

Alabama Board of Licensure for  
**Professional Geologists**

# Next Steps in Alabama Water Policy

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

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Office of the Vice President for  
Research & Economic Development  
**Water Policy and Law Institute**



**ABLPG and the geosciences play a key and crucial role in water resources investigations (hydrogeology, geomorphology, hydrology) and are intimately associated with the “rocks and water” of our great State. Indeed, PGs are stakeholders in the Alabama water policy spectrum.**

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



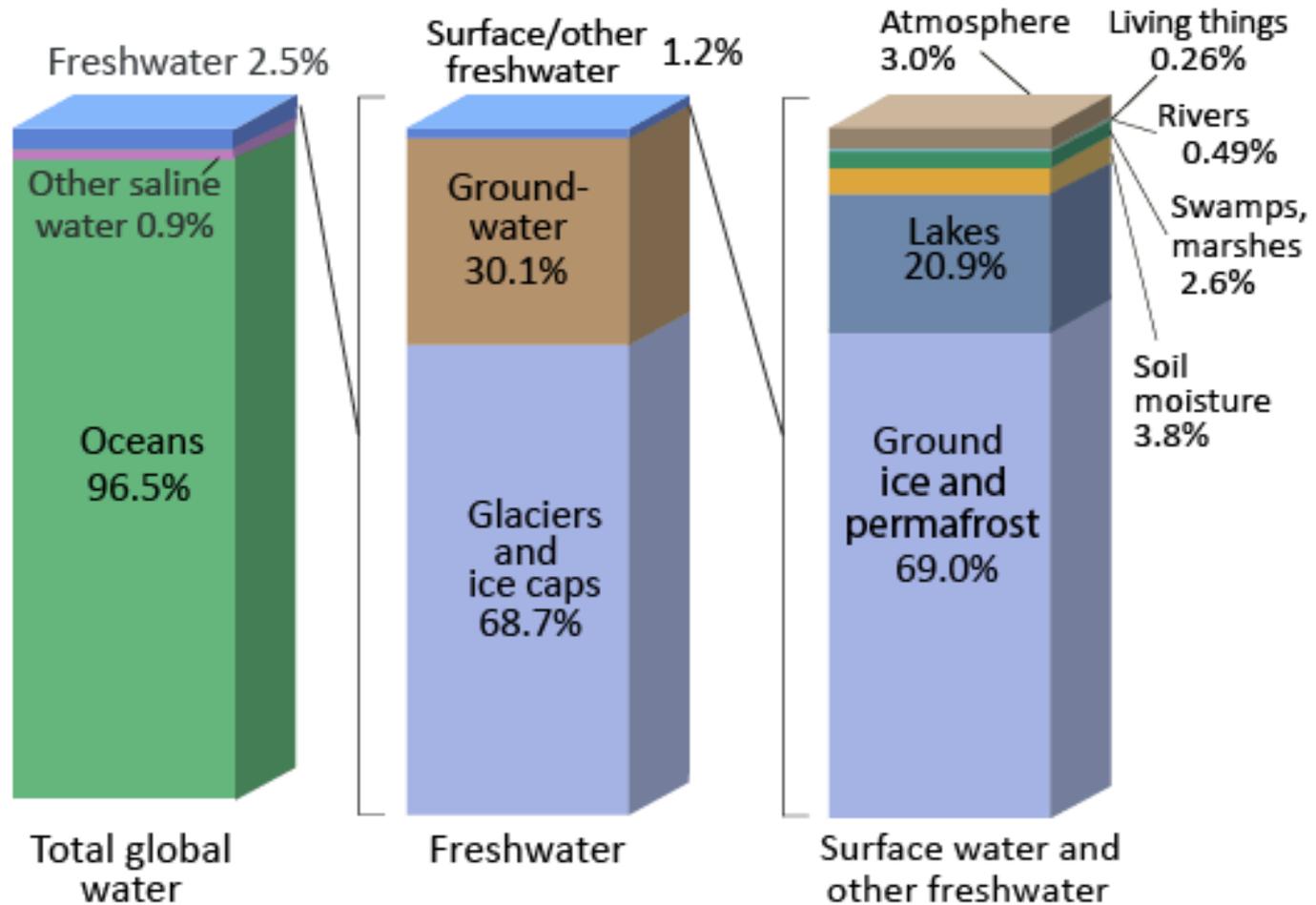
**We're All Mad Here in Groundwater Land...**



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



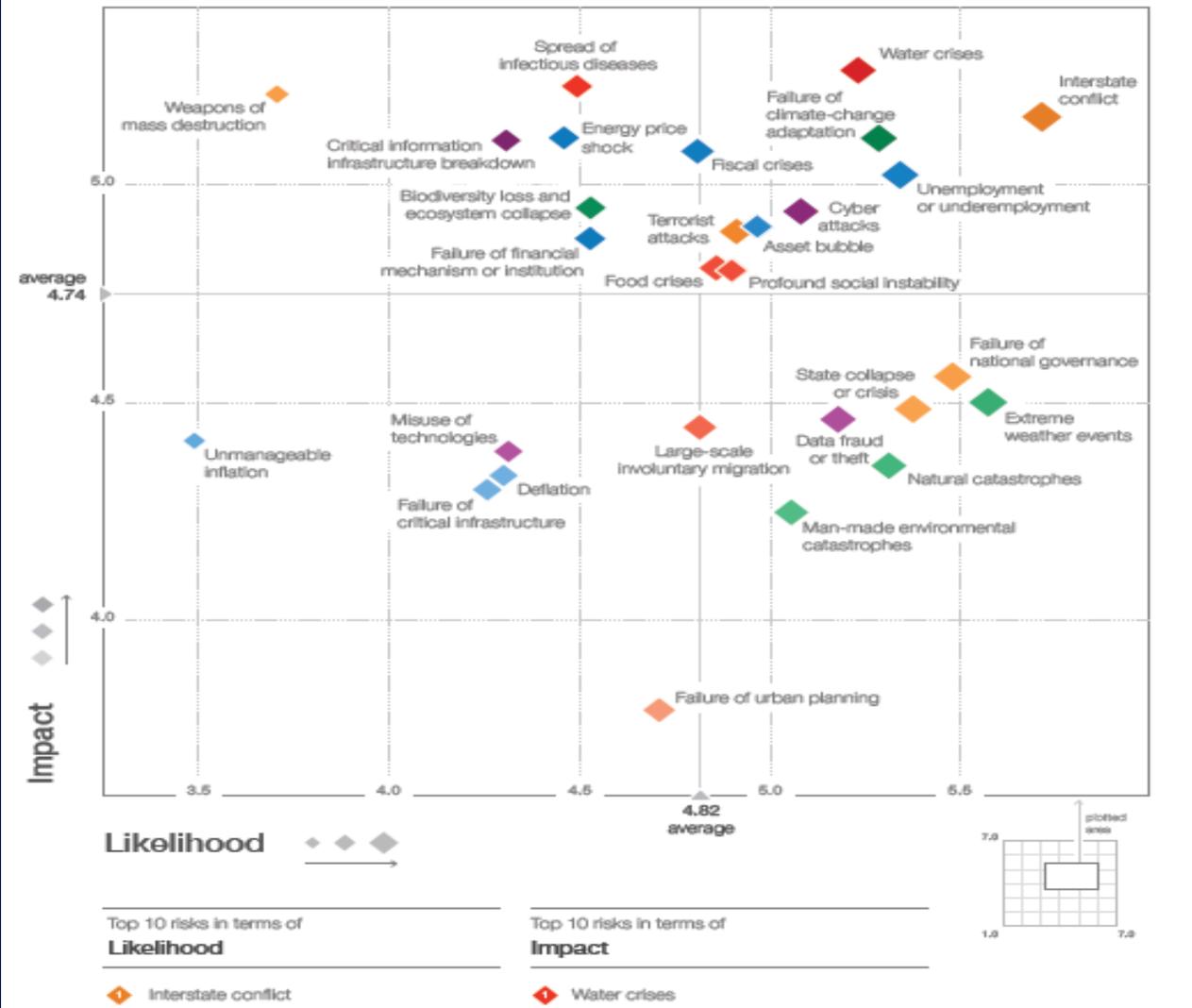
# Where is Earth's Water?



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.

# Policy in Action: Why?

Figure 1: The Global Risks Landscape 2015



# Actionable Water Intelligence



Flooding



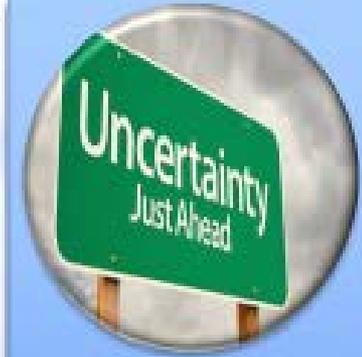
Water  
Quality



Water  
Availability



Drought



Climate  
Change

Need integrated understanding of near- and long-term outlook and risks

Integrated Modeling and Data

Hydrologic   Economic   Demographic   Environmental   Political



Tennessee

Mississippi

Alabama

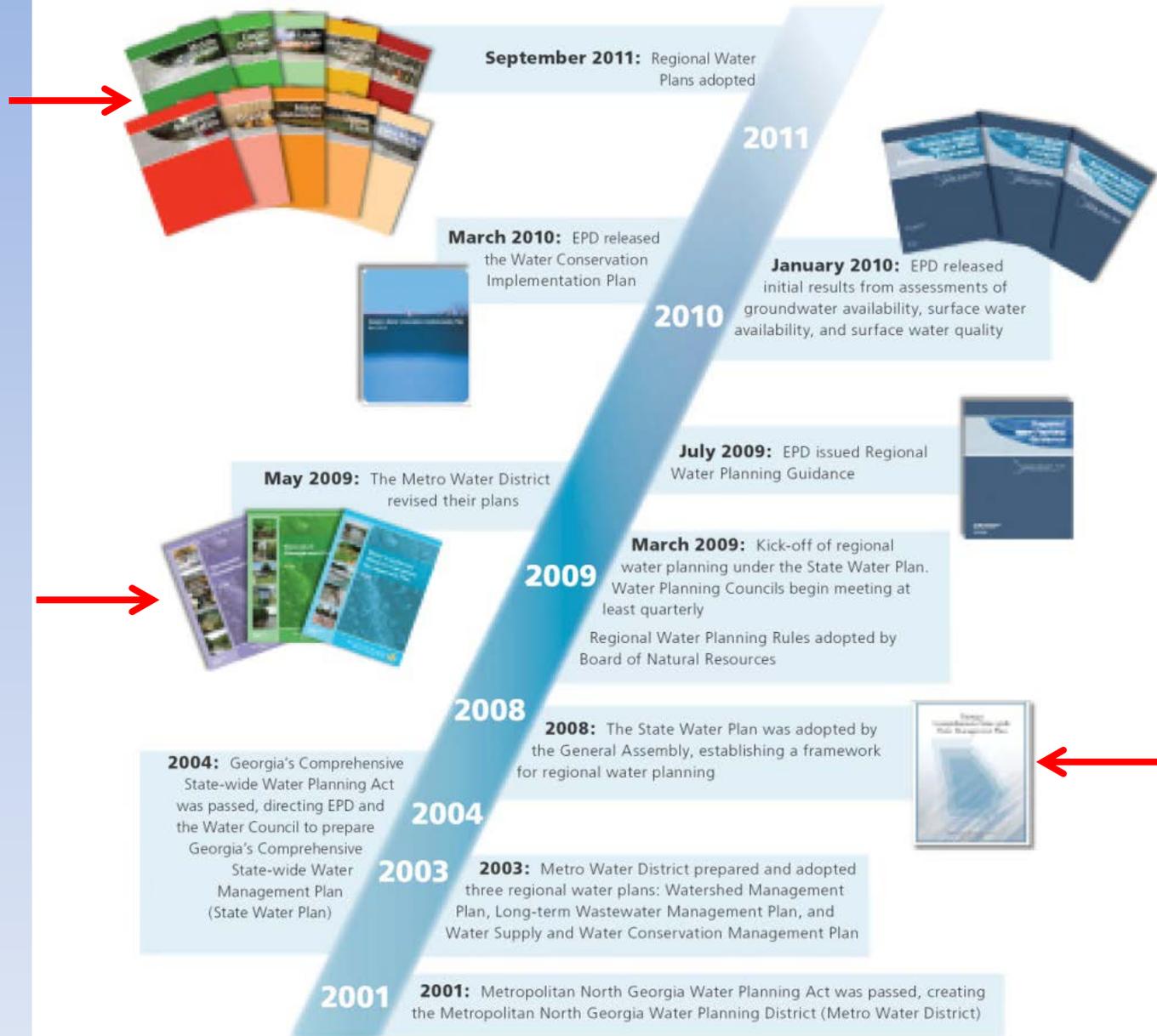
?

Georgia

Florida

**All of our sister states  
have a water plan.**

# Water Planning in Georgia: 12+ Years



# WHAT IS THE AWAWG?

A group of six state agencies with significant roles in water resources evaluation, management, and regulation tasked by Governor Bentley to meet and propose a state water management action plan.



Geological Survey of Alabama



Alabama Department of Environmental Management



Alabama Department of Agriculture and Industries



Alabama Department of Conservation and Natural Resources



Alabama Office of Water Resources



Office of the State Climatologist

# AWAWG Report Containing Policy Options and Recommendations Delivered to Governor's Office on December 1, 2013

## MAPPING THE FUTURE OF ALABAMA WATER RESOURCES MANAGEMENT: Policy Options and Recommendations



A Report to  
The Honorable Robert Bentley  
Governor of Alabama  
by the  
Alabama Water Agencies Working Group  
December 1, 2013

## ALABAMA WATER AGENCIES WORKING GROUP

### MEMBERSHIP

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Alabama Water Agencies Working Group (AWAWG)  
Special Counsel on Water Law and Policy



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John McMillan  
Glen Zorn  
Brett Hall  
Patrick Moody

# Governor Bentley Released the AWAAG Report on April 17, 2014



# AWAWG Groundwater Issue Paper

- Policy options and recommendations
- Statewide Groundwater Assessment Program-Geological Survey of Alabama

## SURFACE AND GROUNDWATER ASSESSMENTS

### Overview:

Water originates as precipitation and runs off the land into lakes and streams or infiltrates into aquifers that store and transmit water through the subsurface. Freshwater aquifers vary in depth from the land surface, where groundwater is discharged from seeps and springs, to more than 3,000 feet below the land surface. Water well production rates vary widely from a few gallons per minute (gpm) in fractured rock aquifers to more than 5,000 gpm in karst aquifers. Approximately 40 percent of public water supplies in Alabama originate from about 20 major aquifers (Fig. 8).

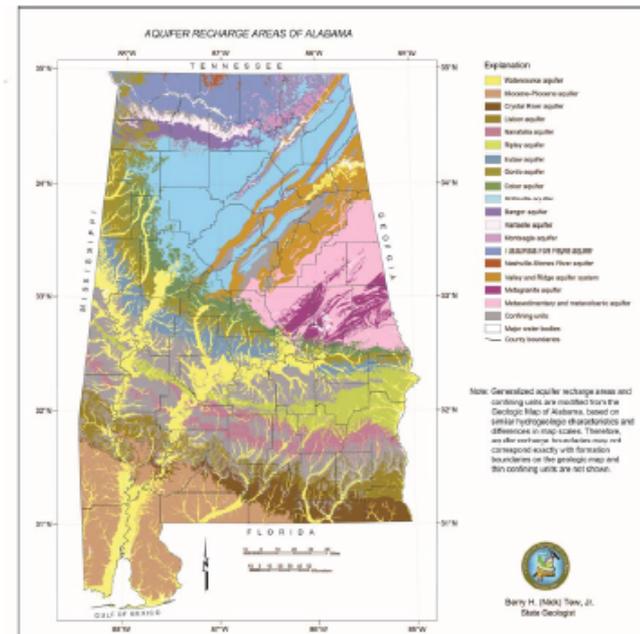


Figure 8. Aquifer recharge areas in Alabama.



## The “Drivers” of Water Policy in Alabama

- It is clear that water will be *the* natural resources, science, engineering, and policy issue of the 21<sup>st</sup> century.
- The habits of a profligate past are colliding with ecological and economic limits (recurring drought, megaregions, and tri-state “water wars”).
- Overarching institutional framework and legal regime that treats water as a limitless resource East of the Mississippi River-myth of abundance is firmly entrenched and leading to “contested waterscapes.”
- Water flows uphill toward money.
- You pay for water projects with someone else’s money.

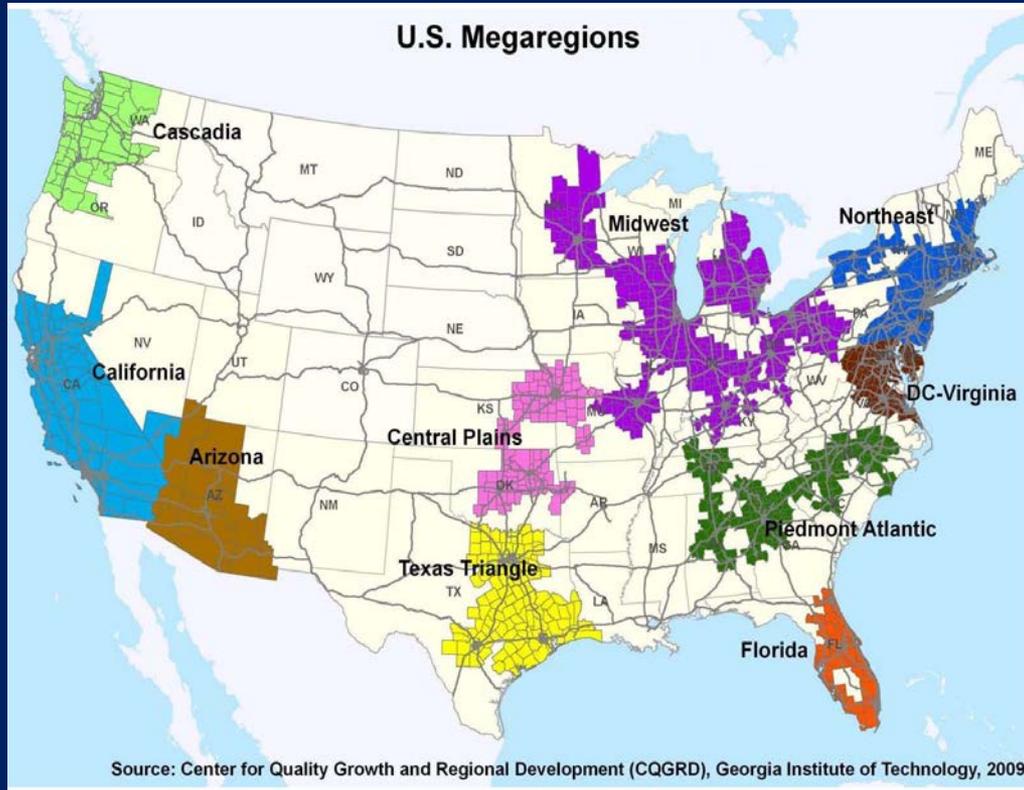


# Drought



**The historically low river levels of 2005-2007 have demonstrated that the Southeastern United States is vulnerable to water shortages resulting from extended drought, overuse, and water policies and water management plans that are not adequate to accommodate future levels of population growth.**

# USGS: 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

# Increase in Water Wars Among States Expected

On March 30, 2016, at the American Bar Association, Section of Environment, Energy, and Resources' 34<sup>th</sup> Water Law Conference, in Austin, TX, the Nation's leading environmental lawyer, DOJ Assistant Attorney General for Environment and Natural Resources, John Cruden, stated that SCOTUS is seeing an unprecedented number of original jurisdiction cases and that trend is likely to continue!

**Bloomberg  
BNA**

Water Law & Policy Monitor™

Source: Water Law & Policy Monitor: News Archive > 2016 > 03/31/2016 > News > Water Resources: Increase in Water Battles Among States Seen, Cruden Says

## Water Resources

### Increase in Water Battles Among States Seen, Cruden Says

By Paul Stinson



March 30 — The U. S. Supreme Court is seeing an unprecedented number of original jurisdiction cases concerning water allocation, and that trend is likely to continue, a top Justice Department official told conference attendees March 30.

"What I was stressing is that I am seeing more original jurisdiction water cases than I have in the past," John C. Cruden, assistant attorney general for environment and natural resources, told Bloomberg BNA on the sidelines of the 34th American Bar Association Water Law Conference in Austin, Texas.

Cruden delivered a keynote address on ground and surface water conflicts waged before the Supreme Court.

"I believe we're going to see more of these because there are so many of these Republican Rivers and Colorado Rivers that are multiple state issues," Cruden said in his address, referring to two river systems that span multiple states and have sparked conflicts over how the water should be allocated.

#### Quantity, Not Quality

"These cases reflect states' concerns about water as a resource issue and they're bringing actions in the Supreme Court to protect water as a resource for them," he said.

Cruden said the influx of state-versus-state cases is unlikely to taper off any time soon.

"I think it can be a trend in the future because every state no matter where you are really now recognizes the extraordinary importance of water not just as something we would think of as a pollution issue but also literally as a resource for irrigation, drinking water, recreation and to keep oysters alive," he said.

Posing the question as to whether a recent uptick in original jurisdiction water cases amounted to the "new normal" Cruden's presentation referred to four water-related cases are currently pending before the nation's high court, *Montana v. Wyoming* (2016 BL 85322, U.S., No. 137, ORIG., 3/21/16), *Texas v. New Mexico* (U.S., No. 141, ORIG., 1/8/13), *Florida v. Georgia* (U.S., No. 142, ORIG., 6/19/15) and *Mississippi v. Tennessee* (2015 BL 206220, U.S., No. 143, ORIG., 6/6/14).

Cruden told Bloomberg BNA such state water concerns aren't limited to drinking water, pointing to the *Florida v. Georgia* case, in which Florida contends the state's oyster industry is being adversely impacted as a result of less water flowing into their state (13 WLPM, 3/23/16).

#### Jurisdiction of Clean Water Rule Not Set

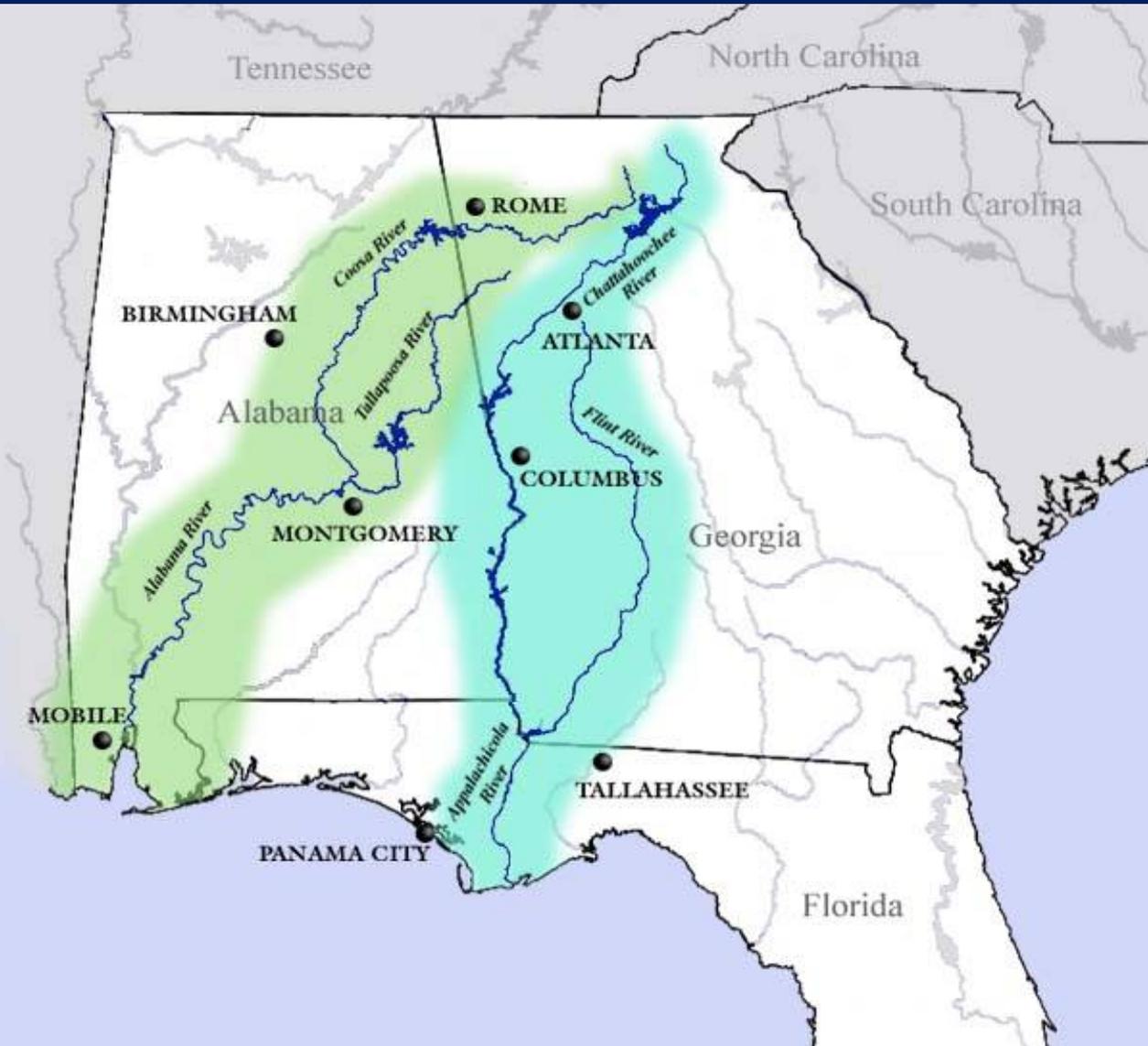
Acknowledging the conference's earlier panel discussing the Clean Water Rule, also known as the waters of the U.S. rule, Cruden said "we're still working our way through who has jurisdiction."

## BNA Snapshot

**Key Development:** John Cruden, assistant attorney general, tells ABA Water Law conference of higher number of original jurisdiction cases among states in the U.S. Supreme Court over water allocations and says this could be "a trend in the future."

**What's Next:** Clean Water Rule has been stayed while Sixth Circuit decides whether it is the appropriate venue for challenges.

# Tri-State Water Wars





\* Tapoco

-  Tennessee River System and Watershed
-  Dam
-  Metropolitan Area

# The Georgia-Tennessee Line

“The Tennessee Valley Authority must approve interbasin water transfer[s] that take water out of the Tennessee River watershed.”

published Monday, March 25th, 2013

## Georgia Senate passes resolution to move state line, claim Tennessee River water

by Staff Report  
[view bio »](#)

font size print email share

Georgia senators today passed a resolution calling for the correction of survey areas along the state's northern border in a 48-2 vote, a news release states.

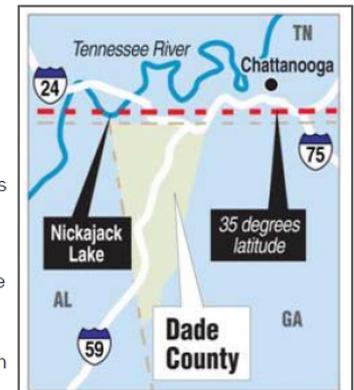
“The Tennessee Valley Authority has identified the Tennessee River as a likely source of water for North Georgia,” said Sen. David Shafer, R-Duluth, as he presented the resolution. “Yet the state of Tennessee has used mismarked boundary lines to block our access to this important waterway.”

Georgia House Resolution 4 proposes a settlement of the boundary dispute, based on almost 200-year-old survey errors, clarifying Georgia's access to Tennessee River water. It directs the state's attorney general to sue to gain control of the entire area south of the 35th parallel if no agreement is reached with Tennessee, the Georgia Senate Press Office release states.

House Resolution 4 now returns to the House for agreement on amendments made by the Senate.

The Tennessee Valley Authority must approve interbasin water transfer that take water out of the Tennessee River watershed. TVA says it has not recommended using the river as a primary water source for North Georgia.

“We aren't certain where Sen. Shafer got his information, but TVA is not involved in this discussion at this point,” TVA spokesman Scott Brooks said.



Georgia Politics



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**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))**



# Mississippi v. Tennessee

Two Southern states are locked in a dispute in the Supreme Court of the United States over a shared aquifer.

*The Atlantic*

## An Interstate Battle for Groundwater

Mississippi and Tennessee are locked in a dispute over who can use the Delta's aquifers.



Rory Doyle

BOYCE UPHOLT | DEC 4, 2015 | SCIENCE

Memphis, Tennessee, the northern terminus and urban hub of the Mississippi Delta, was a foul place in the mid-19th century. Yellow fever swept the city three times in the 1870s, killing 8,000 residents and scaring away thousands more. The city's water system, patchwork and decrepit,

# ***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 5<sup>th</sup> Circuit agreed and upheld dismissal (*Hood*, 570 F.3d at 630. n. 5).
- In 2010, SCOTUS denied Mississippi's appeal of the 5<sup>th</sup> 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* is now before the SCOTUS. A Special Master, Honorable Eugene E. Siler, Jr., of London, Kentucky, was appointed on November 10, 2015.
- This controversy will be a landmark decision as it relates to aquifers and groundwater. Current case law suggests that equitable apportionment would apply.

“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>



(Left)  
(Right)

SERIOUS DROUGHT  
HELP SAVE WATER

4 5 II

With Cal  
Emergen  
has conti

### Top S Droug

April 25, 20  
to strengt  
Californians  
[Read More](#)

### Year's F

May 1, 2014  
hot summer a  
water content  
percent of average for the date.  
[Read More](#)



TODAY'S  
WATER SAVING TIP

DAILY

AddThis  
Google Analytics

# 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



James W. Borchers • Michael Carpenter



With Support By

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

# 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]

# 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.*

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# 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

# National Water Center-The Link: Data-Driven Policy Making

## The WAVE Water Policy Column Data-Driven Policy Making

Bennett L. Bearden, J.D., LL.M., J.S.D.<sup>1</sup>  
Andrew Ernst, Ph.D., PE, BCEE, DWFLE<sup>2</sup>  
Edward Clark, Ph.D.<sup>3</sup>  
Lian Zhu<sup>4</sup>

<sup>1</sup>Director, Water Policy and Law Institute, The University of Alabama  
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<sup>4</sup>Ph.D. Student, Civil, Construction & Environmental Engineering, The University of Alabama

This is the Information Age, a period in human history characterized by the ubiquity of information, accompanied by unavailability of knowledge. Both public and private sector organizations have embraced the premise of Data Driven Decision Making (DDDM) [2] as core components of Total Quality Management (TQM) and other continuous improvement efforts. DDDM provides private sector organizations a structured mechanism for improving their competitive advantage, potentially improving productivity rates by as much as 4% and increasing profits by 6% [10]. Key to the successful implementation of DDDM is the reliance on verifiable, high quality data, and a rigorous analysis process.

There are key differences between policy development and decision making, with the scale of these differences tending to increase with the increasing size of the employing organization or scope of their application. Decision making, by definition, is the process by which an approach to achieving a particular goal is identified within a given set of constraints. Decision making can, somewhat arbitrarily, be categorized by the scope of its implementation (Figure 1).

An organization's mission is its overarching vision or purpose. In the context of a State, this is embodied in its Constitution, while for water or wastewater systems, this usually embodies basic premises of provision of clean water or protection of the environment. Policy and strategy can often be conflated, reflecting an overarching framework for operational or tactical decision making. Policy frameworks shape thinking and guide

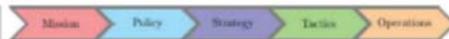


Figure 1: Scope of Decision Making

long term decision making, while strategy focuses more on the actions and resources needed to achieve specific long term objectives. Tactics and operations can similarly be conflated, with differences related to the immediacy of the decision and the specificity of the desired outcome.

Examples of decision making can range in scope from identifying preferred policy frameworks that support an economic development goal, while satisfying stakeholder expectations, to selection of watershed management strategies to achieve a target water quality goal, or selection of a treatment train configuration to ensure compliance with regulated effluent standards.

Rather than being discrete elements, Figure 1 should be viewed as a continuous spectrum, with the scope of the goal getting broader and more inclusive to the left, and the specificity of the tools and constraints increasing towards the right. In a tactical or operational context, for example, selection of a treatment technology might only require civil or environmental engineering expertise, while watershed management might require the same technical expertise, but also need agricultural production, aquatic ecology, industrial processes and other expertise. As the scope of expertise required for decision making increases, so does the corresponding data and information needs, as does the necessity for brokered decision support to accommodate the increasing breadth of stakeholder expectations and constraints.

Because of the broad swath of stakeholder expectations and constraints, and the inter-dependence between the wide range of technical expertise required, water policy development is an increasingly complex and intertwined process. Traditional complex decision making processes have been conducted in a discrete but sensitively integrative fashion. For example, in Total Maximum Daily Loads (TMDL) development, impaired streams that do not meet the "fishable/swimmable" goal must undergo a Use Attainability Analysis (UAA) every 3 years to determine if new information has become available to support the achievement of the goal. A key component of TMDL development is stakeholder engagement that occurs in parallel to the scientific and technical investigations. These processes inform each other at discrete intervals with stakeholder engagement and the scientific assessment intersecting at pre-defined points in the decision process. Not unlike braided streams (Figure 2), this structured cyclic approach, leaves little room for dynamic exchange of information between parallel efforts, and can often introduce additional artifacts that may further complicate and elongate the time to convergence on a satisfactory decision.

All strands in the braided decision making process described in Figure 2, are comprised themselves of individual, strand-specific micro-decisions, utilizing whatever information is available at the time. The ideal decision making process



# NWC: Collaboration Opportunities



- As part of the IWRSS framework, the NWC will serve as a catalyst for federal partnerships.
- Just as important, the NWC will present opportunities for collaboration with academic and non-Federal partners.
- All of these partnerships will be vital to address national and global challenges associated with water.

THE UNIVERSITY OF  
ALABAMA

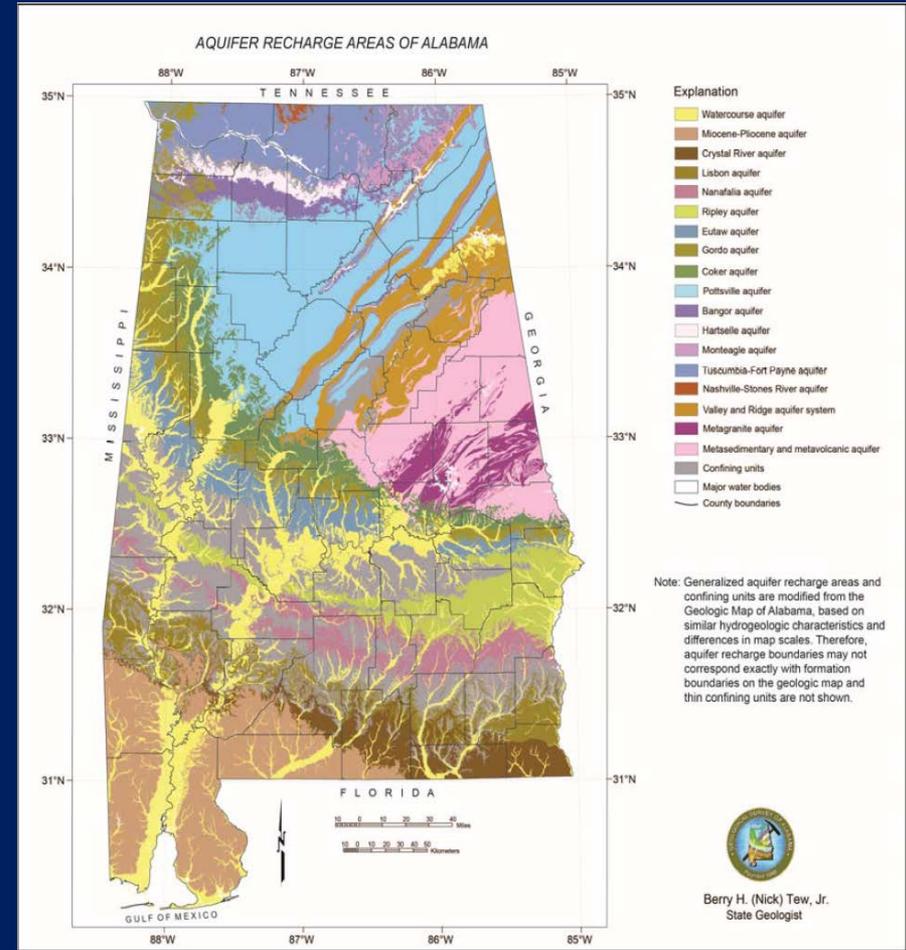


ESRI

THE UNIVERSITY OF  
TEXAS  
AT AUSTIN



**“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

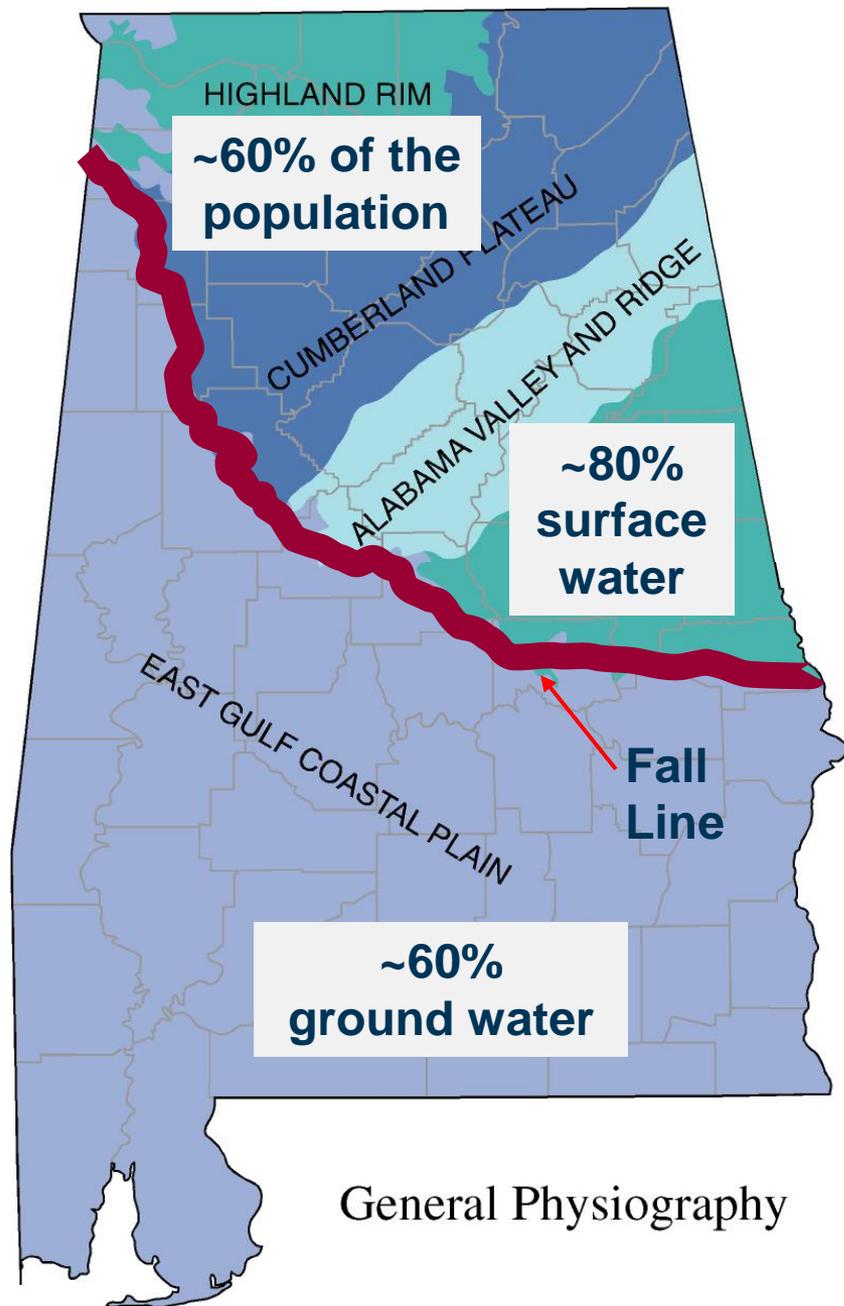
Water resources  
data support

Current and  
projected water use  
and consumption

**AWAWG**

# Technical Track

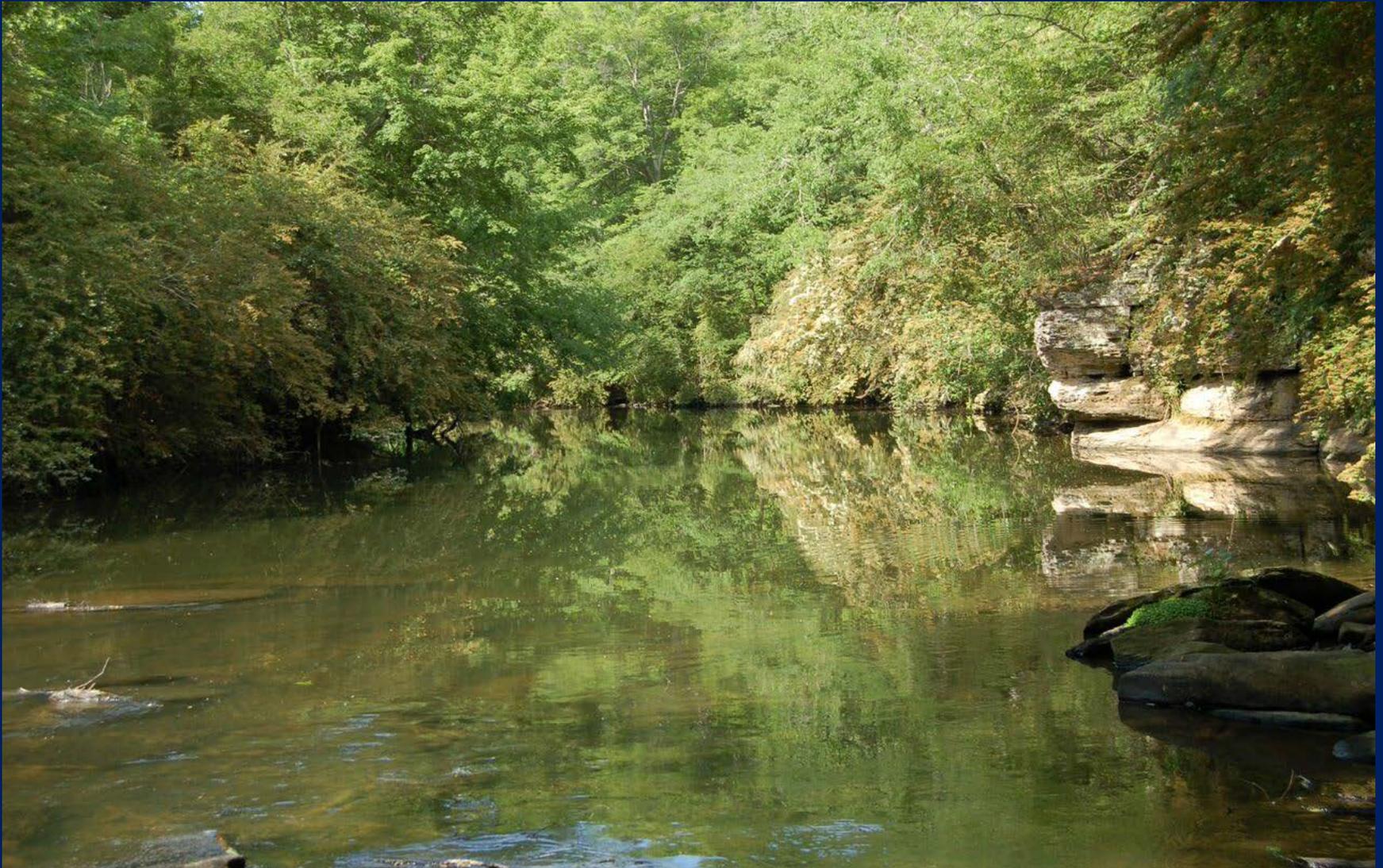
Consists of science  
and engineering  
activities related to  
improving the  
understanding of  
Alabama water  
resources and their  
uses



# 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.

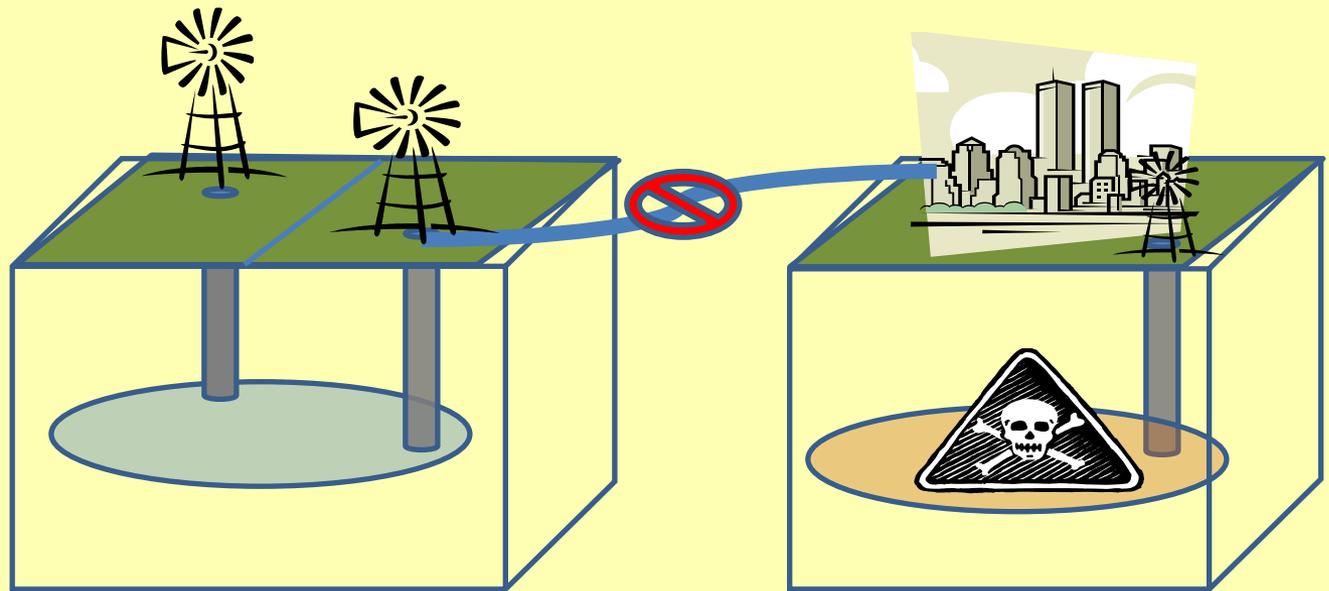
## *Adams v. Lang* : Summary

- 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.

## Proposed Riparian Relaxation



1. Allow legal use of water for non-riparian farmers/users
2. Riparian owners would still control access to water. Thus, the non-riparian may be required to pay a fee to the riparian owner for this access. We assume the market will work.

**However , we must assure that the other part of the riparian doctrine – that down stream users must be protected - also be maintained.**

3. New non-riparian users would be the first to give up use of water during extreme hydrologic droughts. Water insurance would be made available (similar to current crop insurance) to protect their investment. Models would be used to set actuarial.

4. Limits would be placed on the total number of acres in a watershed for which non-riparian access would be allowed to (e.g. 20% of watershed).



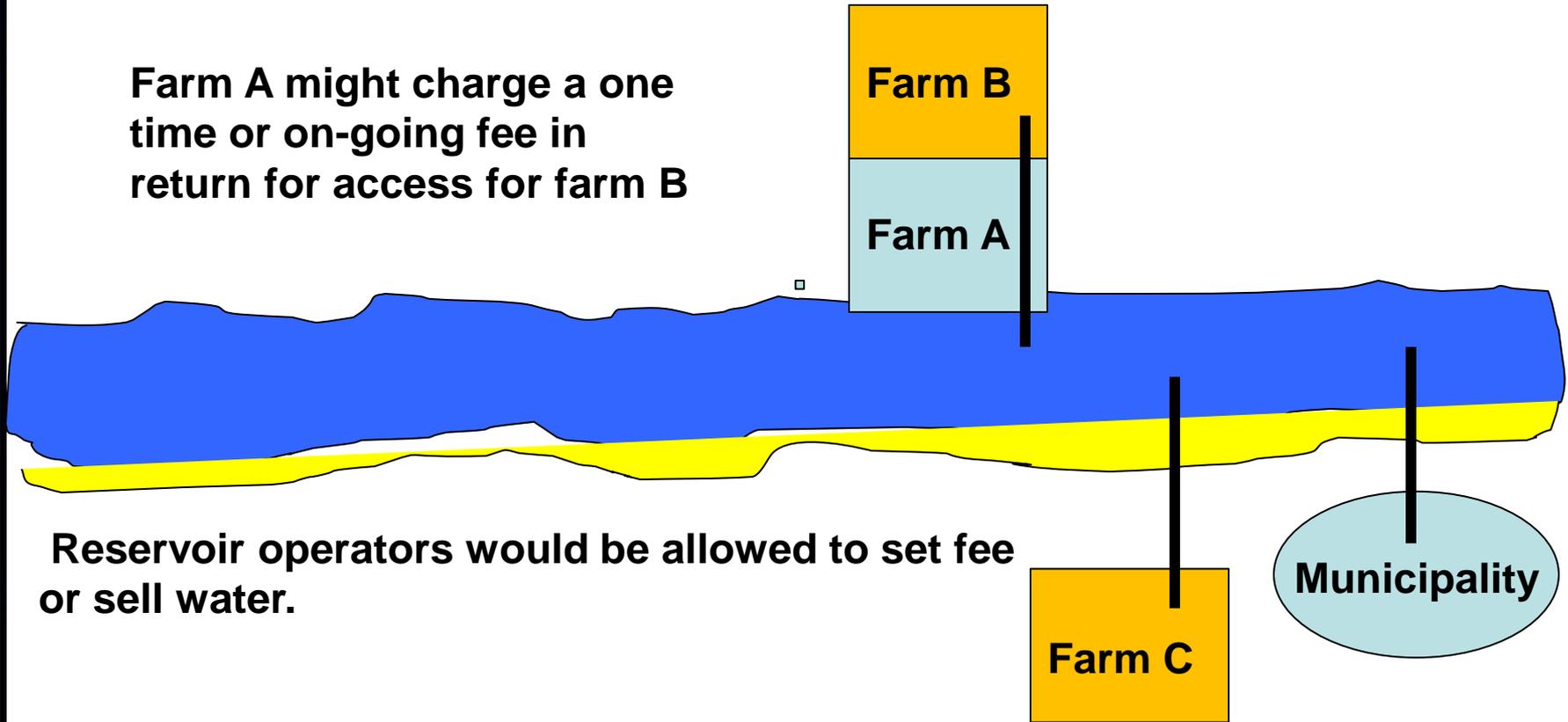
**Farm A has riparian access but Farm B does not. Most farms don't have riparian access.**



**Reservoir operators often have easements along the reservoirs so no farms have riparian rights**



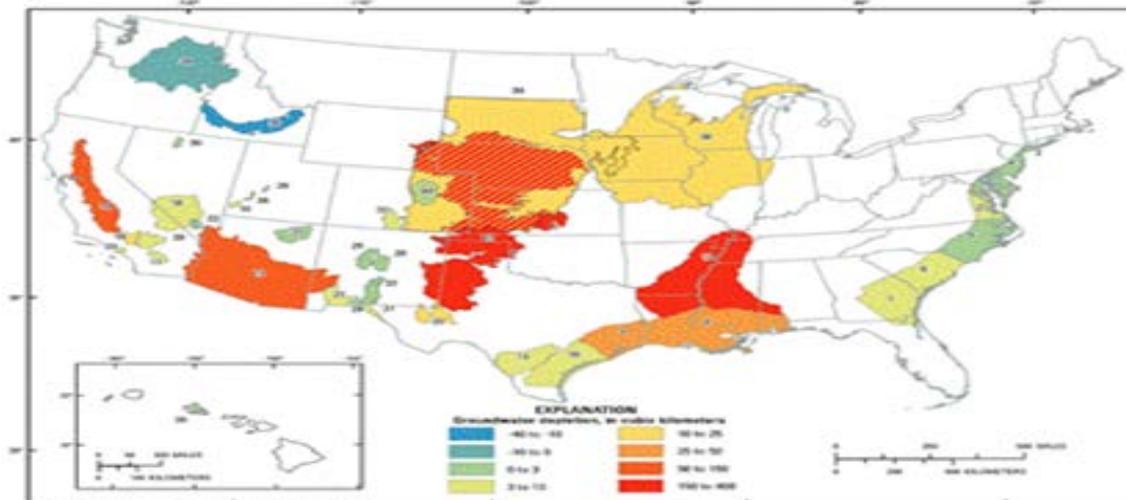
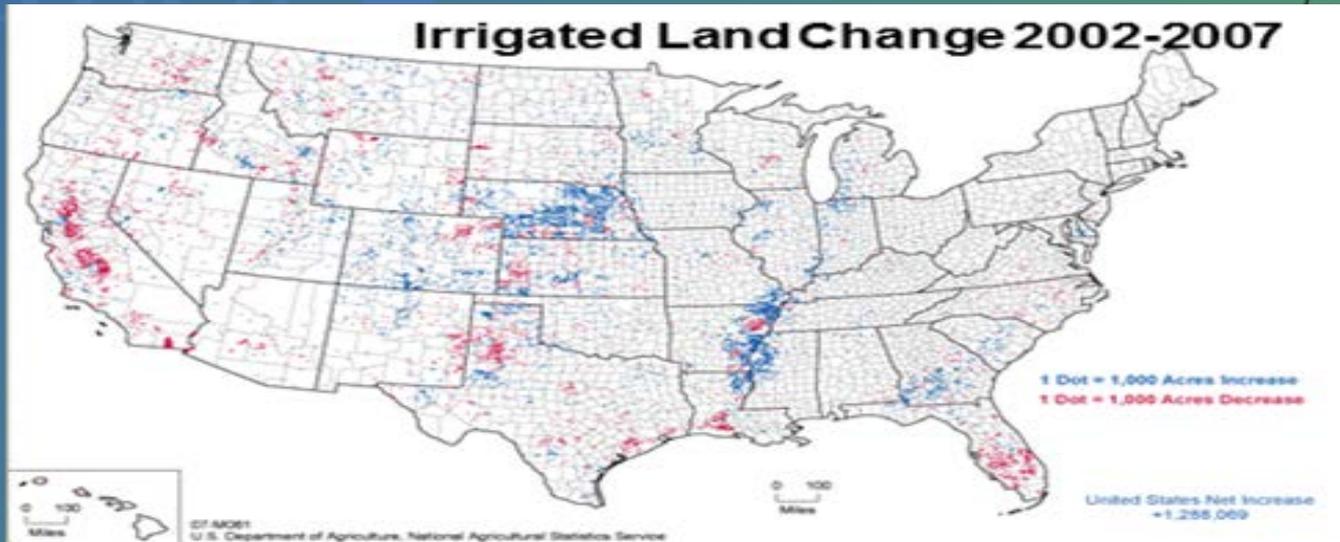
**Farm A might charge a one time or on-going fee in return for access for farm B**



**Reservoir operators would be allowed to set fee or sell water.**



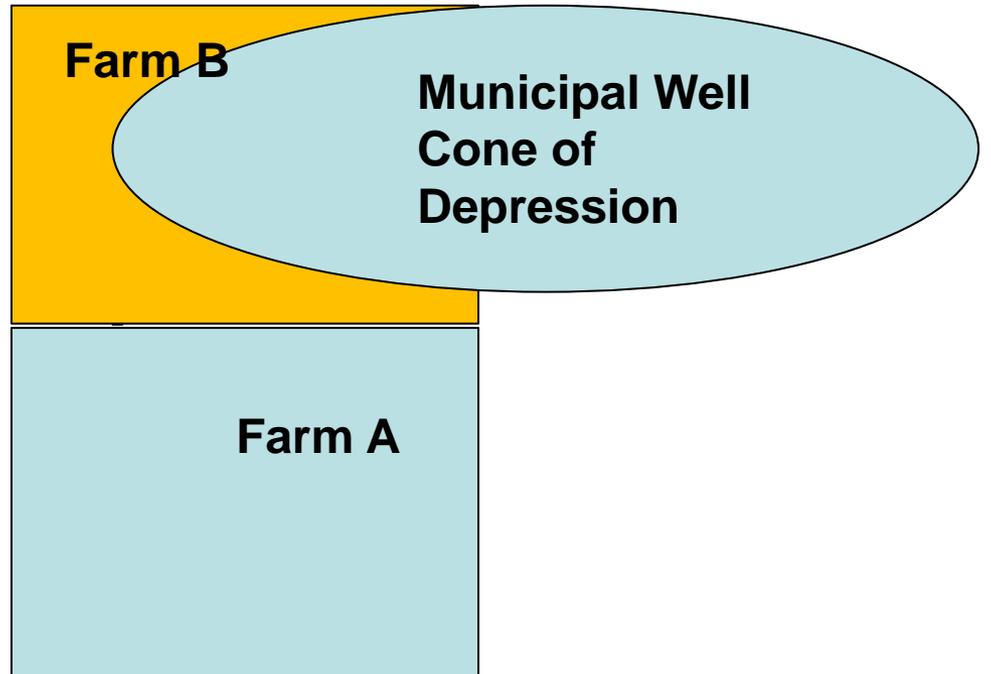
The Southeast has also depleted groundwater in some locations, in part, because of Riparian restrictions on moving water.



Base from U.S. Geological Survey digital data, 1973, 1:250,000  
Map by Equi-Axis Cartographic  
Horizontal coordinate: NAD 83, zone of location: 18N 08W

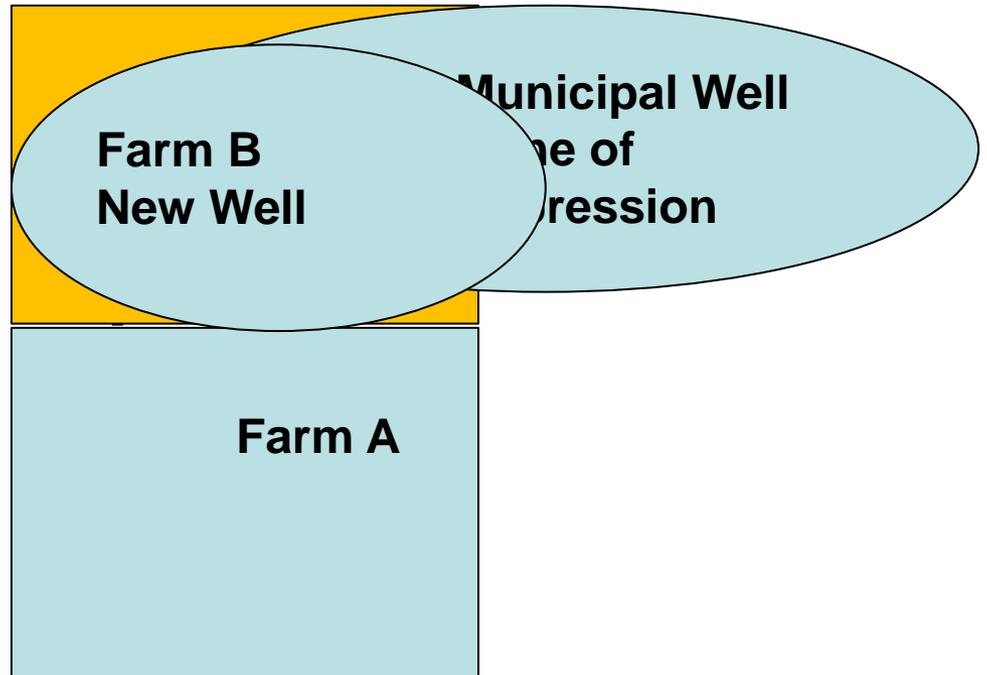


**Relaxation of Riparian  
Access might also allow  
improved use of ground  
water**



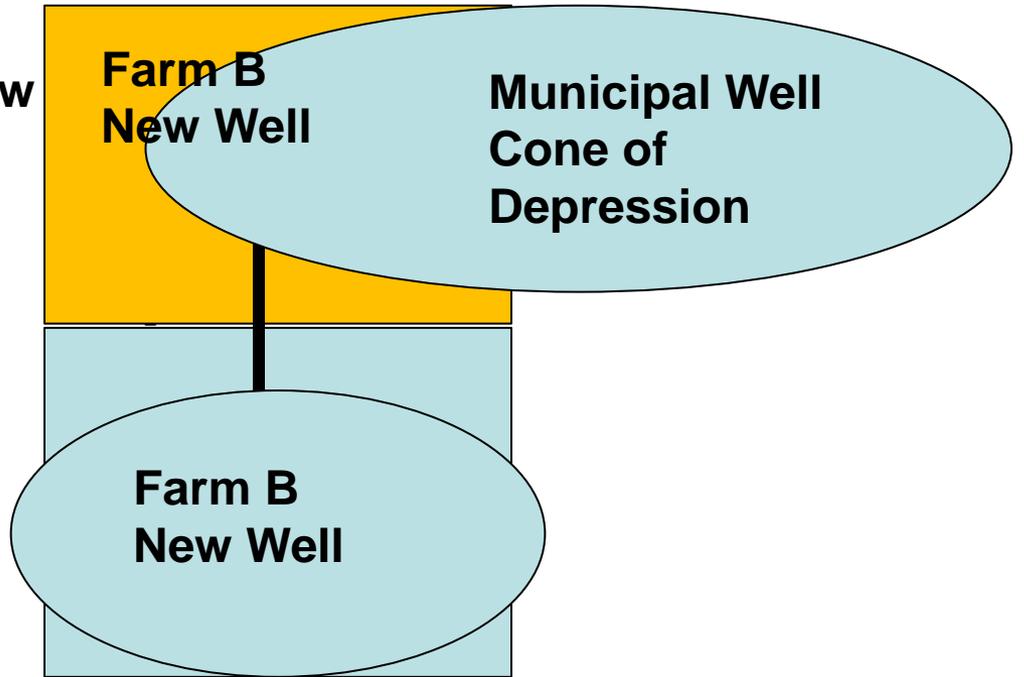


**Relaxation of Riparian  
Access might also allow  
improved use of ground  
water**





**Relaxation might also allow improved use of ground water**



# SB367 in 2016 Legislative Session

**“[E]stablish and define water basins of the State...used for purposes of water resources planning and management under the Alabama Water Resources Act”**

1 175886-1:n:03/16/2016:MCS/th LRS2016-1183  
2  
3  
4  
5  
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7  
8 SYNOPSIS: This bill would establish and define water  
9 basin areas of the State of Alabama. These basin  
10 areas would be used for purposes of water resource  
11 planning and management under the Alabama Water  
12 Resources Act.  
13  
14 A BILL  
15 TO BE ENTITLED  
16 AN ACT  
17  
18 Relating to the establishment of water basin areas  
19 for the State of Alabama to be used for purposes of water  
20 resource planning and management activities under the Alabama  
21 Water Resources Act.  
22 BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:  
23 Section 1. (a) For purposes of this act, the  
24 following terms shall have the following meanings:  
25 (1) ALABAMA WATER RESOURCES ACT. Chapter 10B,  
26 commencing with Section 9-10B-1, of Title 9, Code of Alabama  
27 1975.

Page 1

# March 15, 2016, Joint Legislative Committee on Water Policy and Management



Senator Arthur Orr (R-Decatur) announced he was working on legislation to define the watersheds in Alabama. The Senate Transportation and Energy Committee discussed, amended, and carried over SB367 in committee. Senator Orr said he introduced the Bill to get the process moving on elements of a larger water policy plan for the state.

# *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 asked "Murdered by Time?"**



Water Policy and Law Institute

*Bennett L. Bearden, JD, LLM, JSD*  
*Director*

THE UNIVERSITY OF  
**ALABAMA**

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