

2015 Alabama Water Resources Conference

September 10-11, Perdido Beach Resort, Orange Beach, AL

“Alice in Groundwater Land”: *Adams v. Lang* and “Nominal” Reasonable Use in Alabama Water Law and Policy



Interpreting Alabama's Groundwater Law and Policy...Come On, Jump In!



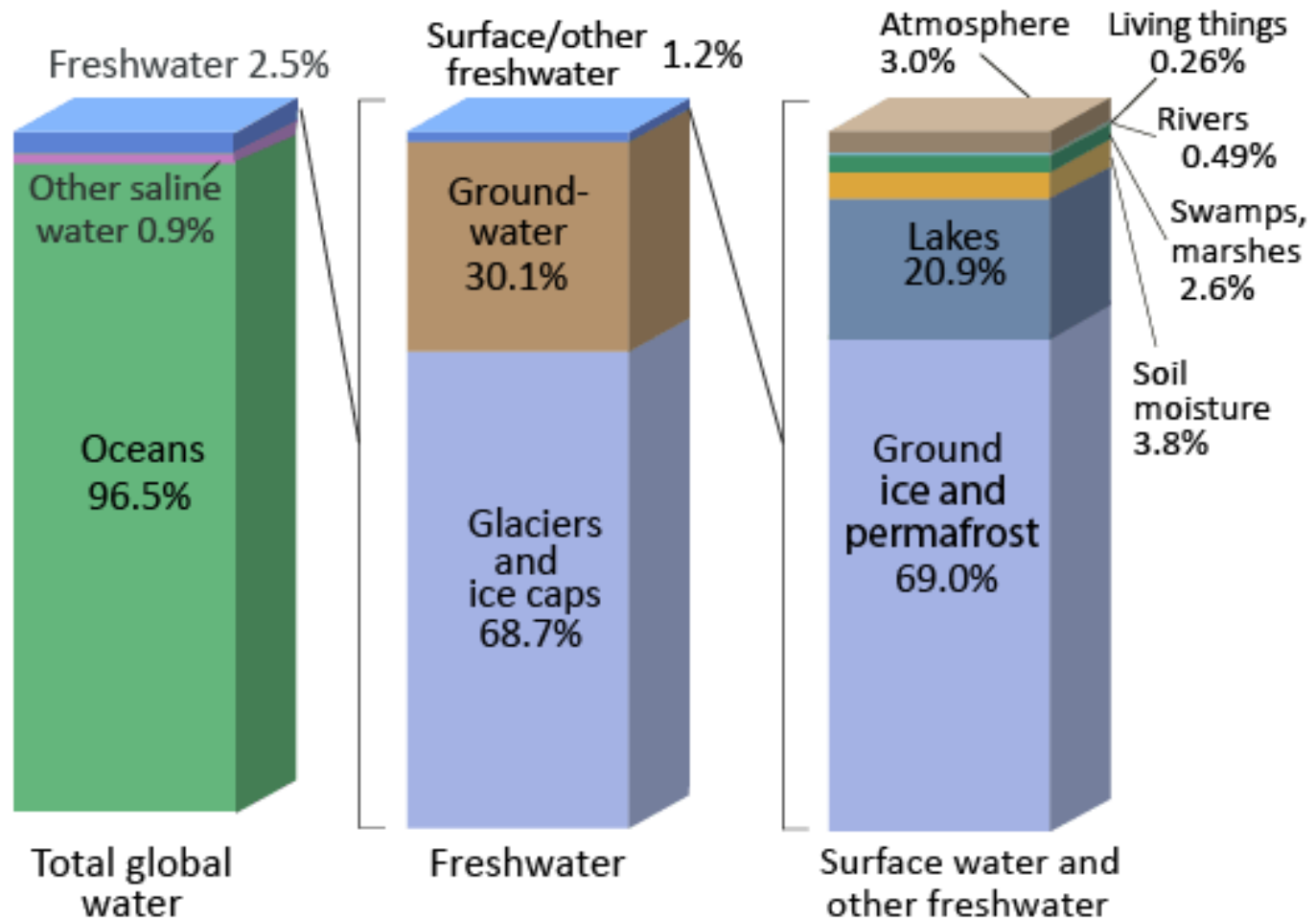
We're All Mad Here in Groundwater Land...



...Except the Lawyers, of Course, Who are Whistling Past the Graveyard!



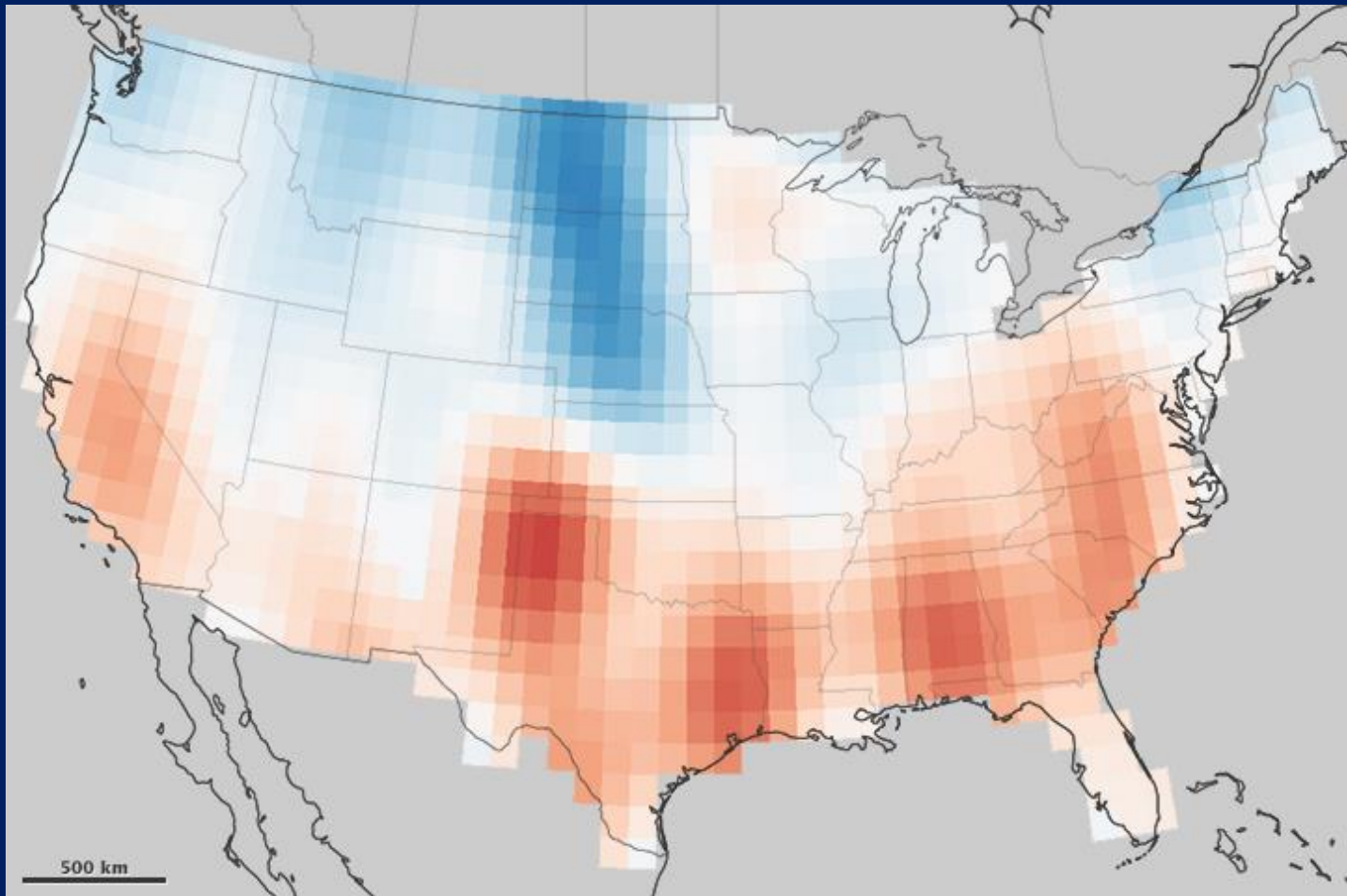
Where is Earth's Water?

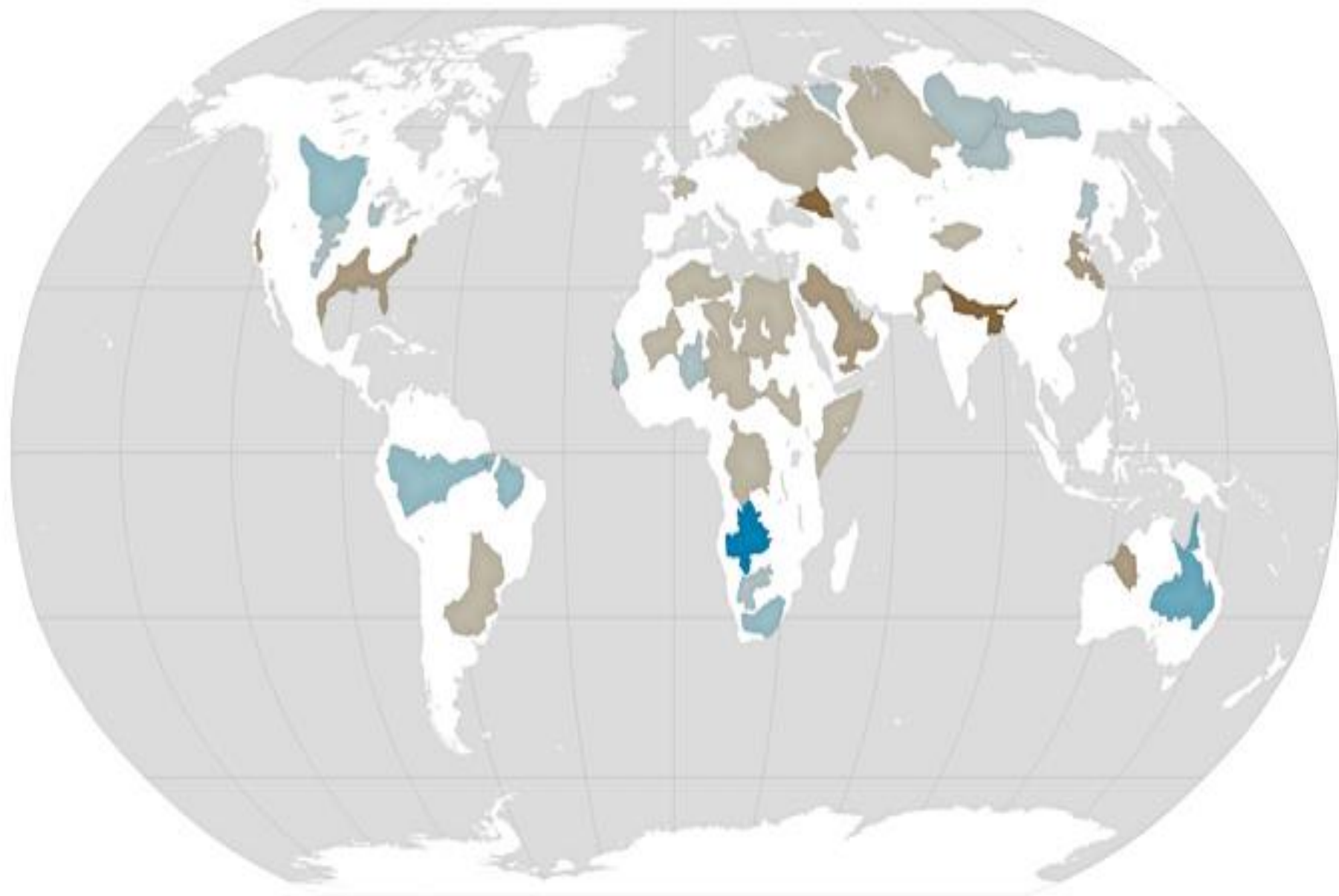


Source: Igor Shiklomanov's chapter "World fresh water resources" in Peter H. Gleick (editor), 1993, *Water in Crisis: A Guide to the World's Fresh Water Resources*.

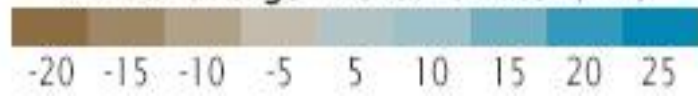
NOTE: Numbers are rounded, so percent summations may not add to 100.

Freshwater Storage Rate of Change 2003-2012 (cm/year)





Annual Change in Groundwater (mm)



“I think people aren’t always aware of the status of groundwater and how important it is... Groundwater is a critical resource. I think we should be protecting and managing our groundwater.”

Mary Scruggs, supervising engineering geologist
California Dept. of Water Resources

Sacramento Bee, May 1, 2014

Report: Well water under strain across California

<http://www.sacbee.com/2014/05/01/6371952/report-well-water-under-strain.html#storylink=cpy>



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Year's F

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percent of average for the date.
[Read More](#)



TODAY'S
WATER SAVING TIP

DAILY

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Google Analytics

**Looming Concern over Tombigbee River in Mississippi and Alabama
(Consider Mississippi Continues to Battle with Memphis over
Groundwater in *MS v. TN*, -S. Ct.-, 2014 WL 5449619 (June 6, 2014))**



***MS v. TN*, -S. Ct.-, 2014 WL 5449619 (June 6, 2014): How Did the Case Get Here?**

- Mississippi sued in 2005 arguing that Memphis was unlawfully diverting Mississippi water resulting in damages of \$1 billion. Trial court dismissed ruling that Memphis sands aquifer was interstate resource subject to equitable apportionment by SCOTUS (*Hood v. City of Memphis, Tenn.*, 570 F.3d 625 (2009)).
- In 2009, U.S. Court of Appeals for the 5th Circuit agreed and upheld dismissal (*Hood*, 570 F.3d at 630. n. 5).
- In 2010, SCOTUS denied Mississippi's appeal of the 5th Circuit decision and its request to file an original action before the Court citing two cases involving equitable apportionment of interstate water resources suggesting that this may be the applicable doctrine. Motion for leave was dismissed without prejudice opening the door for Mississippi to refile, which it did in June 2014.
- *MS v. TN* was on SCOTUS Petitions for Conference of 06.11.2015, Docket No. 220143. SCOTUS noted probable jurisdiction in the case.
- This controversy will be a landmark decision as it relates to aquifers and groundwater. Current case law suggests that equitable apportionment would apply.

Regional and Intrastate Collaboration and Cooperation on Water Resources Science, Policy, and Law



UA partners with AU, MSU on water resources

BY HEATHER BUCHANAN | Published 2 hours ago | Updated 2 hours ago



Photo By Kevin Hudson

Officials from Mississippi State University and the University of Alabama met March 12 in Starkville, Miss. to finalize an agreement to collaborate on water resource issues. The University of Alabama signed the agreement on January 28 and Auburn University signed on February 18. Photo Courtesy of Kevin Hudson | MSU.



ports may divide schools in the Southeastern Conference, but one of Earth's most basic resources has brought together three Southern institutions.

[http://www.cw.ua.edu/article/2015/04/ua-partners-with-mi-msu-on-water-resources\[4/6/2015 10:29:10 AM\]](http://www.cw.ua.edu/article/2015/04/ua-partners-with-mi-msu-on-water-resources[4/6/2015 10:29:10 AM])

More Often Than Not, Water Law Ignores Interconnectivity

Ground Water and Surface Water A Single Resource

U.S. Geological Survey Circular 1139

by **Thomas C. Winter
Judson W. Harvey
O. Lehn Franke
William M. Alley**

Full Report of Findings / April 2014

Land Subsidence from Groundwater Use in California

Prepared By



LUHDORFF & SCALMANINI
CONSULTING ENGINEERS

James W. Borchers • Michael Carpenter



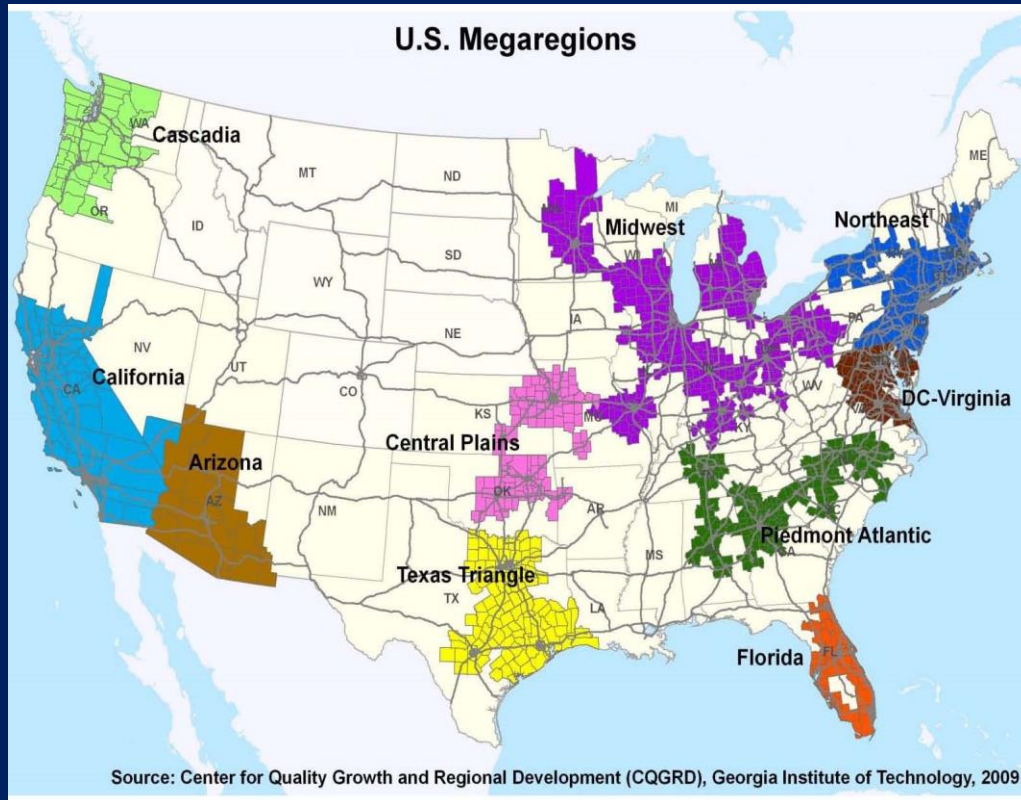
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CALIFORNIA
WATER
FOUNDATION

Executive Summary

- % of total supply from groundwater
 - Normally: ~35- 40%
 - This year: ~65%
- Impacts of over pumping
 - Water quality, contamination
 - Energy costs to pump water
 - Costs to deepen or replace wells
 - Impacts to surface water
 - Land subsidence

USGS July 28, 2014: Urban Areas in the Southeastern U.S. Will Double in Size By 2060—Where Will We Get the Water?



News Release

July 28, 2014 Adam Terando 919-515-4448 aterando@usgs.gov
Christian Quintero 813-498-5019 cquintero@usgs.gov

Scientists Predict Massive Urban Growth, Creation of 'Megalopolis' in Southeast in Next 45 Years

RALEIGH, N.C.—Urban areas in the Southeastern United States will double in size by 2060 unless there are significant changes to land development, according to a new study by the Department of Interior's Southeast Climate Science Center and North Carolina State University.

The predicted growth would come at the expense of agricultural and forest lands, creating an urban "megalopolis" stretching from Raleigh to Atlanta, which also raises a number of ecological concerns.

"If we continue to develop urban areas in the Southeast the way we have for the past 60 years, we can expect natural areas will become increasingly fragmented," said Adam Terando, a research ecologist with the U.S. Geological Survey, adjunct assistant professor at NC State, and lead author of the study. "We could be looking at a seamless corridor of urban development running from Raleigh to Atlanta, and possibly as far as Birmingham, within the next 50 years."

To understand how urban and natural environments could change, the researchers used NC State's High Performance Computing services to simulate urban development between now and 2060 across the Southeastern United States.

Among the expected impacts of such expansive urban growth, the fragmentation of natural areas would significantly limit the mobility of wildlife, making it more difficult for them to find mates, raise young, find food and respond to environmental changes.

"This, in turn, increases the likelihood that we'll see more conflicts between people and wildlife, such as the increasing interactions with bears we're seeing in our suburban areas," Terando said.

An increase in urbanization would also make urban heat islands—the warming of cities due to human activities and development—more common, favoring species that can take advantage of

Research on National Water Policy Issues



Winter 2011
SUSTAINABILITY OF WATER RESOURCES

The
BRIDGE
LINKING ENGINEERING AND SOCIETY

The Sustainability of Water Resources in the Colorado River Basin
Jeffrey Jacobs

Nutrient Control in Large-Scale U.S. Watersheds: The Chesapeake Bay and Northern Gulf of Mexico
David A. Dzombak

Managing Sustainable Water Supplies: The New York City and Metropolitan Boston Experience
Rutherford H. Platt

Critical Issues and Sustainability Challenges for a Large Metropolitan Water-Wastewater Facility
Mohammad Habibian

A Plea for a Coordinated National Water Policy
Gerald E. Galloway Jr.

NATIONAL ACADEMY OF ENGINEERING
OF THE NATIONAL ACADEMIES

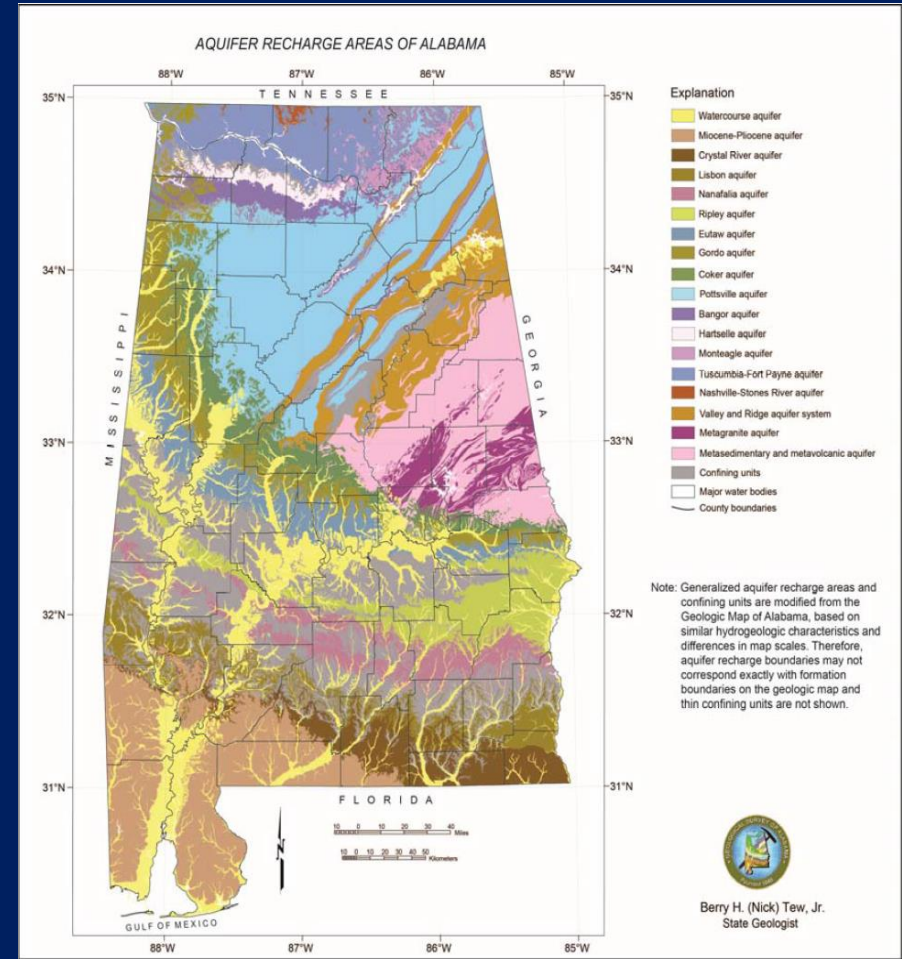
Promoting the technological welfare of the nation by marshalling the knowledge and insights of eminent members of the engineering profession.

The National Water Center



NOAA, USGS, USACOE, FEMA, and UCAR:
Integrated Water Resources Science and Services
(IWRSS)-a cross-cutting, multidisciplinary systems
approach to addressing complex water problems
collaboratively

“Approximately 40 percent of public water supplies in the state originate from about 20 major aquifers.” Marlon Cook, Geological Survey of Alabama, Statewide Groundwater Assessment Program



Process Support Track

Support and funding from the Governor's Office
and Legislature

Stakeholder Outreach Track

Public outreach
(stakeholder survey
regional workshops)

OWR water user
meetings/surveys

Outreach to
legislature and
AWRC

Water plan website
Open input process
Social media

Focus Panel Track

Riparian/Legal

Instream flow

Local/Regional
planning

COU/Permitting
IBTs

Water
Conservation
Efficiency & Reuse

Technical Track

Water availability
assessments
Surface water
Groundwater

GAP analysis
and support at
the state and
watershed level

IBTs, Risk analysis
Instream flow
Permitting
Interstate issues

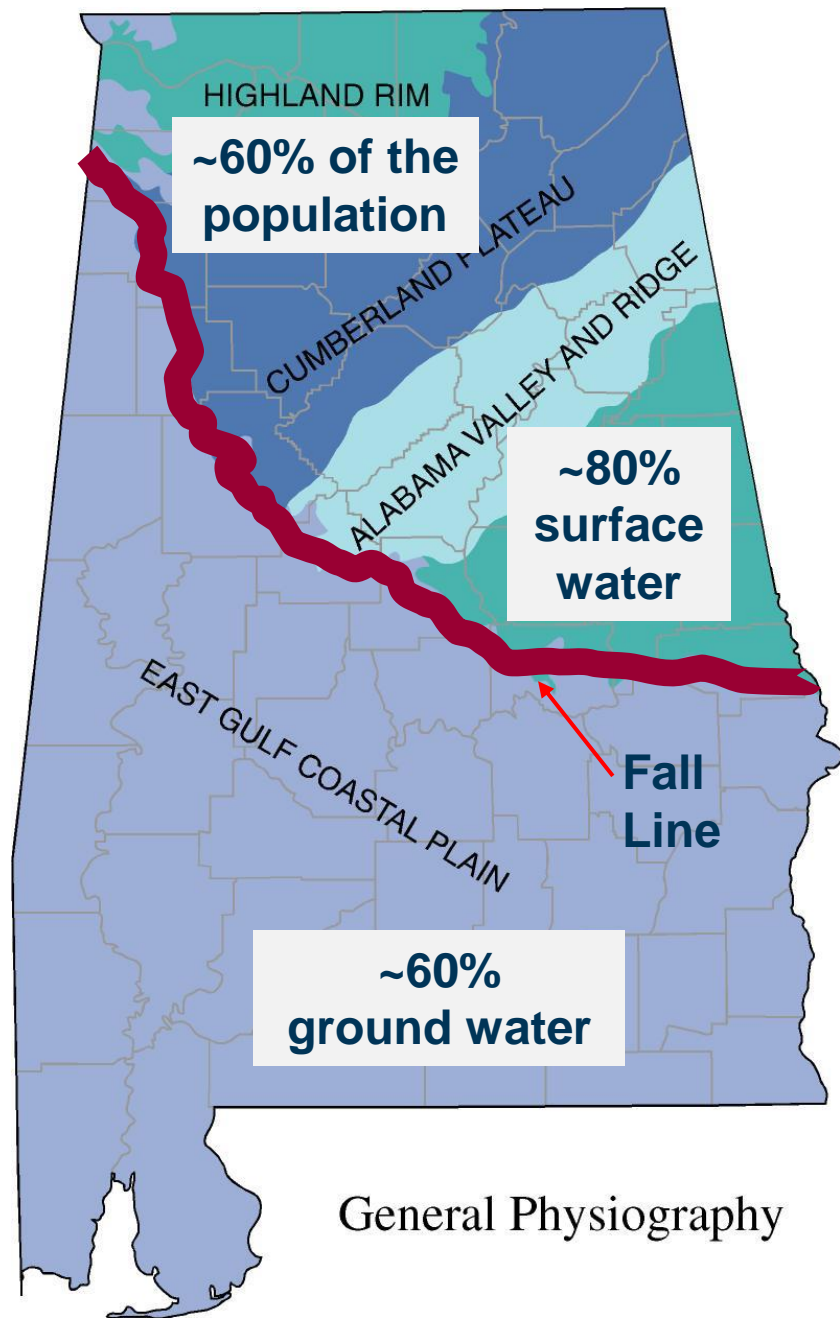
Water resources
data support

Current and
projected water use
and consumption

AWAWG

Technical Track

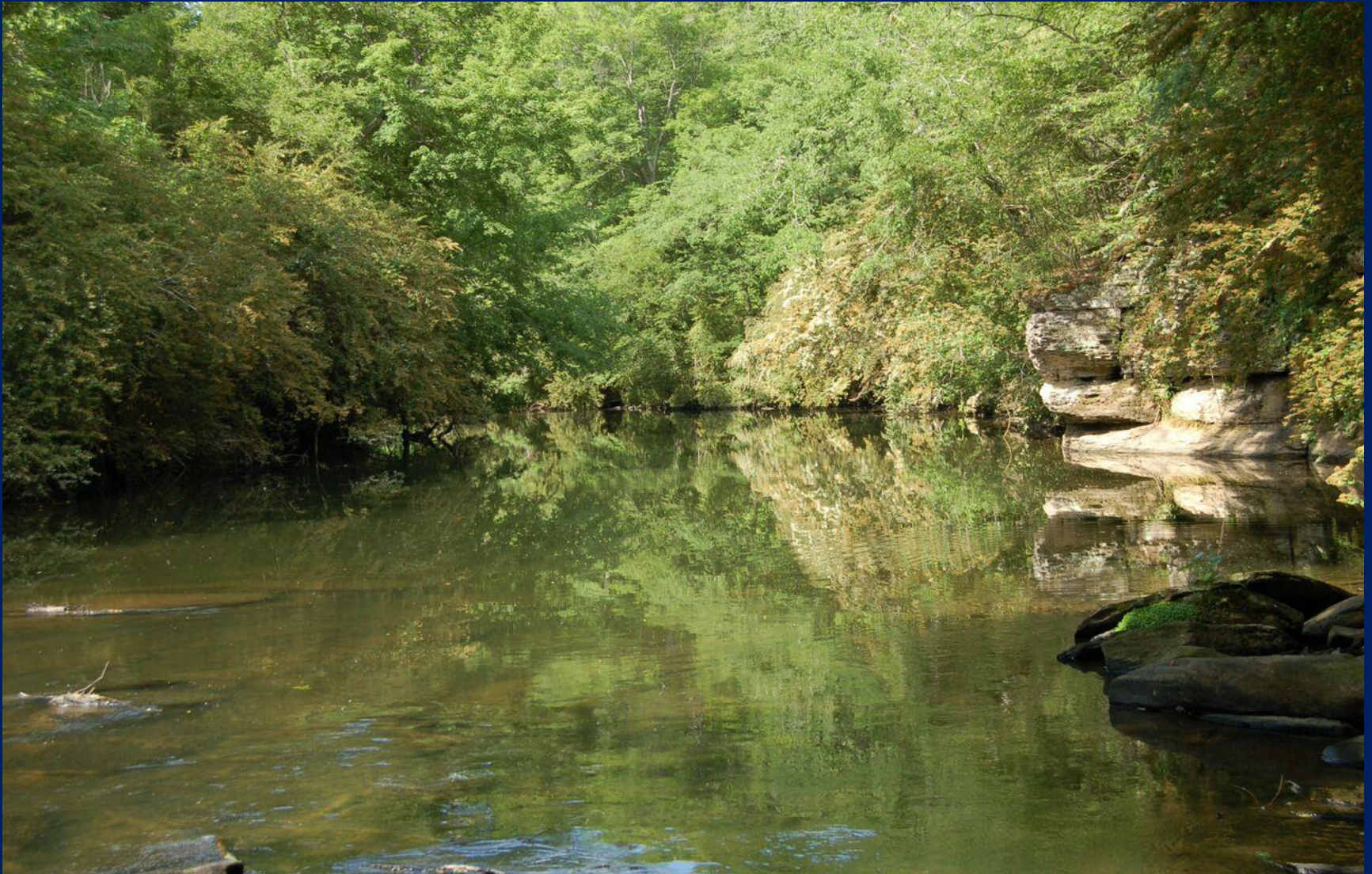
Consists of science
and engineering
activities related to
improving the
understanding of
Alabama water
resources and their
uses



Water Withdrawal Sources

- 60% of the population lives above the Fall Line
- Surface water is used by a margin of 4 to 1 compared to groundwater above the fall line
- Groundwater is the predominant source in the Coastal Plain

Alabama Water Law: Traditional Riparian Rights (Surface Water) and Reasonable Use (Groundwater) = Insecurity, Uncertainty, and Lack of Predictability



**Groundwater Law in the U.S. (*State v. Michels Pipeline Construction, Inc.*, 217 N.W.2d 339
(Wis. 1974))**

- Five different legal regimes, no logical connection to surface water law.
 1. Absolute Ownership or Rule of Capture
 2. American Reasonable Use
 3. Correlative Rights
 4. Restatement Reasonable Use
 5. Prior Appropriation

Surface Water Doctrine and Groundwater Doctrine *Not* Necessarily Connected

- Alabama has riparian doctrine for surface water and American reasonable use rule for groundwater
- California has prior appropriation for surface water and correlative rights for groundwater
- New Mexico treats both with prior appropriation



Alabama Law Brief

Surface Water

“[E]very riparian proprietor has an **equal right to have the stream flow through his lands in its natural state**, without material diminution in quantity or alteration in quality.”

This rule is **qualified by the limitation that each of said proprietors are entitled to a reasonable use of the water** for domestic, agricultural, and manufacturing purposes. *Crommelin v. Fain*, 403 So. 2d 177, 184 (Ala. 1981)

Non-Riparian owners “may not consume water from such watercourses.”
Alabama AG Opinion 2000-226, p. 4, August 31, 2000

Groundwater

“[U]se [of groundwater resources] must be limited to purposes incident to the beneficial enjoyment of the land from which they are obtained.”

However, a property may not concentrate such waters and convey them off his land if the springs or wells of another are impaired.
Martin v. City of Linden, 667 So. 2d 732, 739 (Ala. 1995)

Alabama Groundwater Law is a “Hodge Podge” of:

1. Reasonable Use
2. Absolute Ownership
3. Nuisance

***Adams v. Lang*, 553 So. 2d 89 (Ala. 1989)**

- Court applied Reasonable Use doctrine, in name only, finding that, since water in the instant case was for beneficial use *on* the land, as opposed to incidental use *to* the land, the use was per se reasonable. The *Adams* rule, as it has come to be known, is that use of groundwater on overlying land is reasonable per se
- Noteworthy is that the court did not “balance the uses” thereby making the rule tantamount to Absolute Ownership doctrine or the English Rule

Martin v. City of Linden, 667 So. 2d 732 (Ala. 1995)

- Court affirmed the nominal reasonable use rule, but further stated that the withdrawal of groundwater for use on land *not* overlying the aquifer is unreasonable *per se*.
- Interpreted “reasonable use” as a legal concept more akin to absolute ownership with an on-tract limitation.

***Henderson v. Wade Sand & Gravel*, 388
So. 2d 900 (Ala. 1980)**

- Alabama courts have limited the application of reasonable use to competing uses of water and have veered away from application of the reasonable use rule where land is harmed by groundwater use, relying instead on nuisance law.

***Adams v. Lang* : Catfish Farming, Circuit Court of Tuscaloosa County, No. CV-88-676**



***Adams v. Lang* : Summary**

- Adams and Armstrong, sued Lang, a nearby catfish pond owner, for damages related to the ongoing decreased flow of their wells due to Lang's pumping.
- Adams and Armstrong argued that Lang was liable for damages under the law of nuisance. Both the trial and final courts agreed that the law of nuisance was not applicable.
- The court stated that the reasonable use rule enunciated by the court in *Sloss-Sheffield Steel & Iron Co. v. Wilkes*, 165 So. 764 (Ala. 1936) applied because the dispute involved a competitive use of groundwater or percolating water.
- If the case involved water use that was only incidental to the use of the defendant's land, then the law of nuisance would apply. However, the use involved in *Adams* is a proprietary use of water, rather than a proprietary use of the land, where the use of water might be only incidentally affected. Applying the rule of beneficial use, the court ruled that Lang was withdrawing water for the purpose of making a beneficial use (catfish farming) on his own land, from which the water was taken.

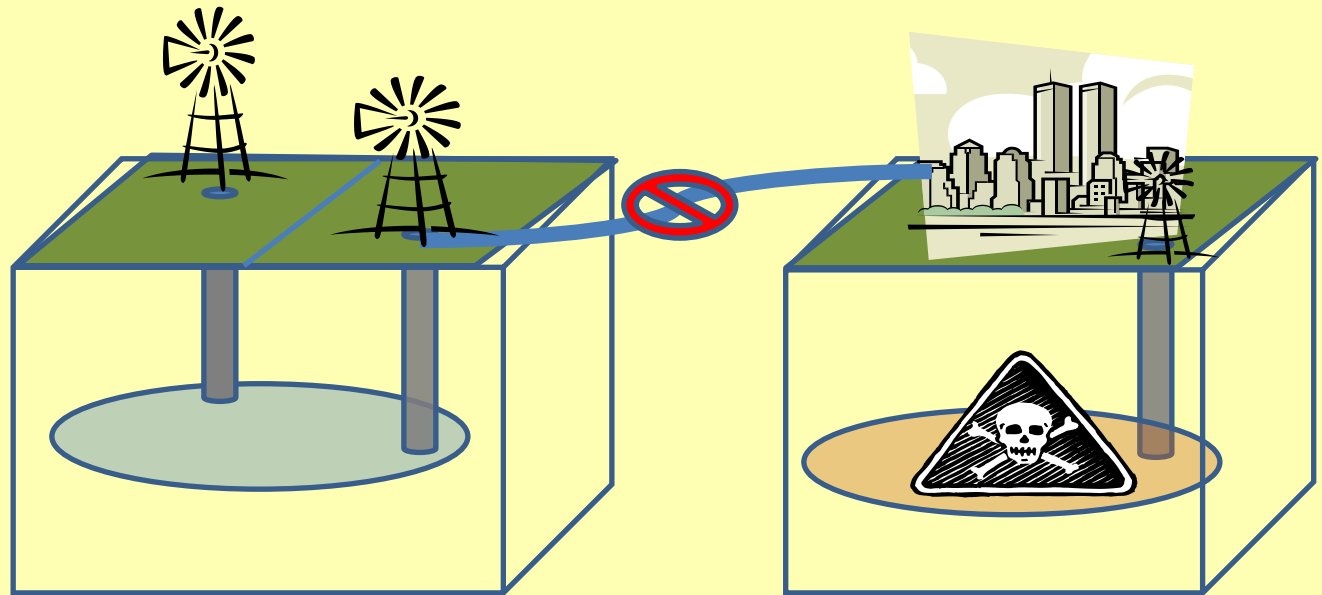
***Adams v. Lang* : Summary**

- Since Lang's use of the water was beneficial, he was not liable for any damages to Adams or Armstrong. The court did not consider how much water was used in determining that the use was beneficial.
- The *Adams* rule, as it has come to be known, essentially is that beneficial use of groundwater on overlying land is reasonable per se.
- The *Adams* rule creates, in essence, an absolute right to use groundwater on the overlying land, irrespective of the detriment caused to other groundwater users on their overlying land.

Corpus Juris Secundum

- “In some states, the rule of common law followed in early decisions has given way to the doctrine of reasonable use limiting the right of a landowner to percolating water in his land to such an amount of water as may be necessary for some useful or beneficial purpose in connection with the land from which it is taken, not restricting his right to use the water for any useful purpose on his own land, and not restricting his right to use it elsewhere in absence of proof of injury to adjoining landowners....”

Martin v. City of Linden : Water Supply, Montgomery Circuit Court, No. CV-91-1346



Martin v. City of Linden, 667 So. 2d 732 (Ala. 1995)

Martin v. City of Linden : Summary

- The City of Linden's principal water supply became contaminated by saltwater and consequently, the City purchased land adjacent to Judy Martin's farm and proposed to drill a permanent well and divert and pipe away up to 500,000 gallons per day back to Linden, 15 miles from the proposed well site.
- Martin successfully sued the City over whether it could use the groundwater *off* the lands from which it is taken.
- The court held that the proposed use of water was not permissible under the so-called reasonable use rule and the City did not have the right to transfer the water back to Linden.

***Martin v. City of Linden* : Policy Implications**

- First, the court confirmed the virtual absolute right to use groundwater on the overlying land, irrespective of the utility of the water use.
- Second, the *Martin* decision emphatically made clear that there is no preference for municipalities under Alabama's reasonable use rule.
- Finally, the courts in the *Adams* and *Martin* cases failed to apply any balancing of uses traditionally considered under the reasonable use rule, thereby relegating "reasonable use" to a legal concept more akin to absolute ownership with an on-tract limitation.

Moving Forward With Efficient Groundwater Policy

- Clearly, the term “reasonable,” in Alabama groundwater law and policy, is a misnomer.
- At the next available opportunity, Alabama courts need to clarify the “nominal” reasonable use rule for groundwater.
- Additionally, the *Martin* case portends the policy and legal issues that municipalities may encounter where groundwater is pumped from a well site, transferred off of the land from which it is taken, and piped away for water supply. Is this an *efficient* use of water?
- This “Alice in Groundwater Land” approach to groundwater law in Alabama suggests that a more comprehensive policy may be advantageous to the state.

Major Points of Difference

Common Law Riparianism

- Reactive lawsuits
- Decides commons policy on case-by-case basis, lacks a check on objective overuse
- Generalist judges
- Decisions/precedents are multi-factor fact bound approach which creates uncertainty
- Water users cannot be sure their use will remain reasonable and will not be impaired by entry of others
- Surface water *only*

Regulated Riparianism

- Proactive permits
- Sets commons policy by statute and limit to sustainable use
- Water agency experts
- Standards for allocating water are specified in governing statute with typical record review
- Water use is pursuant to quantified time-limited permits that subject to conditions and shortage plans
- Integrates *groundwater*



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What is the Future of Alabama's Groundwater Resources? Wise Management or as the Mad Hatter suggested "Murdered by Time?"



Special Thanks to:

- Heather Elliott, J.D., University of Alabama School of Law
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- Robert “Bo” Abrams, J.D. of Florida A&M University School of Law
- Circle of Blue

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Director

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