

# TUWaterWays

Water News and More from the Tulane Institute on Water Resources Law & Policy  
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## Without Trees, the Water Cycle Doesn't Cycle So Much

Deforestation impacts far away agricultural zones and megacities where they're finding that precipitation [don't get around much anymore](#). Evidence of the link between [deforestation and climate change](#) is growing stronger. Researchers recently published a [study](#) that found tropical forests to have cooling properties that go beyond carbon sequestration; the three major tropical rainforest areas play a major role in disbursing water into the atmosphere to such a level that their deforestation can impact precipitation a continent away. A second recent [paper](#) examines the need for water and land-use policy not to get bogged down on the local catchment-based idea that forests limit water availability. Tree roots suck water out of the ground, and tree leaves spew water into the atmosphere, it's true. But on a local level, they reduce temperature by shading the ground and by cooling the air through the evapotranspiration itself. And on a regional and global level, it's becoming more and more clear that a large percentage of precipitation comes from water that entered the atmosphere over land, mainly through plants, and especially through trees. The [grade school diagram](#) of the water cycle showing evaporation coming from the oceans is proving to be far, far too simple.

## There's Something [In the Air Tonight](#), and it's Water, for now.

As we just discussed, we're cutting down forests, so there's less water in the air; there's less water in the air, so there's less precipitation. So, what can we humans, who are sometimes too smart for our own good, do about this? Well, some researchers in Saudi Arabia have [published research](#) on the ability of various commonly available salts to harvest water from the atmosphere. The concept is neatly simple – the salts absorb water at night and release under sunlight the next day. Yet the impacts of it, of removing water from the atmosphere and potentially reducing precipitation, pose intriguing questions about water law and politics. If one upwind area scales up atmospheric water harvesting, what remedy do people in the downwind area have available? As transboundary and interstate groundwater resources are [having a moment](#) in the American legal system, the seeds of the next frontier of water disputes could be planted within this research.

## The Ocean Floors may be Unknown to Humans, but the Ocean Floors Sure Know Us

Those aliens from [The Abyss](#) must be madder at humans than Mary Elizabeth Mastrantonio was at Ed Harris. A new [study](#) published in *Current Biology* found that only one eighth of the ocean isn't

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:

[World Water Week](#)

August 26-31, 2018

Stockholm, Sweden

## Water jobs:

[Associate Corporate Counsel](#)

American Water

Hershey, PA

[Utility Services Manager](#)

Sewerage and Water Board of New Orleans  
New Orleans, LA

[Attorney – Water](#)

City of Houston

Houston, TX

[Water Law Attorney](#)

Boly:Welch

Portland, OR

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impacted by human activities. Well, good thing we've got big areas of protected oceans" you might think. But no! Only 5% of the marine wilderness areas are in internationally protected areas! [Other findings](#) show very little coastal ecosystem not impacted by humans, and much of what isn't impacted is polar or open ocean with soft-bottom benthic ecosystems underlying it. Impacts measured included climate change, fishing, and nutrient pollution. Hopefully international cooperation can find a way to both prioritize keeping these areas free from human impacts and limit the impacts on the other 87% of the world's oceans. Until then, let's all support those who are doing good work and act responsibly ourselves. It could be the only thing that keeps [the kaiju](#) from coming for us.