silver lining is that El Nino is usually preceded by some truly mondo waves all along the western edge of the Pacific. Call up Johnny Utah and Bodhi, we're gonna get so pitted.

#### **Many Rivers to Cross**

While Americans are breaking new ground on throwing carp through Little Tike basketball hoops, folks over in Slovenia are dealing with the age old problem of what to do when your wagon reaches a river. Historically, as we all know, choices have been limited. You can attempt to ford the river, caulk the wagon and float it, take a ferry across, wait, or get more information. Well a few landlubbing Ljubljanan's didn't like any of these options, opting instead to build their own inflatable ferries. The Ferryboat is an inflatable raft made of hypalon that weighs about 660 lbs. It inflates in five minutes using an electric air pump that can be attached to a solar array for full self-sufficiency. Once inflated, the ferryboat can support up to 11,000 lbs, enough to carry a small or mid-sized vehicle (and passengers). So next time you take your babica from Kamnik to visit her računovodja over in Tolmin, bring along your own ferry, and cross the Sava in style.