

No. 143, Original

IN THE
Supreme Court of the United States

STATE OF MISSISSIPPI,

Plaintiff,

v.

STATE OF TENNESSEE, CITY OF MEMPHIS, TENNESSEE,
AND MEMPHIS LIGHT, GAS & WATER DIVISION,

Defendants.

On Bill of Complaint
Before the Special Master, Hon. Eugene E. Siler, Jr.

**PLAINTIFF’S RESPONSE TO DEFENDANTS’
MOTION FOR SUMMARY JUDGMENT**

JIM HOOD

Attorney General

State of Mississippi

DONALD L. KILGORE

GEORGE W. NEVILLE

MISSISSIPPI ATTORNEY GENERAL’S
OFFICE

Walter Sillers State Office Building,
Suite 1200

550 High Street

Jackson, MS 39201

(601) 359-3680

dkil@ago.state.ms.us

gnevi@ago.state.ms.us

C. MICHAEL ELLINGBURG

Counsel of Record

DANIEL COKER HORTON & BELL, P.A.

4400 Old Canton Road, Suite 400

(39211)

P. O. Box 1084

Jackson, MS 39214-1084

mellingburg@danielcoker.com

JOHN W. (DON) BARRETT
DAVID M. McMULLAN, JR.
BARRETT LAW GROUP, P.A.
404 Court Square North
Post Office Box 927
Lexington, MS 39095
(662) 834-2488
dbarrett@barrettlawgroup.com
donbarrettpa@gmail.com
dcmullan@barrettlawgroup.com

LARRY D. MOFFETT
DANIEL COKER HORTON & BELL, P.A.
265 North Lamar Blvd., Suite R
P. O. Box 1396
Oxford, MS 38655
(662) 232-8979
lmoffett@danielcoker.com

GEORGE B. READY
GEORGE B. READY ATTORNEYS
Post Office Box 127
Hernando, MS 38632
(662) 429-7088
gbready@georgebreadyattorneys.com

ELIZABETH TIPPING
CHARLES BARRETT
WILLIAM J. HARBISON, II
NEAL & HARWELL, PLC
1201 Demonbreun Street, Suite 1000
Nashville, TN 37203
(615) 244-1713
etipping@nealharwell.com
cbarrett@nealharwell.com
jharbison@nealharwell.com

Counsel for the State of Mississippi

TABLE OF CONTENTS

Table of Contents	i
Table of Authorities	ii
I. Introduction	2
A. The Limited Issue Identified For Hearing	2
B. Defendants Have Not Met The Summary Judgment Standard	4
C. Summary Of Material Facts	5
II. Defendants' Motion for Summary Judgment Should Be Denied ...	10
A. The Water at Issue Is Not All Groundwater in the Mississippi Embayment Underlying Eight States	10
B. The Technological Ability To Pump Groundwater Out Of A Neighboring State's Natural Groundwater Storage Does Not Make That Groundwater An Interstate Resource	12
C. The Incremental Natural Movement Of Small Amounts Of Groundwater Into Tennessee Over Centuries Does Not Make The Mississippi Groundwater At Issue An Interstate Natural Resource	14
D. Defendants' Argument Regarding Hydrological Connections To Surface Waters Is Incomplete and Irrelevant To The Stated Issue....	14
III. Conclusion.....	15

TABLE OF AUTHORITIES

Cases

<i>Anderson v. Liberty Lobby, Inc.</i> , 477 U.S. 242 (1986).....	4
<i>AT&T Communications v. Mountain States, Inc.</i> , 778 P.2d 677 (Colo. 1989)	1
<i>City of Milwaukee v. Illinois and Michigan</i> , 451 U.S. 304 (1981)	3
<i>Colorado v. New Mexico</i> , 459 U.S. 176 (1982)	3
<i>Florida Dept. of Revenue v. New Sea Escape Cruises, Ltd.</i> , 894 So.2d 954 (Fla. 2005)	1
<i>General Motors Corp v. Washington</i> , 377 U.S. 436 (1964)	2
<i>Idaho v. Oregon</i> , 462 U.S. 1017 (1983)	3
<i>Independent Warehouses v. Scheele</i> , 331 U.S. 70 (1947)	2
<i>Kansas v. Colorado</i> , 206 U.S. 46 (1907)	3, 12
<i>Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Ware</i> , 414 U.S. 117	2
<i>Missouri v. Illinois</i> , 180 U.S. 208 (1901)	12, 13
<i>Nebraska v. Wyoming</i> , 325 U.S. 589 (1945)	3
<i>New Jersey v. New York</i> , 283 U.S. 336 (1931)	3
<i>Norton Co. v. Dept. of Rev.</i> , 340 U.S. 534 (1951)	2
<i>South Carolina v. North Carolina</i> , 558 U.S. 256 (2010)	3
<i>Toolson v. New York Yankees, Inc.</i> , 346 U.S. 356 (1953)	2
<i>Wyoming v. Colorado</i> , 259 U.S. 419 (1922).....	3

Other

Merriam-Webster’s Collegiate Dictionary (1986)	1
Merriam-Webster’s Collegiate Dictionary (10th ed. 1999)	2

Defendants’ Motion for Summary Judgment only refers to “the Aquifer” as they define it,¹ and ignores the specific question in the Special Master’s Order for the hearing: “whether *the water that is at issue* in this case is *interstate in nature*.” Dkt. No. 56 (Case Management Order) (emphasis added)). Rather than address this question, Defendants selectively quote fragments of the Special Master’s Memorandum Decision (Dkt. No. 55), augmented only by immaterial and incomplete evidence and phrases that embody counsel’s conclusions on mixed questions of fact and/or law.

This case does not involve interstate river water rapidly flowing through multiple States on a path to the sea. It involves water in tiny pore spaces of the earth within Mississippi’s borders, where it naturally resided for thousands of years in the territory granted to Mississippi upon admission into the Union. The fact that it has “existed” and “occurred” exclusively within the land making up Mississippi for millennia, and would still “exist” and “occur” exclusively within Mississippi’s borders, absent Defendants’ pumping, makes it “intrastate” by definition.²

¹ Defendants’ definition ignores important distinctions in local geology and hydrology.

² Applying the plain and ordinary meaning of “intrastate,” the groundwater at issue, based on its residence time in Mississippi alone, is “intrastate water.” *AT&T Communications v. Mountain States, Inc.*, 778 P.2d 677, 683 (Colo. 1989) (“plain and ordinary meaning” of “intrastate” is “existing within a state”) quoting *Merriam-Webster’s Collegiate Dictionary* 1186 (1986); *Florida Dept. of Revenue v. New Sea Escape Cruises, Ltd.*, 894 So.2d 954, 961 (Fla. 2005) (“the term “intrastate” is

Nevertheless, Defendants have knowingly taken in excess of 400 billion gallons of Mississippi groundwater by pumping in southwest Tennessee between 1965 and 2016. Exh. 1 at 5-6, 18, 20; S10; S11; S12; S14; S15; Exh. 2 at O16, O32, O47-49; Exh. 3 at F2, F28, F41; Exh. 4 at 126-40 and 237-38. This is not a dispute that should be decided on Defendants' broad generalizations of selective, incomplete, and immaterial evidence, but one that must be decided considering all material facts relating to the specific Mississippi groundwater at issue.

I. INTRODUCTION

A. The Limited Issue Identified For Hearing

The question defined for the January 2019 hearing is “[w]hether the *water that is at issue* in this case is *interstate in nature*.”³ The phrase “interstate in nature” is sometimes used in cases decided under the interstate commerce clause,⁴ and is best

commonly construed as meaning “existing or occurring within a state”) *citing Merriam-Webster's Collegiate Dictionary* 614 (10th ed. 1999).

³ The Special Master stated the same question slightly differently in the Memorandum Decision (Dkt No. 55) at page 36: “[W]hether the Aquifer and the water constitutes an interstate resource.”

⁴ This phrase appears in some Supreme Court cases, but not in original jurisdiction equitable apportionment cases independent of annual surface water contributions. *See Norton Co. v. Dept. of Rev.*, 340 U.S. 534 (1951) (state tax challenge on interstate commerce grounds); *General Motors Corp v. Washington*, 377 U.S. 436 (1964) (taxpayer case); *Independent Warehouses v. Scheele*, 331 U.S. 70 (1947) (state tax challenge on interstate commerce grounds); *Toolson v. New York Yankees, Inc.*, 346 U.S. 356 (1953) (jurisdiction over antitrust suit brought by professional baseball players); *Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Ware*, 414 U.S. 117 (conflict between Securities Exchange Act arbitration provision and

understood in terms of intrastate residence and interstate travel. In the seminal *Kansas v. Colorado* decision the Court addressed both issues. First, it affirmed the separate States’ “full jurisdiction [and authority] over the lands within its borders, including the beds of streams *and other waters*” residing within its borders. *Kansas v. Colorado*, 206 U.S. 46, 93-97 (1907) (emphasis added). Then, the Court addressed the specific problem of surface water flowing “under the agency of natural laws” in the Arkansas River, which was “a stream running through the territory which now composes Kansas and Colorado.” 206 U.S. 46 at 97-98. Nothing in that case, or any subsequent Court decision even remotely diminishes an individual State’s sovereign authority over water naturally residing only within its borders under the “agency of natural laws” to any degree,⁵ or purports to recognize any authority in the Court to

state law authorizing suit to recover wages notwithstanding arbitration provision); *City of Milwaukee v. Illinois and Michigan*, 451 U.S. 304 (1981) (federal common law action preempted by federal amendments to Clean Water Act).

⁵All of the Court’s equitable apportionment cases begin by tracing the interstate path of the water. *E.g.*, *Kansas v. Colorado*, 206 U.S. 46, 50, (1907) (Arkansas River from Colorado through Kansas, Oklahoma, Indian Territory, Arkansas, and to the sea); *Wyoming v. Colorado*, 259 U.S. 419, 456 (1922) (Laramie River from Colorado through Wyoming to North Platte River); *New Jersey v. New York*, 283 U.S. 336 (1931) (Delaware River from New York to Pennsylvania, New Jersey, and Atlantic Ocean); *Nebraska v. Wyoming*, 325 U.S. 589, 592 (1945) (North Platte River from Colorado through Wyoming, Nebraska, and into Missouri River near Iowa); *Colorado v. New Mexico*, 459 U.S. 176, 178 (1982) (Vermejo River from Colorado into New Mexico and the Canadian River); *Idaho v. Oregon*, 462 U.S. 1017 (1983) (tracing path of anadromous fish from Pacific Ocean up Columbia-Snake River through Wyoming, Idaho, Washington, Oregon, British Columbia); *South Carolina v. North Carolina*, 558 U.S. 256 (2010) (Catawba River flowing

authorize cross-border extractions of groundwater by pumping.⁶

B. Defendants Have Not Met The Summary Judgment Standard

Defendants' Motion is replete with characterizations and generalizations, but not with geological and hydrological facts qualifying as evidence supporting a summary judgment. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). The substantive law determines the facts that must be considered in determining the outcome of the case. The Special Master accurately identified geology and groundwater hydrology as some types of proof that are needed to determine the stated question; however, Defendants have not offered evidence addressing the specific geological and hydrological groundwater conditions that are necessary to make a recommendation on a matter of first impression before the Court. One example is Defendants' complete failure to address critically important groundwater hydrology issues of natural flow velocity, flow direction, and resulting residence time of the groundwater at issue in this case. The following summary provides an example of the types of material facts ignored in Defendants' Motion and arguments.

from North Carolina into South Carolina).

⁶ A few cases in which river water has been allocated between States involve questions of whether pumping from shallow aquifers in one State has denied the allocated river water to another, but these cases do not address groundwater independently, or water in a deep confined aquifer system like the one in the present dispute.

C. Summary Of Material Facts

This case does not involve a single continuous “body of water,” underground river, or lake underlying eight states touching the Mississippi Embayment as imagined by Defendants. P48-49; Exh. 5 at 95. The Mississippi Embayment includes an array of sedimentary materials deposited during the Eocene Epoch, approximately 40,000,000 years ago, and subsequently buried under additional deposits made in the later millennia. S9. The resulting subsurface geology is complex and diverse, with discontinuous deposits of natural “sands” and “clays”⁷ sometimes separated into confined formations that can store and transmit water, qualifying them as aquifers. These aquifers vary in geographic coverage, thickness, permeability, specific yield, water quality, and other characteristics which may vary dramatically over very short distances. S8; Exh. 6 at 19-21; 246-253.

The names of the geologic formations and hydrologic units in the Mississippi Embayment vary significantly in different states and in local and regional studies. *See* Exh. 7 at 15-26. However, the Sparta Sand and the Memphis Sand are consistently recognized as separate geologic formations and aquifers. The two share an upper confining unit, but in Mississippi near the Tennessee border, the thick

⁷ These are natural materials created and deposited over thousands of years of varying environmental conditions, and are invariably heterogeneous and anisotropic within the formation or in aerial distribution, and can have different hydrological properties over short distances.

Memphis Sand formation disappears, and is replaced by several distinct geological and hydrological units identified by the USGS, each having different sedimentary compositions and hydrologic characteristics. Exh. 8 at 16; Exh. 6 at 2; Exh 9 at Figure 5; Exh. 10 at 4-9; Exh. 11 at D15; Exh. 17 at 25; Defendants' Exh. 1. The deeper Memphis Sand continues to the north through west Tennessee.

The extension of the Memphis Sand a few miles into Mississippi, and its contact with the thinner Sparta Sand through complex facies changes in the Sparta's lower confining unit does not mean that groundwater has ever flowed in any meaningful quantities from Mississippi north into Tennessee under natural conditions; and it does not answer the hydrological and geological issues raised by the Special Master which are necessary to evaluate the competing States' claims under the United States Constitution. It is true that groundwater moves or "flows" within confined aquifers, but the rate of flow (velocity) and direction of groundwater movement in confined aquifers has nothing in common with surface water. The 2001 USGS Circular 1186 addresses this fact, explaining that river flow is measured in miles per day (e.g., 16 miles a day), while groundwater velocity is measured in inches per day, with groundwater movement of a foot a day considered a high velocity. Exh. 12 at 8. Further, natural groundwater movement in a confined aquifer is driven by gravity and pressure—both determined in nature by geology and hydrologic characteristics of the specific aquifer. Exh. 13 at 44.

The evidence will show that for thousands of years under natural conditions before both Mississippi and Tennessee were admitted to the Union, surface water entering the confined Memphis and Sparta Sand outcrops in Mississippi seeped downward moving very slowly in an east to west/southwest direction driven by gravity and natural pressures within the aquifer system at a velocity of about an inch a day, and remains in Mississippi groundwater storage for a period of 4,000 to 22,000 years. Exh. 1 at 7, 9-11; Exh. 14 at 4, 10-11; Exh. 8 at 23-24.⁸ This Mississippi groundwater naturally stored and residing in Mississippi would have remained in Mississippi at constant volumes and pressures created by nature, but for the introduction of Defendants' massive groundwater pumping operations near the Mississippi border. Exh. 1 at 9-11; Exh. 14 at 4.⁹

MLGW's groundwater production and sales operation is one of the largest in

⁸ The only exception is a small amount of groundwater residing in the northeast corner of DeSoto County, Mississippi, for hundreds of years before it would naturally move into Tennessee at the same rate under natural conditions. Exh. 4 at 143.

⁹ Defendants assert "the parties agree that there have never been any physical barriers in the Aquifer that impede or prevent the flow of groundwater across the Tennessee-Mississippi border" (Motion at 8-9); but Plaintiff's actual position, as reflected in Defendants' record citations (Joint Statement Response to D48, and Plaintiff's Response to Tennessee's Interrogatory No. 3), is that there is (obviously) no physical subterranean wall or dam underlying the border totally blocking groundwater movement between the states, but that natural hydrologic conditions in northwest Mississippi prevent groundwater from flowing from Mississippi into Tennessee under natural conditions. MLGW's mechanical pumping has altered those natural conditions and pulled Mississippi groundwater into Tennessee.

the world, and by its location of wells near the Mississippi border, it has dramatically reduced natural groundwater pressures in Mississippi, redirecting and capturing billions of gallons of Mississippi groundwater not naturally available in Tennessee.

Exh. 1 at 6; Exh. 5 at 97-98, 150-51. There is nothing natural about this pumping:

The withdrawal of ground water by pumping is the most significant human activity that alters the amount of ground water in storage and the rate of discharge from an aquifer. The removal of water stored in geologic materials near the well sets up hydraulic gradients that induce flow from more distant parts of the aquifer. ... The area of water-level decline is called the cone of depression, and its size is controlled by the rate and duration of pumping, the storage characteristics of the aquifer, and the ease with which water is transmitted through the geologic materials to the well.

Exh. 15 at 6. Overlapping cones of depression in areas of high density pumping pulls groundwater into the cones, and drives it into the well(s). Exh. 13 at 43.

But Defendants were simply never concerned about the impacts of MLGW groundwater pumping on Mississippi and its citizens. At the time MLGW designed and developed its Lichterman, Davis and Palmer well fields near the Mississippi border, it was fully aware that these fields would only increase the amount of groundwater MLGW was drawing out of Mississippi's natural groundwater storage into Tennessee. Exh. 2 at O16, O32, O47-49; Exh. 3 at F2, F28, F41. Defendants have intentionally captured an estimated 412 billion gallons of groundwater naturally residing only within Mississippi since 1965. *See* Exh. 1 at 6, 9-11, 17-18, 20; Exh. 6 at 16. These huge extractions of Mississippi groundwater have been

reported by federal and Tennessee groundwater scientists since the 1980s,¹⁰ but MLGW's pumping continued to increase until the year 2000 when its pumping peaked at approximately 163 million gallons a day, part of which was coming from Mississippi. Exh. 1, Tables 1 & 2.

This significant loss of Mississippi's natural groundwater storage and pressures within the cone of depression created by Defendants in Tennessee, and extending significantly into Mississippi, has materially decreased the amount of groundwater Mississippi can produce for the benefit of its citizens; and has increased the costs of producing Mississippi groundwater within the cone of depression. Exh. 6 at 3; Exh. 8 at 29. The drastic reduction of the natural pressures within the cone of depression created by Defendants has also converted parts of the Mississippi alluvial aquifer from an area naturally recharged by water from the Memphis Sand, to an area of recharge for the Memphis Sand; and is drawing much younger groundwater in shallower aquifer formations downward into the older, higher quality water in the Memphis and possibly Sparta sands through paleochannels in the upper confining layer in both States. Exh. 8 at 23-24; Exh. 5 at 70-75.

¹⁰ See Exh. 16 at 10, 14-15, 20-24, 28-43, 77-79, 130-31, 138-41 and Exhibits 2 and 3; Exh. 9 at MS SCT 002966-67; Exh. 17 at MS SCT 000305-08; Exh. 18 at MS SCT 000414; Exh. 19 at MS SCT 000640; Exh. 2 at MS SCT 000692, 000706-18; Exh. 20 at MS SCT 000991, 001033.

These losses and risks were needlessly imposed on Mississippi by Defendants, who could have obtained plenty of water without a material impact on Mississippi. The geographic extent and material impact of a cone of depression created by groundwater pumping is predictable and measureable. Placing MLGW wellfields in the same Memphis Sand to the north and east of Memphis within Tennessee; increasing the spacing between those commercial wells; and, limiting the duration of pumping from individual wells on a rotating cycle in accordance with good groundwater development practices would have avoided any material impact on Mississippi groundwater. Exh. 4 at 126-40 and 237-38; Exh. 5 at 156-57.¹¹

II. DEFENDANTS' MOTION FOR SUMMARY JUDGMENT SHOULD BE DENIED

A. The Water at Issue Is Not All Groundwater in the Mississippi Embayment Underlying Eight States

The *water at issue* is groundwater that was naturally residing in Mississippi but has been pumped into Tennessee by MLGW's massive groundwater pumping operations. *Defendants never address the residence time of this groundwater or its flow direction under natural conditions.* Instead, Defendants claim the water at issue

¹¹ The Parties' Joint Statement of Stipulated and Contested Facts (Dkt. No. 64) contains 141 contested statements of fact, over 50 of which were tendered by Mississippi on geology, hydrology, historical flows between States, and groundwater pumping impacts. Mississippi incorporates herein by reference all of its statements, responses to Defendants' statements, and the record evidence cited therein by Mississippi.

is all water in “a single, continuous hydrological body that lies beneath parts of Mississippi, Tennessee, and six other states.” Motion at 5. Defendants state “the Aquifer at issue” is called many different names, including the “Sparta Aquifer,” the “Memphis Sand Aquifer,” the “Sparta-Memphis Sand,” and the “Middle Claiborne Aquifer,” Motion at 1, 2 n. 1, 3, 5-7, and criticize Mississippi for its refusal to concede there is only one such aquifer “at issue.” Motion at 12-14.

In their criticism Defendants ignore the fact that the “Aquifer” to which Defendants refer is a group of formations, including the distinct Sparta Sand and Memphis Sand formations. It is well-recognized those are *separate* aquifers that are sometimes (not always) referred to collectively. For example, Defendants’ Exhibit 1 explains that what it refers to as “the Sparta-Memphis Aquifer,” is actually two different aquifers: the “Sparta aquifer” and the “Memphis aquifer.” *Id.* (“Herein, the sand layers within the Sparta Sand and Memphis Sand that comprise the Sparta aquifer and the Memphis aquifer will be referred to as the Sparta-Memphis aquifer.”).¹² Regardless, the “one aquifer” or “two aquifers” issue is a red

¹² The varying labels applied to these formations separately and/or collectively has led to confusion, both in scientific publications and, unfortunately, in this proceeding, where the parties and various witnesses have, at times, referred to the Sparta aquifer and the Memphis aquifer collectively, using a hodgepodge of terms. Such labels do not, however, change the undeniable fact that the Sparta Sand and the Memphis Sand are distinct formations/aquifers, with different locations, geologic properties, thicknesses, and hydrologic characteristics.

herring. The water in eight different states is not at issue. Instead, the critical inquiry is the location, hydrologic characteristics, and residence time of the water that is actually at issue: groundwater that resided within Mississippi for thousands of years and would not be available in Tennessee absent MLGW's pumping.

B. The Technological Ability To Pump Groundwater Out Of A Neighboring State's Natural Groundwater Storage Does Not Make That Groundwater An Interstate Resource

Cutting a partial quote out of *Kansas v Colorado*, Defendants argue that when “the action of one State reaches through the agency of natural laws into the territory of another State” equitable apportionment is the complaining State's exclusive remedy. Motion at 2 (citing Op. 2). This is not consistent with the Court's actual holding. The Court's actual language was

[W]henever, as in the case of *Missouri v. Illinois*, 180 U.S. 208, the action of one State reaches through the agency of natural laws into the territory of another State, the question of the extent and the limitations of the rights of the two States becomes a matter of justiciable dispute between them, and this court is called upon to settle that dispute in such a way as will recognize the equal rights of both and at the same time establish justice between them.

Kansas v. Colorado, 206 U.S. 46, 97 (1907). This was a holding declaring that the Court had jurisdiction in original actions between States to resolve their disputes to “establish justice between them,” *not* a proclamation that all such water-related disputes between States must be resolved by equitable apportionment. Indeed, *Missouri v. Illinois* was a nuisance (not equitable apportionment) suit seeking an

injunction stopping construction of an “unnatural channel” that would transport Chicago’s sewage to the Des Plaines and Illinois Rivers which, by the agency of natural laws would carry the sewage into the Mississippi River. *Missouri* at 241-48.

The agency of natural laws in the present case are the natural processes that created the formations under Mississippi and saturated them with high quality groundwater moving across northwest Mississippi where it exclusively resided for thousands of years; and MLGW’s groundwater pumping is the equivalent of the “unnatural channel.” The Court’s water cases do not limit its authority to fashion remedies appropriate for the facts in each case. This case is not about water rapidly flowing through and temporarily residing in multiple States on a journey to the sea. It is about Mississippi’s sovereign authority under the Constitution to manage, preserve, protect, and control the taking of high quality groundwater naturally occurring and residing in Mississippi for hundreds and thousands of years.

Defendants’ argument that groundwater pumping by MLGW is an “agency of natural laws” is convoluted and absurd. Such groundwater pumping is an “unnatural” force disrupting the natural forces under which the Mississippi groundwater was naturally stored and resided. The fact that the natural geology that kept the naturally occurring groundwater within Mississippi could be utilized as a conduit for Defendant’s pumping because there is not a “barrier” beneath the ground to counteract Defendants’ technological manipulation of the natural conditions does

not change Mississippi's rights in and sovereignty over the naturally occurring groundwater residing only within its territory under natural conditions.

C. The Incremental Natural Movement Of Small Amounts Of Groundwater Into Tennessee Over Centuries Does Not Make The Mississippi Groundwater At Issue An Interstate Natural Resource

The fact that groundwater moves and that a small amount of Mississippi groundwater could naturally travel from Mississippi into Tennessee over hundreds of years (Ex. 4 at 143) does not support Defendants' position. Defendants vigorously cross-examined Dr. Spruill (*see* Ex. 4) on Mississippi groundwater natural movement in a very small part of DeSoto County, Mississippi, that is not included in Mississippi's claims, and received a very clear response: under natural conditions groundwater in that area would ultimately make it to Tennessee after periods of six hundred to eight hundred years. *Id.* This merely emphasizes the fact that all the groundwater residing in Mississippi under natural conditions is intrastate groundwater falling under Mississippi's sole sovereign authority. The groundwater at issue and actually claimed in Mississippi's complaint is calculated to naturally reside in Mississippi absent pumping for 4,000 to 22,000 years. Exh. 14 at 4.

D. Defendants' Argument Regarding Hydrological Connections To Surface Waters Is Incomplete and Irrelevant To The Stated Issue

Defendants' argument relating to hydrological connections of groundwater to surface waters suffers from the same flaws as those above. It totally ignores

groundwater residence time. The shortest possible groundwater residence time between surface water entry into the confined aquifers in Mississippi and discharge into the “paradigmatic interstate” Mississippi River is 4,000 years. Exh. 14 at 4, 10-11. This evidence is undisputed. Under any definition the groundwater traveling across Mississippi is intrastate. While some unconfined groundwater originating in the Wolfe River may or may not ultimately find its way into Tennessee based on flow path model results provided by one of Defendants’ experts, no travel or residence time calculations were provided by any of Defendants’ witnesses, so there is no evidence contradicting the residence time calculations by Mississippi’s experts.

III. CONCLUSION

This is a matter of first impression for which a full record of scientific literature and expert testimony should be developed for the Supreme Court, not dismissed, as Defendants request, based on a few select and incomplete excerpts of documents that fail to address material facts such as the complexity of the groundwater systems’ geology and the storage, flow velocity, flow direction, and residence time of the water at issue under natural conditions. These types of facts are critical to the proper resolution of this proceeding. Defendants’ Motion should be promptly denied allowing the parties to proceed with preparation for the scheduled evidentiary hearing.

Respectfully submitted, this the 6th day of July, 2018.

THE STATE OF MISSISSIPPI

BY: /s/ C. Michael Ellingburg

JIM HOOD
Attorney General
State of Mississippi
DONALD L. KILGORE
GEORGE W. NEVILLE
MISSISSIPPI ATTORNEY GENERAL'S
OFFICE
Walter Sillers State Office Building,
Suite 1200
550 High Street
Jackson, MS 39201
(601) 359-3680
dkilg@ago.state.ms.us
gnevi@ago.state.ms.us

C. MICHAEL ELLINGBURG
Counsel of Record
DANIEL COKER HORTON & BELL, P.A.
4400 Old Canton Road, Suite 400
(39211)
P. O. Box 1084
Jackson, MS 39214-1084
mellingburg@danielcoker.com

JOHN W. (DON) BARRETT
DAVID M. McMULLAN, JR.
BARRETT LAW GROUP, P.A.
404 Court Square North
Post Office Box 927
Lexington, MS 39095
(662) 834-2488
dbarrett@barrettlawgroup.com
donbarrettpa@gmail.com
dcmullan@barrettlawgroup.com

LARRY D. MOFFETT
DANIEL COKER HORTON & BELL, P.A.
265 North Lamar Blvd., Suite R
P. O. Box 1396
Oxford, MS 38655
(662) 232-8979
lmoffett@danielcoker.com

GEORGE B. READY
GEORGE B. READY ATTORNEYS
Post Office Box 127
Hernando, MS 38632
(662) 429-7088
gready@georgebreadyattorneys.com

ELIZABETH TIPPING
CHARLES BARRETT
WILLIAM J. HARBISON, II
NEAL & HARWELL, PLC
1201 Demonbreun Street, Suite 1000
Nashville, TN 37203
(615) 244-1713

etipping@nealharwell.com
cbarrett@nealharwell.com
jharbison@nealharwell.com

Counsel for the State of Mississippi

CERTIFICATE OF SERVICE

Pursuant to Paragraph 3 of the Case Management Plan (Dkt. No. 57), I hereby certify that all parties on the Special Master's approved service list have been served by electronic mail, this the 6th day of July, 2018.

/s/ C. Michael Ellingburg
C. Michael Ellingburg