OFFICE OF THE O

## In The Supreme Court of the United States

THE STATE OF MISSISSIPPI,

Plaintiff,

V

The City of Memphis, Tennessee, Memphis Light, Gas & Water Division, and The State of Tennessee, Defendants.

On Motion for Leave to File Bill of Complaint in Original Action

## BRIEF IN OPPOSITION TO MOTION FOR LEAVE TO FILE BILL OF COMPLAINT

Leo M. Bearman

Counsel of Record

David L. Bearman

Kristine L. Roberts

Chad D. Graddy

Baker, Donelson, Bearman,

Caldwell & Berkowitz, PC

165 Madison Ave., Ste. 2000

Memphis, TN 38103

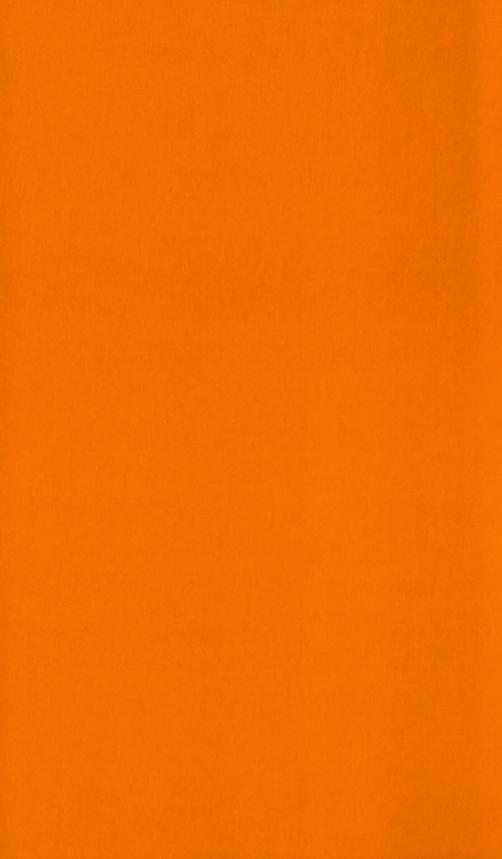
(901) 526-2000

CHERYL W. PATTERSON
CHARLOTTE KNIGHT GRIFFIN
MEMPHIS LIGHT, GAS & WATER
DIVISION
220 South Main Street
Memphis, TN 38103
(901) 528-4721

Walker W. Jones, III
Baker, Donelson, Bearman,
Caldwell & Berkowitz, PC
Meadowbrook Office Park
4268 I-55 North
Jackson, MS 39211
(601) 351-2400

CHRISTOPER S. CAMPBELL HARRIS SHELTON HANOVER WALSH, PLLC One Commerce Square Suite 2700 Memphis, TN 38103 (901) 545-1455

Counsel for Defendants The City of Memphis, Tennessee, and Memphis Light, Gas & Water Division



#### **QUESTIONS PRESENTED**

- 1. Whether the Court should grant Mississippi leave to file an original action asserting claims for conversion and trespass against the City of Memphis, Tennessee, and its utility division, arising from the City's withdrawal of ground water from an interstate aquifer that underlies multiple states, including Tennessee and Mississippi, when (a) the aquifer has never been apportioned either by this Court, congressional act, or interstate compact; and (b) the City withdraws water from the aquifer only from within Tennessee's boundaries and in compliance with Tennessee's laws.
- 2. Whether the Court should grant Mississippi leave to file an original action seeking a "conditional" and "provisional" equitable apportionment of the Memphis Sand Aquifer and monetary damages for past diversions of water, when (a) Mississippi does not allege any real or substantial injury or damage to its current or foreseeable use of the aquifer, and (b) this Court's precedents do not allow for the recovery of damages for past diversions.

#### TABLE OF CONTENTS

QUESTIONS PRESENTED
TABLE OF CONTENTS i
TABLE OF AUTHORITIES
INTRODUCTION
STATEMENT OF THE CASE
Factual Background
Mississippi's First Lawsuit Against Memphis and MLGW
REASONS FOR DENYING MISSISSIPPI'S MOTION
I. MISSISSIPPI FAILS TO STATE A CLAIM FOR CONVERSION AND TRESPASS AGAINST MEMPHIS AND MLGW
A. Mississippi's Tort Claims Are Contrary to and Cannot Be Reconciled With This Court's Equitable Apportionment Precedents
B. Mississippi's Tort Claims Are Based Entirely on False Assumptions
1. The Aquifer has never been apportioned between Mississippi and Tennessee 10

		2.	detern	ninative	of Miss	nic boun issippi's	right t	o the	11
		3.				"own" t			
	C.	Mi	ssissip	pi's Cla	im for	rity to Money LGW .	Dam	ages	
II.	GF	JOS	INDS	TO SU	PPORT	ALLE AN EG EE	ATIU	BLE	19
	A.	In	jury	Warra	nting	eal or S an I	Equit	able	20
		1.	requir	es a hei	ghtened	ortionme l showin damage	g of re	eal or	
		2.	injury	sufficie	ent to s	nt fails to upport a ent	a clair	n for	21
	В.	Do	es No	t Pern	nit Re	ble App covery f Water	of M	loney	
Ш.	IN	JU.	RY T	O ITS	INTE	ALLE RESTS	IN	THE	24
CC	)N(	CLU	JSION						28

#### APPENDIX:

Appendix 1:	Excerpts from deposition of David A. Wiley (Nov. 15, 2007) 1b
Appendix 2:	Excerpts from Expert Report of David E. Langseth, Sc.D., P.E. and John B. Robertson, P.G. (July 2, 2007)
Appendix 3:	Excerpts from deposition of Jamie Crawford (July 30, 2007) 13b
Appendix 4:	Excerpts from deposition of Jim Hoffman (July 30, 2007) 23h

#### TABLE OF AUTHORITIES

#### **CASES**

Abbott Laboratories, Inc. v. Gardner, 387 U.S. 136 (1967)
Alabama v. Arizona, 291 U.S. 286 (1934) 6
Arizona v. California, 373 U.S. 546 (1963) 9
Baldwin v. Fish & Game Comm'n of Montana, 436 U.S. 371 (1978)
Califano v. Sanders, 430 U.S. 99 (1977)
California v. Superior Court of Riverside County, 93 Cal. Rptr. 2d 276 (Cal. Ct. App. 2000) 17
California v. U.S., 438 U.S. 645 (1978) 9
Colorado v. Kansas, 320 U.S. 383 (1943)
Colorado v. New Mexico, 459 U.S. 176 (1982) 7, 13, 20, 21, 24
Colorado v. New Mexico, 467 U.S. 310 (1984) 12, 13, 20, 21
Connecticut v. Cahill, 217 F.3d 93 (2d Cir. 2000) 9

282 U.S. 660 (1931) 7, 20, 21, 22, 24
Douglas v. Seacoast Products, Inc., 431 U.S. 265 (1977)
Dycus v. Sillers, 557 So. 2d 486 (Miss. 1990) 17, 18
Ex parte Fritz, 38 So. 722 (Miss. 1905)
Georgia v. Pennsylvania R.R. Co., 324 U.S. 439 (1945) 6
Hinderlider v. La Plata River & Cherry Creek Ditch Co., 304 U.S. 92 (1938) 7, 8, 10, 13, 14
Hood, ex rel. Mississippi v. City of Memphis, Tenn., 533 F. Supp. 2d 646 (N.D. Miss. 2008) 4
Hood, ex rel. Mississippi v. City of Memphis, Tenn., 570 F.3d 625 (5th Cir. 2009) 4
Hughes v. Oklahoma, 441 U.S. 322 (1979)
Idaho v. Oregon, 462 U.S. 1017 (1983) 13, 20, 23
Illinois v. City of Milwaukee, 406 U.S. 91 (1972)
Kansas v. Colorado, 206 U.S. 46 (1907)

Kansas v. Colorado, 533 U.S. 1 (2001)
Missouri v. Holland, 252 U.S. 416 (1920)
Nebraska v. Wyoming, 325 U.S. 589 (1945)
Nebraska v. Wyoming, 515 U.S. 1 (1995) 6, 19
New Jersey v. New York, 283 U.S. 336 (1931)
New Mexico v. Gen. Elec. Co., 335 F. Supp. 2d 1185 (D.N.M. 2004) 18
New Mexico v. Gen. Elec. Co., 467 F.3d 1223 (10th Cir. 2006) 2, 18
New York v. New Jersey, 256 U.S. 296 (1921)
Ohio v. Kentucky, 410 U.S. 641 (1973) 6, 7
Puerto Rico v. SS Zoe Colocotroni, 628 F.2d 652 (1st Cir. 1980)
Sporhase v. Nebraska, 458 U.S. 941 (1982)
State Game & Fish Comm'n v. Fritz, 193 So. 9 (Miss. 1940) 16, 17

#### viii

Texas v. New Mexico, 462 U.S. 554 (1983) 2, 6, 9, 23
Texas v. New Mexico, 482 U.S. 124 (1987)
Virginia v. West Virginia, 206 U.S. 290 (1907)
Washington v. Oregon, 297 U.S. 517 (1936)
Wyoming v. Colorado, 259 U.S. 419 (1922)
STATUTES
28 U.S.C. § 1251(a) 6, 8, 9
Miss. Code Ann. § 51-3-3
Miss. Code Ann. § 51-3-11
OTHER
4 WATERS & WATER RIGHTS (Robert E. Beck ed., 1991 ed., 2004 repl. vol.)

#### INTRODUCTION

In its proposed complaint, Mississippi sues the City of Memphis, Tennessee ("Memphis"), and its utility division, Memphis, Light, Gas & Water Division ("MLGW"), alleging conversion of and trespass to ground water in an unapportioned interstate aquifer – ground water that Mississippi claims to "own." In addition, Mississippi "provisionally" and "conditionally" sues Tennessee, Memphis, and MLGW seeking an equitable apportionment of the interstate aquifer.

Mississippi's ability to obtain and use ground water from the interstate aquifer is not at risk or at issue here. Mississippi's complaint does not allege any loss of use or shortage of water. Instead, Mississippi merely alleges that ground water it claims to "own" has been diverted from beneath Mississippi into Tennessee.

Mississippi's tort claims against Memphis and MLGW are in direct conflict with this Court's long-standing equitable apportionment jurisprudence. For Mississippi's complaint to state a viable claim against Memphis and MLGW in this interstate context, this Court would be required to overturn one hundred years of its equitable apportionment jurisprudence and renounce the principles on which that doctrine was created. Moreover, this Court has never recognized the torts of conversion and trespass as being available causes of action to resolve disputes between sovereign states over rights to interstate water resources, has never held that a state's territorial boundary is alone dispositive of its equitable share of an interstate resource, and has never awarded money damages in

an equitable apportionment case for diversions that occurred before the interstate resource had been apportioned. And yet, Mississippi's tort claims necessarily require each of the above in order to go forward.

Mississippi's "provisional" claim for equitable apportionment is most notable for what it does not allege. Mississippi's complaint fails to allege any injury to Mississippi's current or foreseeable use of the ground water in the aquifer at issue. The sole basis for Mississippi's asserted damages is that ground water within the interstate aquifer has moved from Mississippi into Tennessee — nothing more. In short, Mississippi's complaint makes no claim that the alleged diversion of interstate ground water has caused any injury to Mississippi's use of the aquifer; Mississippi merely alleges the fact of diversion.

The motive behind Mississippi's complaint is transparent. Mississippi seeks only to "provide a windfall to the public treasury [of Mississippi]." New Mexico v. Gen. Elec. Co., 467 F.3d 1223, 1247 (10th Cir. 2006) (quoting Puerto Rico v. SS Zoe Colocotroni, 628 F.2d 652, 676 (1st Cir. 1980)). Such a purpose lacks the "seriousness and dignity," Illinois v. City of Milwaukee, 406 U.S. 91, 93 (1972), that "justif[ies] the expense and time necessary to obtain a judicial resolution" from this Court, Texas v. New Mexico, 462 U.S. 554, 576 (1983). This Court should, therefore, deny Mississippi's motion.

#### STATEMENT OF THE CASE

#### Factual Background

At issue in this case is ground water flowing through the Memphis Sand Aquifer, an interstate water resource underlying and shared by several states (the "Aquifer"). The Aquifer lies primarily beneath northwestern Mississippi, western Tennessee. and eastern Arkansas. For the past 120 years, Memphis has relied on the Aguifer as its primary municipal water source. It is undisputed that Memphis withdraws ground water from the Aquifer through wells that are located entirely within Tennessee and operates those wells in compliance with Tennessee's laws and regulations. It is further undisputed that the Aquifer has never been apportioned by judicial decree, interstate compact, or congressional act.

On September 2, 2009, Mississippi filed its Motion for Leave to File Bill of Complaint ("Motion"), along with its proposed complaint. In its complaint, Mississippi asserts two claims. First, as its "primary" claim, Mississippi sues only Memphis and MLGW under theories of conversion and trespass. Mississippi alleges that Memphis and MLGW have "diverted and wrongfully taken" ground water that Mississippi "owns" - what the complaint presumptively refers to as "Mississippi's water." Complaint, ¶¶ 5(a), 24. Mississippi seeks monetary damages in excess of \$1 billion, an amount that purportedly represents the "value" of ground water that has and will move from Mississippi into Tennessee. *Id.* at ¶ 5(a). Mississippi also requests an injunction requiring Memphis and MLGW to cease pumping from the Aquifer, id. at ¶ 5(b), which, if granted, would eliminate Memphis' sole source of water.

Second, Mississippi brings a "provisional" and "conditional" claim against Tennessee for equitable apportionment, "if and only if" it is unable to obtain monetary damages from Memphis and MLGW through its tort claims. Id. at  $\P$  5(c). In its equitable apportionment claim, Mississippi also seeks monetary damages from Memphis and MLGW for any past diversions of ground water that are inconsistent with the Court's apportionment. Id.

## $\frac{Mississippi's First Lawsuit Against Memphis and}{MLGW}$

Mississippi has already brought these same tort claims against Memphis and MLGW in the U.S. District Court for the Northern District of Mississippi (the "First Lawsuit"). Hood ex rel. Mississippi v. City of Memphis, No. 02:05CV32-D-B (N.D. Miss. filed Feb. 1, 2005). The district court dismissed Mississippi's tort claims in the First Lawsuit pursuant to Rule 19 of the Federal Rules of Civil Procedure, finding that Tennessee was a necessary and indispensable party to the action and that Tennessee could not be joined without the district court's losing jurisdiction. Dist. Ct. (Motion, p. 28a). The district court rejected

<sup>&</sup>lt;sup>1</sup> The opinions of the district court dismissing Mississippi's First Lawsuit and of the Fifth Circuit affirming the district court's ruling are reported at *Hood*, *ex rel*. *Mississippi v*. *City of Memphis*, *Tenn.*, 533 F. Supp. 2d 646 (N.D. Miss. 2008), and *Hood*, *ex rel*. *Mississippi v*. *City of Memphis*, *Tenn.*, 570 F.3d 625 (5th Cir. 2009), respectively. Both opinions have been reproduced in the

Mississippi's position that Memphis was "pumping water that belongs to the State of Mississippi, because it has not yet been determined which portion of the aquifer's water is the property of which State." Dist. Ct. (Motion, pp. 23a - 24a). Relying on this Court's precedents, the district court held that the power to equitably apportion the Aquifer lay "in the original and exclusive jurisdiction of the United States Supreme Court because such a dispute is necessarily between the State of Mississippi and the State of Tennessee." Dist. Ct. (Motion, p. 24a).

Mississippi appealed the dismissal, and the U.S. Court of Appeals for the Fifth Circuit affirmed. Fifth Cir. (Motion, p.16a). Mississippi filed a Petition for Writ of Certiorari, see Mississippi v. City of Memphis, No. 09-289 (filed Sept. 2, 2009), requesting that this Court review the Fifth Circuit's decision and the resulting dismissal of the same tort claims that Mississippi now seeks to bring in this Original Action.<sup>2</sup> Concurrently with its Petition, Mississippi filed its Motion for Leave to File Bill of Complaint.

Appendix to Mississippi's Motion and will be cited herein as "Dist. Ct. (Motion, p.\_a)" and "Fifth Cir. (Motion, p.\_a)."

<sup>&</sup>lt;sup>2</sup> During the course of the First Lawsuit, the parties conducted extensive discovery on matters directly relevant here. The excerpts of deposition testimony and from an expert report prepared by expert witnesses for Memphis and MLGW, which appear in the Appendix to this Response, are from the First Lawsuit.

### REASONS FOR DENYING MISSISSIPPI'S MOTION

This Court retains "substantial discretion to make case-by-case judgments" to decline to exercise its original and exclusive jurisdiction under 28 U.S.C. § 1251(a). Texas v. New Mexico, 462 U.S. at 570; see Nebraska v. Wyoming, 515 U.S. 1, 8 (1995). requirement that a party request and obtain leave from the Court to file an original action "serves an important gatekeeping function" and allows the Court "to dispose of matters at a preliminary stage." Nebraska v. Wyoming, 515 U.S. at 8; see also Ohio v. Kentucky, 410 U.S. 641, 644, 652 (1973) (denying leave to file an amended complaint in an original action). Leave to file a complaint should "be denied if it is plain that no relief could be granted in the exercise of the original jurisdiction of this Court," Georgia Pennsylvania R.R. Co., 324 U.S. 439, 445 (1945), or if the complaint fails to allege damages that are "clearly shown to be of a serious magnitude and imminent," Alabama v. Arizona, 291 U.S. 286, 292 (1934).

This Court has shown reluctance to "exercise original jurisdiction in any but the most serious of circumstances." Nebraska v. Wyoming, 515 U.S. at 8. The "threatened invasion of rights must be of serious magnitude and it must be established by clear and convincing evidence." New York v. New Jersey, 256 U.S. 296, 309 (1921). "[N]ot every matter of sufficient moment to warrant resort to equity by one person against another would justify an interference by this court with the action of a state." Alabama v. Arizona, 291 U.S. at 292.

Mississippi's complaint is "peculiarly susceptible" to dismissal at this preliminary motion stage, *Ohio v. Kentucky*, 410 U.S. at 645, because the claims asserted therein are so obviously contrary to the established precedent of this Court and fail to state any viable claim for relief.

- I. MISSISSIPPI FAILS TO STATE A CLAIM FOR CONVERSION AND TRESPASS AGAINST MEMPHIS AND MLGW.
  - A. Mississippi's Tort Claims Are Contrary to and Cannot Be Reconciled With This Court's Equitable Apportionment Precedents.

century, "[e]quitable For than more a apportionment [has been] the doctrine of federal common law that governs disputes between states concerning their rights to use the water of an interstate stream." Colorado v. New Mexico, 459 U.S. 176, 183 (1982). The goal of equitable apportionment is to resolve disputes between sovereign states over interstate resources in a way that recognizes the equal rights of each state and "establish[es] justice between them." Kansas v. Colorado, 206 U.S. 46, 98 (1907). In so doing, the doctrine of equitable apportionment reflects and embraces the "cardinal rule underlying all the relations of the states to each other" - "equality of right." Id. at 97; see also Connecticut v. Massachusetts, 282 U.S. 660, 670 (1931) (stating that equitable apportionment disputes are to "be settled on the basis of equality of right") (citing Kansas v. Colorado, 206 U.S. at 100). Interstate water resources are equitably apportioned "between states," Hinderlider v. La Plata River & Cherry Creek Ditch Co., 304 U.S. 92, 107

(1938), and, therefore, the original and exclusive jurisdiction to hear such matters lies with this Court, 28 U.S.C. § 1251(a).

Mississippi's common law tort claims against Memphis and MLGW are contrary to the "cardinal rule" at the heart of the equitable apportionment doctrine. Kansas v. Colorado, 206 U.S. at 97. First, Mississippi's proposed complaint improperly reaches across Mississippi's northern border by asserting against Tennessee citizens claims who withdrawing ground water exclusively from within Tennessee and in compliance with Tennessee's laws. By unilaterally claiming "ownership" of a specific portion of the unapportioned interstate Aquifer, Mississippi overtly "reach[es], through the agency of natural laws, into the territory of another state." Id. Mississippi's tort claims, by definition, infringe on the sovereignty of Tennessee because they presume that Mississippi's rights to the unapportioned ground water in the Aquifer are superior to Tennessee's rights to the same shared interstate resource.

Second, by suing only non-state defendants in tort, Mississippi circumvents Tennessee's sovereign interests in the Aquifer. Mississippi's position cannot be sustained because the apportionment of interstate water resources is a matter affecting the sovereign interests of states. Mississippi has no viable claim against Memphis or MLGW in this case because the ground water withdrawn by Memphis is merely derivative of "[Tennessee's] share of the water of the [Aquifer]." *Hinderlider*, 304 U.S. at 102.

Third, Mississippi's tort claims against non-state defendants usurp this Court's original and exclusive jurisdiction to apportion interstate waters between states under 28 U.S.C. § 1251(a). If the Aquifer is to be equitably apportioned, only this Court apportion it, and Tennessee must be a party. See Arizona v. California, 373 U.S. 546, 564 (1963) (acknowledging the Court's "serious responsibility to adjudicate cases where there are actual existing controversies over how interstate streams should be apportioned among States"), abrogated on other grounds by California v. U.S., 438 U.S. 645 (1978); Texas v. New Mexico, 462 U.S. at 567 ("There is no doubt that this Court's jurisdiction to resolve controversies between two States extends to a properly framed suit to apportion the waters of an interstate stream between States through which it flows.") (citations omitted).

Finally, Mississippi advances the untenable position that, for purposes of determining whether a controversy falls within 28 U.S.C. 1251(a), a plaintiff-state's choice of claims and defendants trumps this Court's consideration of the nature of the controversy and the real parties in interest. See Connecticut v. Cahill, 217 F.3d 93, 107 (2d Cir. 2000) (Sotomayor, J., dissenting) (finding it "clear that a plaintiff-State's choice of named defendants does not change the inherent nature of the lawsuit for jurisdictional purposes"); id. at 109 (noting that "[n]owhere does the Supreme Court surrender its prerogative to decide whether it will exercise its exclusive jurisdiction under § 1251(a) to hear a case").

- B. Mississippi's Tort Claims Are Based Entirely on False Assumptions.
  - 1. The Aquifer has never been apportioned between Mississippi and Tennessee.

Mississippi's claims against Memphis and MLGW presuppose that some portion of the Aquifer has already been apportioned to Mississippi (i.e., the portion that Mississippi claims to "own" and that Mississippi accuses Memphis and MLGW of "wrongfully taking"). This assumption is, of course, wrong.

The Constitution provides for the resolution of "interstate controversies" over natural resources through an equitable apportionment "suit in this Court" or an interstate compact "with consent of Congress." *Hinderlider*, 304 U.S. at 104-06. The ground water in the Aquifer has never been equitably apportioned between Mississippi and Tennessee. Mississippi can have no right to relief for the alleged wrongful taking of ground water that this Court has not yet apportioned – and may never apportion – to Mississippi.

In the First Lawsuit, both the district court and the Fifth Circuit properly rejected Mississippi's tort claims because, as in its complaint here, Mississippi relies on the false assumption that the Aquifer has already been apportioned. The district court stated:

The subject aquifer in the case sub judice has not been apportioned, neither by agreement of the involved States nor by the U.S. Supreme

Court. However, absent apportionment, this court cannot afford relief to the Plaintiff and hold that the Defendants are pumping water that belongs to the State of Mississippi, because it has not yet been determined which portion of the aquifer's water is the property of which State. It is simply not possible for this court to grant the relief the Plaintiff seeks without engaging in a *de facto* apportionment of the subject aquifer; such relief, however, is in the original and exclusive jurisdiction of the United States Supreme Court because such a dispute is necessarily between the State of Mississippi and the State of Tennessee.

Dist. Ct. (Motion, pp. 23a-24a). Affirming the district court's decision, the Fifth Circuit recognized that "the amount of water to which each state is entitled from a disputed interstate water source must be allocated before one state may sue an entity for invading its share." Fifth Cir. (Motion, p. 8a) (emphasis added) (citations omitted); see also Abbott Laboratories, Inc. v. Gardner, 387 U.S. 136, 148 (1967) (noting that the purpose of the ripeness doctrine is to "prevent the courts, through avoidance of premature adjudication, from entangling themselves in abstract disagreements"), abrogated on other grounds by Califano v. Sanders, 430 U.S. 99 (1977).

#### 2. Mississippi's geographic boundary is not determinative of Mississippi's right to the Aquifer.

Mississippi's tort claims also assume that Mississippi's geographic boundary alone is determinative of the specific volume of ground water within the Aquifer that is "owned" by Mississippi -Mississippi presumptively refers "Mississippi's ground water." See Motion, p. (asserting that Mississippi "owns the surface water and ground water resources within the geographical confines of its boundaries"); see also Complaint, ¶¶ 5(a), 5(b), 14, 16, 19, 21-24; Motion, pp. i, 3, 5, 6, 8-11, 17. Invoking the public trust and equal footing doctrines, Mississippi claims that the ground water at issue has already been apportioned to it as a "selfevident attribute of statehood." Motion, p. 14. Mississippi's position is contrary to this Court's longstanding equitable apportionment decisions. Indeed, Mississippi's reliance on the inapposite public trust and equal footing doctrines is merely an attempt to disguise a failed legal position that this Court has repeatedly rejected.

In the context of interstate water disputes, a state's border is "essentially irrelevant to the adjudication of these sovereigns' competing claims." *Colorado v. New Mexico*, 467 U.S. 310, 323 (1984).

"The contention of Colorado that she as a state rightfully may divert and use, as she may choose, the waters flowing within her boundaries in this interstate stream, regardless of any prejudice that this may work to others having rights in the stream below her boundary, cannot be maintained. The river throughout its course in both states is but a single stream, wherein each state has an interest which should be respected by the other."

... "Both States have real and substantial interests in the River that must be reconciled as best they may."

Hinderlider, 304 U.S. at 102-03 (quoting Wyoming v. Colorado, 259 U.S. 419, 466 (1922), and New Jersey v. New York, 283 U.S. 336, 342-43 (1931)); see also Colorado v. New Mexico, 467 U.S. at 323 (rejecting "the notion that the mere fact that the [river] originates in Colorado automatically entitles Colorado to a share"); Hinderlider, 304 U.S. at 102-03 (rejecting an upstream state's claim that it has "such ownership or control" to divert all the water in an interstate resource as having been "consistently denied" and "adjudged untenable"); cf. Idaho v. Oregon, 462 U.S. 1017, 1028 n.12 (1983) ("While the origin of the fish may be a factor in the fashioning of an equitable decree, it cannot by itself establish the need for a decree.").

Mississippi's contention that its allocation of water within the interstate Aquifer should, somehow, be determined solely by its geographical boundary also directly conflicts with this Court's holdings requiring consideration of "many factors to ensure a fair and equitable allocation." Idaho v. Oregon, 462 U.S. at 1027 n.10 (1983); see also id. at 1025 (noting that "apportionment is based on broad and flexible equitable concerns rather than on precise legal entitlements"); Colorado v. New Mexico, 459 U.S. at 186 (stating that "in an equitable apportionment of interstate waters it is proper to weigh the harms and benefits to competing states"); Nebraska v. Wyoming, 589, 618 (1945) (stating 325U.S. "[a]pportionment calls for the exercise of an informed judgment on consideration of many factors").

Mississippi raised this same argument in the First Lawsuit. The Fifth Circuit squarely rejected it as the same unsuccessful position advanced by other states in previous equitable apportionment suits:

The Supreme Court has consistently rejected the argument advanced by different states, and advanced by Mississippi in this lawsuit, that state boundaries determine the amount of water to which each state is entitled from an interstate water source.

Fifth Cir. (Motion, p. 10a) (citing Hinderlider, 304 U.S. at 102). The Fifth Circuit recognized that Mississippi's public trust theory fatally ignores the interstate nature of the Aquifer. The authorities cited by Mississippi, see Motion, pp. 12-14, do not support its position because they all concern intrastate title disputes – none involve a dispute over an interstate water resource.

Mississippi's legal position cannot have merit because, if a state's boundary line were determinative of that state's allocation of an interstate resource, then this Court's settled application of the doctrine of equitable apportionment to resolve interstate resource disputes would have been unnecessary. This Court should reject Mississippi's argument, as it has consistently and repeatedly done in the past.

### 3. Mississippi does not "own" the ground water at issue.

Mississippi's conversion and trespass claims against Memphis and MLGW are premised on Mississippi's "assertion of ownership of all water resources within its borders, including the subject ground water." Motion, p. 12; Complaint, ¶¶ 1, 2, 6; see also Motion, pp. i, 13 (claiming to "own" the water at issue). However, this Court rejected the argument that a state "owns" natural resources in a series of decisions initially involving wildlife and subsequently addressing ground water resources. Nearly a century ago, Justice Oliver Wendell Holmes dismissed the idea of a state's having "title" in wild birds:

To put the claim of the State upon title is to lean upon a slender reed. Wild birds are not in the possession of anyone; and possession is the beginning of ownership.

Missouri v. Holland, 252 U.S. 416, 434 (1920). More recently, the Court has recognized that states' "interest in regulating and controlling those things they claim to 'own,' including wildlife, is by no means absolute." Baldwin v. Fish & Game Comm'n of Montana, 436 U.S. 371, 385 (1978). The Court characterized a state's claim to "own" wildlife as being "pure fantasy" and merely a "legal fiction":

"A State does not stand in the same position as the owner of a private game preserve and it is pure fantasy to talk of 'owning' wild fish, birds, or animals. Neither the States nor the Federal Government, any more than a hopeful fisherman or hunter, has title to these creatures until they are reduced to possession by skillful capture.... The 'ownership' language of cases such as those cited by appellant must be understood as no more than a 19th-century legal fiction expressing 'the importance to its people that a State have power to preserve and

regulate the exploitation of an important resource."

Hughes v. Oklahoma, 441 U.S. 322, 334-35 (1979) (quoting Douglas v. Seacoast Products, Inc., 431 U.S. 265, 284 (1977)) (citations omitted).

In Sporhase v. Nebraska, 458 U.S. 941 (1982), this Court explained that ground water, like wildlife, was not subject to state "ownership" in the proprietary and possessory sense. *Id.* at 950-51. A state's claimed "ownership" of ground water is merely a legal fiction:

[T]his Court traced the demise of the public ownership theory and definitively recast it as "but a fiction expressive in legal shorthand of the importance to its people that a State have power to preserve and regulate the exploitation of an important resource."

Id. at 951 (quoting Hughes, 441 U.S. at 334).

The Supreme Court of Mississippi itself rejected the assertion that Mississippi "owns" ground water, holding that ground water, like wildlife,<sup>3</sup> is not

<sup>&</sup>lt;sup>3</sup> As did this Court, the Supreme Court of Mississippi first acknowledged the fiction of public "ownership" of natural resources in the context of wildlife. See State Game & Fish Comm'n v. Fritz, 193 So. 9, 12 (Miss. 1940) (holding that "the State does not own the fish as proprietor or absolute owner" and, therefore, "it has no right to take the fish and sell them solely, and for no other purpose than, as a proprietary business of the state") (internal citation omitted); Ex parte Fritz, 38 So. 722, 723 (Miss. 1905) (holding that a state's interest in wild animals is "not as

susceptible to absolute ownership:

"In its ordinary or natural state water is neither land, nor tenement, nor susceptible of absolute ownership. It is a movable, wandering thing and admits only of a transient, usufructuary property."

Dycus v. Sillers, 557 So. 2d 486, 501-02 (Miss. 1990) (quoting State Game & Fish Comm'n v. Louis Fritz Co., 193 So. 9, 11 (Miss. 1940)); see also California v. Superior Court of Riverside County, 93 Cal. Rptr. 2d 276, 285 (Cal. Ct. App. 2000) (explaining that Miss. Code Ann. § 51-3-1 embodies the legal fiction of ownership and acknowledging the inconsistent concepts of ownership and management"); id. at 285, 287 (citing Sporhase, 458 U.S. at 951, 956; finding it "impossible to accept . . . that the state has an ownership interest in the 'corpus' of state waters even though individual users have usufructuary rights"; and noting that "[t]he ownership proposed . . . is impossible to define and virtually unrelated to the common sense of the term").

The underlying premise of Mississippi's tort claims – that Mississippi "owns" the ground water at issue – is wrong. Both this Court and Mississippi's own highest court have rejected the presumption of "ownership" that is the basis of Mississippi's complaint. Because a state's interest in ground water is usufructuary in nature and not proprietary or possessory, traditional common law tort claims for

proprietor, but in its sovereign capacity, as the representative and for the benefit of its people in common").

conversion and trespass are simply inapplicable. See Dycus, 557 So. 2d at 501-02 (holding that ground water rights are usufructuary only); 4 WATERS & WATER RIGHTS § 36-8 – 36-9 & nn.16-17 (Robert E. Beck ed., 1991 ed., 2004 repl. vol.) ("[T]he Supreme Court has made it abundantly clear that it has little patience with claims of absolute 'ownership' by either [state or federal] government.").4

#### C. There Is No Authority to Support Mississippi's Claim for Money Damages Against Memphis and MLGW.

The authorities cited by Mississippi do not support Mississippi's prayer for money damages against Memphis and MLGW. See Motion, p. 17 (citing Kansas v. Colorado, 533 U.S. 1 (2001), and Virginia v. West Virginia, 206 U.S. 290 (1907)). In fact, this Court's decision in Kansas v. Colorado, 533 U.S. 1 (2001), confirms that Mississippi's monetary damages claim against Memphis and MLGW cannot be maintained. That case holds only that a state can seek money damages against another state — but only if the states have entered into a compact allocating an interstate resource, and, thereafter, one state withdraws a volume of water that exceeds its apportioned share. See id. at 6-7; see also Texas v. New Mexico, 482 U.S. 124, 130 (1987) (noting that this

<sup>&</sup>lt;sup>4</sup> See also New Mexico v. Gen. Elec. Co., 335 F. Supp. 2d 1185, 1234-35 (D.N.M. 2004) (rejecting New Mexico's claim of absolute ownership of its ground water and holding that the state's asserted interest "[fell] outside of the scope of the law's protection traditionally afforded to private landowners' right of exclusive possession by the law of trespass"), aff'd, 467 F.3d 1223 (10th Cir. 2006).

"Court has recognized the propriety of money judgments against a State in an original action") (emphasis added).<sup>5</sup> There is simply no support for Mississippi's claim for money damages against Memphis and MLGW in the context of this interstate dispute over unapportioned ground water.

## II. MISSISSIPPI FAILS TO ALLEGE ANY GROUNDS TO SUPPORT AN EQUITABLE APPORTIONMENT DECREE.

Mississippi's self-styled "alternative or provisional" equitable apportionment count does not constitute a claim of such serious magnitude as to warrant relief from this Court. See Nebraska v. Wyoming, 515 U.S. at 8. Mississippi does not – and could not – allege any harm or injury to its use of the Aquifer as a result of Memphis and MLGW's ground water withdrawals. Mississippi alleges only that Memphis and MLGW have diverted "Mississippi's" ground water. That is not enough to state a claim for equitable apportionment.

<sup>&</sup>lt;sup>5</sup> Virginia v. West Virginia, 206 U.S. 290 (1907), is wholly inapplicable. In that case, Virginia brought suit to recover a portion of its public debt incurred while making improvements to the western part of its territory from which West Virginia was carved to become a separate state. *Id.* at 291-92.

- A. Mississippi Has No Real or Substantial Injury Warranting an Equitable Apportionment Action.
  - 1. An equitable apportionment action requires a heightened showing of real or substantial injury or damage.

A state's mere assertion that the diversion of water from an interstate resource has affected its interests and rights is not sufficient to maintain an equitable apportionment suit. Kansas v. Colorado, 206 U.S. at 117 (dismissing the action because this Court was "not satisfied that Kansas [had] made out a case entitling it to a decree"); see also Colorado v. Kansas, 320 U.S. 383, 384-85 (1943) (discussing Kansas v. Colorado, 206 U.S. 46 (1907)); Connecticut v. Massachusetts, 282 U.S. at 674 (dismissing Connecticut's action because Connecticut's "substantial interests" were not "being injured" by alleged diversions of water by Massachusetts). state seeking Α equitable apportionment must show by clear and convincing evidence that another state's diversion of water "had 'worked a serious detriment to the substantial interests of [the state]." Colorado v. New Mexico, 459 U.S. at 187 n.13 (quoting Colorado v. Kansas, 320 U.S. at 400); see Colorado v. New Mexico, 467 U.S. at 316.

To justify an equitable apportionment decree in this case, Mississippi "must prove by clear and convincing evidence [that] some real and substantial injury or damage" has resulted from the alleged diversion of water into Tennessee. *Idaho v. Oregon*, 462 U.S. at 1027; see Colorado v. New Mexico, 459 U.S. at 187 n.13; Washington v. Oregon, 297 U.S. 517, 522 (1936); Connecticut v. Massachusetts, 282 U.S. at 674. To

satisfy its heightened burden, Mississippi must "place in the ultimate factfinder an abiding conviction that the truth of its factual contentions are 'highly probable." Colorado v. New Mexico, 467 U.S. at 316 (quoting Charles T. McCormick, Law of Evidence § 320, at 679 (1954)). This Court has reasoned that the heightened standard provides an appropriate counter-balance to the "risks of erroneous decision: The harm that may result from disrupting established uses is typically certain and immediate, whereas the potential benefits from a proposed diversion may be speculative and remote." Id. (quoting Colorado v. New Mexico, 459 U.S. at 187); see Connecticut v. Massachusetts, 282 U.S. at 669.

#### 2. Mississippi's complaint fails to allege any injury sufficient to support a claim for equitable apportionment.

It is not surprising that Mississippi relegates its equitable apportionment claim to the status of "provisional" or "alternative" relief. In so doing, Mississippi effectively concedes that it has not suffered a "real or substantial injury or damage." Connecticut v. Massachusetts, 282 U.S. at 672; Colorado v. New Mexico, 459 U.S. at 187 n.13.

In this respect, Mississippi's complaint is most notable for what it does not allege. Mississippi does not allege a current or foreseeable shortage of ground water in Mississippi. Nor does Mississippi allege that ground water withdrawals by Memphis or MLGW have affected its use of the Aquifer or the availability of ground water in Mississippi. Mississippi's only contention is that pumping from the interstate Aquifer

within Tennessee has diverted ground water that was once beneath Mississippi into Tennessee.

The omissions in Mississippi's complaint stand in to this Court's past equitable stark contrast apportionment cases and the conditions that have traditionally driven states to seek this Court's exclusive jurisdiction. See, e.g., Colorado, 320 U.S. at 384-85 (alleging that, as a result of Colorado's diversion of river water, "the average flow had been greatly reduced and the natural flow completely cut off"); Washington v. Oregon, 297 U.S. at 520 (alleging that a "fair division of the water [was] vital to the prosperity of [the state's] agricultural community, and even to its life"); New Jersey v. New York, 283 U.S. at 343-44 (alleging that the proposed diversion would "interfere with the navigability of the Delaware [river]," "deprive the State and its citizens who are riparian owners of the undiminished flow of the stream," "injuriously affect water power and the ability to develop it," "injuriously affect the sanitary conditions of the River," "injure the shad fisheries," and "injure the cultivation of adjoining lands"); Connecticut v. Massachusetts, 282 U.S. at 664 (alleging that "any subtraction from the flow of the Connecticut river through that State" would "impair the navigability of the stream, lessen productivity of river bottom lands by diminution of inundation during times of high water in each year, diminish the power capable of development[.] . . . diminish the run of shad in the river and decrease its capacity to discharge and destroy sewage").

Certainly, if this were a bona fide, "properly framed" dispute over rights to use the interstate Aquifer, this Court's authority to decide it as between states could not be questioned. See Texas v. New Mexico, 462 U.S. at 567. However, while Mississippi wraps its claim in the "provisional" cloak of equitable apportionment, the relief Mississippi requests (i.e., money damages against Memphis and MLGW) reveals that Mississippi is merely asserting the same failed tort claims that the Fifth Circuit and the district court soundly rejected in the First Lawsuit. This action is not a "properly framed" equitable apportionment suit, and this Court should not permit it to go forward.

#### B. The Remedy of Equitable Apportionment Does Not Permit Recovery of Money Damages For Past Use of Water.

Mississippi's prayer for "monetary damages against Memphis and MLGW for any past diversions and takings of ground water . . . that are inconsistent with the Court's apportionment," Complaint, ¶ 5(c)(iii) (emphasis added), is contrary to this Court's decisions. Retroactive damages such as those sought Mississippi are not recoverable in an equitable apportionment suit - even if apportionment were remedy equitable warranted here. The of apportionment does not compensate for prior injury or legal wrongs. Idaho v. Oregon, 462 U.S. at 1025, 1028. Instead, the purpose of equitable apportionment is to "ameliorate present harm and prevent [] future injuries to the complaining State." Id. at 1028. There is no authority to the contrary.

# III. MISSISSIPPI HAS NOT ALLEGED ANY INJURY TO ITS INTERESTS IN THE AQUIFER.

This Court has squarely rejected Mississippi's position that the mere diversion of water from an interstate resource is, in and of itself, sufficient to state a claim for equitable apportionment. As noted, to be actionable, Mississippi must prove by clear and convincing evidence that the diversion has caused or threatens to cause a real or substantial injury. Colorado v. New Mexico, 459 U.S. at 187 n.13 (noting that "a state seeking to prevent or enjoin a diversion by another state bears the burden of proving that the diversion will cause it 'real or substantial injury or damage") (quoting Connecticut v. Massachusetts, 282 U.S. at 672). Mississippi's complaint contains no allegation that the diversion of ground water at issue in this case has caused or might foreseeably cause any injury - much less a "real or substantial" one.

The sole measure of damages sought by Mississippi is the alleged "value" of the ground water diverted – ground water that Mississippi claims to have "permanently lost." Complaint, ¶ 23. However, the testimony of Mississippi's own retained expert in the First Lawsuit refutes Mississippi's position and demonstrates that the ground water that Mississippi claims to have "permanently lost" has not been lost at all.

David A. Wiley, Mississippi's expert geologist in the First Lawsuit, testified that there is a continuous cycle of water coming into (i.e., recharge) and flowing out of (i.e., discharge) the Aquifer. However, because the amounts of recharge and discharge are virtually the

same, a "constant volume" of ground water always remains in the Aquifer beneath DeSoto County, Mississippi (i.e., storage). App. 1, p. 3b.6 Wiley acknowledged that any change in the amount of water in storage beneath DeSoto County since pumping began more than a century ago is statistically insignificant. App. 1, p. 5b. The Aquifer beneath DeSoto County contains an estimated 33 trillion gallons of ground water. App. 2, p. 12b. According to Wiley's own calculation, the change in ground water storage beneath DeSoto County is 20,000 gallons per day. App. 1, p. 5b (stating that the change in ground water storage is 0.02 million gallons per day). Assuming that Mississippi's own calculation is correct, and further assuming that its calculation could be extrapolated back 123 years to the time when ground water was first withdrawn from the Aquifer (20,000 gallons x 365 days x 123 years), the cumulative change in the volume of ground water in storage beneath DeSoto County would amount to only 0.0027%.

Jamie Crawford is the Assistant Director of the Mississippi Department of Environmental Quality's ("MDEQ's") Office of Land and Water Resources, and

<sup>&</sup>lt;sup>6</sup> Appendix 1 includes excerpts from the transcript of the deposition of David A. Wiley.

<sup>&</sup>lt;sup>7</sup> Appendix 2 includes excerpts from the Expert Report prepared and submitted by David E. Langseth, Sc.D., P.E., and John B. Robertson, P.G., on behalf of Memphis and MLGW in the First Lawsuit. Langseth and Robertson opine that Mississippi has not suffered any injury to its use of ground water in the Aquifer and that pumping in the Memphis area has not altered the amount of ground water that has been or will be available to be pumped in Mississippi. App. 2, pp. 8b-10b.

he was designated by Mississippi as a witness pursuant to Rule 30(b)(6) of the Federal Rules of Civil Procedure in the First Lawsuit. App. 3, pp. 14b-15b, 18b.8 Crawford's testimony confirms that there has been no permanent loss of ground water and no current or threatened water shortage. Mississippi has the power to revoke ground water pumping permits if it determines that Mississippi's static ground water levels have dropped below an established minimum. App. 3, p. 19b. Mississippi has never revoked a permit on such grounds. App. 3, pp. 19b-20b. Additionally, Mississippi law requires the MDEQ to issue a "water use warning or declare and delineate a water use caution area" if "mining of an aquifer is occurring," or if it determines that "existing water resources, including surface water, groundwater, or both, are inadequate to meet present or reasonably foreseeable needs." App. 3, pp. 16b-18b; Miss. Code Ann. § 51-3-11. "Mining of an aquifer" occurs when "withdrawal of groundwater from hydrologically connected water bearing formations in a manner in excess of the standards established by [MDEQ]." App. 3, p. 16b; Miss. Code Ann. § 51-3-3. Mississippi has never issued a water use warning or delineated a water use caution area. App. 3, pp. 17b-18b.

Jim Hoffman is a Geologist Administrator in MDEQ's Office of Land and Water Resources, and he was also designated by Mississippi as a Rule 30(b)(6) witness in the First Lawsuit. App. 4, pp. 24b-25b.9

<sup>&</sup>lt;sup>8</sup> Appendix 3 includes excerpts from the transcript of the deposition of Jamie Crawford.

<sup>&</sup>lt;sup>9</sup> Appendix 4 includes excerpts from the transcript of the deposition of Jim Hoffman.

Both Crawford and Hoffman testified that the MDEQ has long been aware that ground water was moving from Mississippi into Tennessee, but Mississippi has never found it necessary to study the issue. App. 3, pp. 20b-22b; App. 4, pp. 25b-27b. Crawford testified that he reviewed calculations of ground water flowing from Mississippi into Tennessee almost fifteen vears ago. App. 3, pp. 21b-22b. Hoffman testified that it was "auite sometime ago" when he first heard the "uninteresting observation" that ground water was allegedly moving from Mississippi into Tennessee. App. 4, pp. 25b-26b. Both Crawford and Hoffman confirmed that the MDEQ has never undertaken any study to verify such reports. App. 3, pp. 21b-22b; App. 4, pp. 25b-26b. In fact, Mississippi concedes that ground water pumping centers within Mississippi have created their own cones of depression that extend across Mississippi's borders into other states, App. 4, p. 27b, the same condition that Mississippi asserts in its complaint against Memphis and MLGW, see Complaint, ¶¶ 16, 19.10

Finally, Wiley and Hoffman directly refuted Mississippi's suggestion that Mississippi has "permanently lost" ground water flowing beneath it as a result of pumping by Memphis and MLGW. Both Wiley and Hoffman testified that, even before pumping began, water in the Aquifer naturally flowed through and out from DeSoto County. App. 1, pp. 2b–4b; App. 3, pp. 26b-27b. In fact, Wiley conceded that, before any pumping began, ground water naturally moved

<sup>&</sup>lt;sup>10</sup> A cone of depression is a natural phenomenon created by the lowering of pressure in an aquifer when ground water is withdrawn from a pump. App. 3, p. 20b; App. 4, p. 27b.

through the Aquifer from Mississippi into Tennessee. App. 1, pp. 2b-4b, 6b.

Mississippi's failure to allege *any* injury to its usufructuary interest in the interstate Aquifer is fatal to its complaint. The testimony of Mississippi's retained expert and Rule 30(b)(6) witnesses confirm that no such injury exists.

#### CONCLUSION

The City of Memphis, Tennessee, and Memphis Light, Gas & Water Division respectfully request that this Court deny Mississippi's Motion for Leave to File a Bill of Complaint.

Respectfully submitted this 1<sup>st</sup> day of December, 2009,

LEO M. BEARMAN

Counsel of Record

DAVID L. BEARMAN

KRISTINE L. ROBERTS

CHAD D. GRADDY

BAKER, DONELSON, BEARMAN,

CALDWELL & BERKOWITZ, PC

165 Madison Ave., Suite 2000 Memphis, Tennessee 38103

Tel: (901) 526-2000 Fax: (901) 577-0716

Counsel for Defendants The City of Memphis, Tennessee and Memphis Light, Gas & Water Division

#### OF COUNSEL:

## CHERYL PATTERSON CHARLOTTE KNIGHT GRIFFIN MEMPHIS LIGHT, GAS & WATER DIVISION

220 S. Main Street Memphis, Tennessee 38103

Tel: (901) 528-4721 Fax: (901) 528-7776

#### WALKER W. JONES, III BAKER, DONELSON, BEARMAN, CALDWELL & BERKOWITZ, PC

Meadowbrook Office Park 4268 I-55 North Jackson, Mississippi 39211

Tel: (601) 351-2400 Fax: (601) 351-2424

#### CHRISTOPHER S. CAMPBELL HARRIS SHELTON HANOVER WALSH PLLC

One Commerce Square, Suite 2700

Memphis, Tennessee 38103

Tel: (901) 545-1455 Fax: (901) 526-4086



## **APPENDIX**

#### **APPENDIX 1**

#### UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF MISSISSIPPI DELTA DIVISION

JIM HOOD, Attorney General, ex rel,	)	
THE STATE OF MISSISSIPPI, Acting		
for itself and Parens Patriae for		
and on behalf of the People of the	)	
State of Mississippi,	)	
	)	
Plaintiff,		
	,	
Vs. Case No. CIVIL ACTION 2:05CV32D-B	,	
(And Related Cases)	2	
THE CITY OF MEMPHIS, TENNESSEE and	,	
MEMPHIS LIGHT, GAS & WATER DIVISION,	,	
Defendants.		

#### THE DEPOSITION OF DAVID A. WILEY

#### **VOLUME I**

November 15th, 2007

BRIAN F. DOMINSKI, RPR, RMR ALPHA REPORTING CORP.

# COURT REPORTERS LOBBY LEVEL, 100 NORTH MAIN BUILDING Memphis, Tennessee 38103 (901) 523-9874

\* \* \* \* [p.28]

Q. And there is no question but the water was flowing before there was any pumping?

A. Groundwater moves.

[p.29] \*\*\*

Q. (BY MR. DAVID BEARMAN) You just said that groundwater moves.

A. Yes.

Q. Is that correct?

A. Yes.

Q. And groundwater was moving before there was any pumping?

A. Yes.

\* \* \*

[p.30] \*\*\*

Q. There was water flowing through Mississippi before there was any pumping in the Memphis Sands Aquifer, right? A. Yes.

Q. And some of that water flowed through Mississippi and out of Mississippi before there was any pumping, right?

A. Yes.

\* \* \*

A. \*\*\* there is a groundwater flow system that has a groundwater budget in a given area. For this I'll say DeSoto County, that geographical area. This groundwater system has a groundwater budget where under natural conditions water flows into the given area. There is an amount of water that is -- a volume, a volume that is constant in the groundwater system, and there is an amount that flows out of that given area.

[p.31] \*\*\*

A. The volume -- there is a volume that is always there. It has always got some coming in and some going out, but there is a constant volume that is always there \* \* \*

\* \* \*

[p.46] \*\*\*

Q. You said groundwater moves?

A. Groundwater moves.

Q. All right. I asked you that groundwater was moving through DeSoto County before there was any pumping. Do you agree with that?

A. Yes.

Q. Okay. And some of that groundwater then was moving out of DeSoto County. Isn't that right?

A. Yes.

Q. Okay. And it was -- that means that it was leaving DeSoto County at some point, correct?

A. There is a -- there was some leaving, yes.

[p.47] \*\*\*

Q. When it left DeSoto County, where did it go?

A. Groundwater under predevelopment conditions --

Q. Predevelopment conditions.

A. -- generally flows from east to west. There is a slight north component to that. \* \* \*

\* \* \*

[p.89]

\* \* \*

Q. All right. That was water that was naturally going from Mississippi into Shelby County?

A. That was water under predevelopment going from DeSoto County into Shelby County.

\* \* \*

[p.90]

Q. Well, as we sit here today, do you recall any change in storage?

A. Very little. As I sit here today, it was a small number.

Q. When you say "small number," is it --

A. Less than one. I mean, it was point something or another. .02. I'd have to look at the budget files.

Q. Is that insignificant in the scheme of things that we're talking about here?

A. Yes. When you are talking about thirty-five million, point zero something is not going to affect it very much.

\* \* \*

[p.123]

\* \* \*

A. \*\*\* predevelopment in the Memphis Sands flows -an amount flows from somewhere in DeSoto [p.124] County to Shelby.

\* \* \*

[p.131]

\* \* \*

Q. Does a state boundary have any hydrogeological significance?

A. No, it doesn't. Not in this case

#### **APPENDIX 2**

#### **Expert Report of**

David E. Langseth, Sc.D., P.E.

#### and

John B. Robertson, P.G.

in the matter of
JIM HOOD, Attorney General, ex rel.,
THE STATE OF MISSISSIPPI, Acting for Itself
and Parens Patriae for and on behalf of the
People of the State of Mississippi

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

#### CIVIL ACTION NO.2:05CV0032

Prepared for Baker, Donelson, Bearman, Caldwell & Berkowitz, PC First Tennessee Building 165 Madison Ave., Suite 2000 Memphis, TN 38103

/s/ DE Langseth

David E. Lanseth, Sc.D., P.E. Gradient Corporation 20 University Road Cambridge, MA 02138

#### Prepared by

/s/ John B. Robertson
John B. Robertson, P.G.
John B. Robertson, P.G., and Associates
40107 North 3rd Street
Desert Hills, AZ 85086

July 2, 2007

\* \* \*

[p.2]

\* \* \*

#### 1.2 Opinion Summary

In summary, our opinions on this matter are:

## Opinions on the Physical Characteristics of the Aquifer

1. The Mississippi Embayment Aguifer System is a large hydraulically connected aquifer system covering parts of several states, including Arkansas. Alabama, Illinois. Kentucky, Louisiana, Mississippi, Missouri. Tennessee. Among the aquifers in the northern portion of this system are the Memphis Sand Aguifer in Tennessee and the contiguous Sparta Sand Aquifer in Mississippi and Arkansas, collectively referred to here as the Memphis/ Sparta Sand Aquifer (MSSA). The Mississippi Embayment Aquifer System also includes other aguifers, such as the Fort Pillow Aguifer (FPA), which underlies and is separated from the MSSA by lower permeability clay layers of varying thickness. These clay layers retard, but

do not stop, water flow among the aquifers in the Mississippi Embayment Aquifer System. The uppermost aquifers in the Mississippi Embayment Aquifer System are the unconfined Mississippi Valley Alluvial Aquifer and surficial aguifers outside the Mississippi River Valley. surficial unconfined aquifers separated from the MSSA by low permeability layers of varying thickness. The hydraulic connections among aquifers in the Mississippi Embayment Aquifer System means pumpage and recharge, or other impacts, to any of the Mississippi Embayment aquifers can affect conditions in the other Mississippi Embayment aquifers.

- MSSA in Tennessee and 2. The northern Mississippi is an abundant ground water supply source in no imminent danger of shortage. The Mississippi Embayment Aquifer System, MSSA. is replenished including the precipitation in both the outcrop areas and throughout the extent of the Mississippi Embayment Aquifer System. Once in the MSSA, ground water then flows through the aguifer system and eventually discharges to surface water. The MSSA will continue to be replenished as long as precipitation continues and is allowed to infiltrate into the ground.
- 3. Under pre-development (before pumping) conditions, MSSA ground water in DeSoto County flowed through and then out of Mississippi, some to Tennessee and some to Arkansas, before eventually discharging to surface water. Along the Tennessee/Mississippi

border, the pre-development flow direction was generally north of [p.3] west, flowing from DeSoto County into Tennessee at a rate of about 9 million gallons per day (MGD).

#### Opinions on Pumping

- 4. Water flowing through the MSSA under Mississippi is either pumped out of the ground in Mississippi or continues flowing until it leaves Mississippi, regardless of whether or not MLGW, or others, are pumping from the MSSA. The ground water that the Plaintiff refers to as "Mississippi's ground water" is actually water that is merely passing through Mississippi as part of the overall hydrologic cycle, available to be pumped as it passes through the MSSA is not a static bowl of water.
- 5. Pumpage in DeSoto County from the MSSA is now and has in the past been limited only by the installed pumping capacity in DeSoto County, not by the ability of the MSSA to supply water. Pumping by MLGW or others in Shelby County has not altered the total amount of ground water that has been or will be pumped in Mississippi. to be available Mississippi users presently have, have had in the past, and will have for the foreseeable future, the ability to withdraw MSSA ground water before it moves beyond the Mississippi state boundary. Specifically, MLGW pumping has:
  - Not reduced the amount of water entering the MSSA in DeSoto County, Mississippi.

- b. Not reduced the flow rate through the MSSA in DeSoto County, Mississippi.
- c. Not caused a net change in the water balance for DeSoto County, Mississippi.
- d. Not created water supply shortages in DeSoto County, Mississippi.
- 6. None of the water that LBG claims has crossed the Mississippi/Tennessee border from 1965 through 2006 due to MLGW pumpage has actually reached and been pumped by an MLGW well. Further, even projecting ahead to 2016 based on current pumping conditions, no water that was flowing through Mississippi in 1965 will have been pumped by MLGW.
- 7. The amount of water withdrawn from the Mississippi Embayment Aquifer System by pumping in Tennessee (including MLGW) is substantially less than the amount withdrawn by pumping in Mississippi and Arkansas. Pumping in each of these three states affects ground water in the other states. Cones of depression from pumping in Arkansas extend into large areas of Mississippi, and cones of depression from pumping in Mississippi extend through large portions of southern Arkansas and northern Louisiana. From 1980 through 2000:
  - a. Pumping in Mississippi extracted 15,986 billion gallons of water from the Mississippi Embayment Aquifer System, an average of 2,084 MGD.

- b. Pumping in Arkansas extracted 36,850 billion gallons of water from the Mississippi Embayment Aquifer System, an average of 4,804 MGD.
- c. Pumping in Tennessee (including MLGW) extracted 2,217 billion gallons of water from the Mississippi Embayment Aquifer System, an average of 289 MGD.

#### [p.4]

- 8. Southhaven Power LLC has been permitted by the State of Mississippi to install wells into and pump ground water from the FPA. This pumping will divert water from Tennessee into these Mississippi wells and create a cone of depression extending from Mississippi into Tennessee.
- 9. LBG's representation of the cone of depression in the Shelby and DeSoto County area as shown in their Figure 5 is misleading due to the exaggeration of the vertical scale. Further, LBG does not provide either the scale exaggeration factor or the data source for their graphic.

#### Opinion on MLGW Aquifer Management

10. Based on our review of MLGW's history of monitoring, studying, and managing the development of the MSSA, it is our professional judgment that the MLGW has been a good steward of the MSSA.

[p.8]

In addition to the high transmissivity, the volume of water in the aquifer at any one time provides a buffer to help sustain the pumping yields through drier spells. For example, the volume of ground water in the MSSA flowing through DeSoto County at any one time is about 33 trillion gallons, theoretically enough to supply the estimated total 2005 DeSoto County MSSA pumping rate of about 20 MGD for about 4,500 years – even if it never rained again. This calculation indicates the enormous magnitude of the water supply in the MSSA aquifer. \* \* \*

\* \* \*

#### **APPENDIX 3**

#### UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF MISSISSIPPI DELTA DIVISION

JIM HOOD, ATTORNEY GENERAL, EX					
	REL., THE STATE OF MISSISSIPPI,				
,	ACTING FOR ITSELF AND PARENS				
	FOR AND ON BEHALF OF	<b>,</b>			
	PLE OF THE STATE OF	,			
· ·		7			
MISSISSII	PLAINTIFF	)			
	1 DAINTH'	)			
VS.	CIVIL ACTION NO. 2:05CV32-D-B	)			
	CONSOLIDATED	)			
		)			
	OF MEMPHIS, TENNESSEE,	)			
	IPHIS LIGHT, GAS & WATER	)			
DIVISION	•	)			
	DEFENDANTS	)			
DESOTO (	COUNTY, MISSISSIPPI	)			
22010	PLAINTIFF	í			
	1 2111 1 1 1 1 1	í			
VS.	CIVIL ACTION NO. 2:05CV085-D-B	)			
THE CITY	MEMPHIS, TENNESSEE,	)			
	IPHIS LIGHT, GAS & WATER	)			
DIVISION	·	ĺ			
21,101011	DEFENDANTS	)			
		)			

NESBIT WATER ASSOCIATION, INC.;	)
MISSISSIPPI UTILITY COMPANY,	)
INC.; AND BILL J. ROBERSON, ON	)
BEHALF OF THEMSELVES AND ALL	)
OTHER ENTITIES AND PERSONS	)
SIMILARLY SITUATED	)
PLAINTIFFS	)
	)
VS. CIVIL ACTION NO. 2:05CV108-D-B	)
	)
THE CITY MEMPHIS, TENNESSEE,	)
AND MEMPHIS LIGHT, GAS & WATER	)
DIVISION	)
DEFENDANTS	)
	)

#### VIDEOTAPE DEPOSITION OF MDEQ 30(b)(6) JAMIE CRAWFORD

Taken at Mississippi Department of Environmental Quality, 2380 Highway 80 West, Jackson, Mississippi, on Monday, July 30, 2007, beginning at 9:20 a.m.

\* \* \*

[p.11] \*\*\*

- Q. And, Mr. Crawford, where do you presently work?
- A. I work for the Department of Environmental Quality in the Office of Land and Water Resources.
  - Q. And is that what we often call MDEQ?

- A. Yes.
- Q. And that stands for Mississippi Department of Environmental Quality?
  - A. Correct.

\* \* \*

[p.12]

\* \* \*

- Q. What is your current position?
- A. I'm the Assistant Director of the office.
- Q. And how long have you had that position?
- A. For three years.
- Q. What are your general responsibilities and duties?
- A. I am in charge of all permitting. I am in charge of many of the -- well, in keeping up with the water levels that are taken, the water use program, the source water assessment protection program. And those would probably be my main duties.

\* \* \*

[p.34] Q. MDEQ is responsible for implementing the statutes and regulations of the State of Mississippi that have to do with groundwater; is that correct?

A. Correct.

Q. Are you familiar with the term "water use warning area"?

A. Yes.

Q. I'm going to hand you a document, if you could take a look at this for me.

A. (Witness complying.)

Q. Do you recognize that document? Do you recognize what I've just handed you?

A. Yes. It's part of our water statute.

Q. All right. And this is actually Mississippi statute Section 51-3-11; is that correct?

A. Correct.

Q. And have you seen this before?

A. Yes.

Q. Now, according to this statute, it says "the commission." Who is the commission?

A. The commission is a board that's appointed by the governor that acts as really our regulatory body.

[p.35] Q. Is that MDEQ?

A. Yes.

Q. It says: "The commission shall issue a water use warning or declare and delineate a water use caution

area if one of the following conditions exists. Number 1, the mining of an aquifer is occurring, or, 2, existing water resources, including surface water, groundwater, or both, are inadequate to meet present or reasonably foreseeable needs."

Did I read that correctly?

A. Yes.

Q. I'll hand you a second document. And do you recognize this as Mississippi law 51-3-3?

A. Yes.

Q. And if you'll turn to page 14, under definition M, it says: "Mining of an aquifer"; do you see that?

A. Yes.

Q. It says: "Mining of an aquifer means the withdrawal of groundwater from hydrologically connected" -- sorry -- "hydrologically connected water wearing formations in a manner in excess of the standards established by the commission."

[p.36] Did I read that correctly?

A. Yes.

Q. And the commission is MDEQ.

A. Yes.

Q. Now, MDEQ has never issued a water use warning; is that correct?

A	mi	, ,		1
Α.	Tha	1LS	corre	CT.

Q. And it has never declared or delineated a water use caution area; is that correct?

A. That's correct.

Q. Do you know what a capacity use area is?

A. It's an old term that was used -- you know, it -- well, it was used in the past to designate something similar to a water use warning or caution area.

Q. And MDEQ or its predecessor never issued a capacity -- or never designated a capacity use area?

A. That's correct. There was discussion of it, but as far as I know, it was never done.

\* \* \*

[p.40]

\* \* \*

Q. And you are here as the 30(b)(6) representative of MDEQ and the Office of Land and Water Resources to discuss permits.

A. Yes.

\* \* \*

[p.64]

\* \* \*

Q. This is an example of a groundwater withdrawal permit, correct?

A. For a power plant, yes.

Q. All right. Is this the same form of a groundwater permit that's issued to anybody that applies for a groundwater withdrawal permit?

A. Yes. With the possible exception of special terms and conditions.

\* \* \*

[p.65]

\* \* \*

Q. If you'll look at that first paragraph of small print, right under the bolded word "permit," about three lines up from the bottom of that paragraph, it says: "Water use under this permit is allowed only when the stream flow, lake level elevation or static groundwater level, whichever, if any, is applicable, is above the established minimum pursuant to Mississippi Code Section 51-3-7."

Do you see that?

A. Yes.

\* \* \*

Q. That means that if MDEQ determines that the static groundwater level, for example, is below an established minimum, then it can take action to change this permit.

A. Correct.

\* \* \*

[p.66]

\* \* \*

Q. Other than the farmers that you just talked to -talked about earlier, are you aware of any time when MDEQ has declared that the stream flow lake level elevation or static groundwater levels were below an established minimum?

- A. For stream flows, yes. Lake levels, I'm not sure.
- Q. What about static groundwater levels?
- A. Not that I'm aware of.

\* \* \*

[p.85]

\* \* \*

- Q. Cone of depression is a natural phenomena that occurs when any well pumps, correct?
  - A. That's correct.
- Q. A well in Mississippi creates a cone of depression when it pumps, correct?
  - A. That's correct.
- Q. A well in Tennessee creates a cone of depression when it pumps.
  - A. Yes.
- Q. And the same with wells in Arkansas and Louisiana and anywhere else.

A. Right.

\* \* \*

[p.89]

\* \* \*

Q. And, in fact, the water in the Sparta aquifer and the Memphis Sands aquifer and in the Lower Wilcox, Fort Pillow aquifers are flowing, correct?

#### A. Correct.

- Q. They're -- this is not like a bathtub where the water's just sitting there.
  - A. Correct.
  - Q. It's moving more like a slow river, if you will.
  - A. Yes.

\* \* \*

[p.176]

\* \* \*

Q. And you indicated that those were calculations done by Kerry Arthur, I think you said, who was with the USGS.

#### A. Right.

- Q. And this was back in the early to mid-'90's; is that accurate?
- A. This was dated '95, so thereabout. Middle part of -- middle '90's.
- Q. And then you indicated that MDEQ has not done any independent work to verify what Kerry Arthur said; is that correct?

#### [p.177] A. That's correct.

- Q. So despite learning of this issue in the mid-'90's, this agency, the official agency of the State of Mississippi with respect to groundwater issues has not done anything to independently confirm what Kerry Arthur said at that point in the mid-'90's, correct?
  - A. To do our own calculations, no, we have not.

\* \* \*

#### **APPENDIX 4**

#### UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF MISSISSIPPI DELTA DIVISION

JIM HOO	DD, ATTORNEY GENERAL, EX
	IE STATE OF MISSISSIPPI,
,	FOR ITSELF AND PARENS
	E FOR AND ON BEHALF OF
	OPLE OF THE STATE OF
MISSISS	
1,1100100	PLAINTIFF
VS.	CIVIL ACTION NO. 2:05CV32-D-B
	CONSOLIDATED
THE CIT	Y OF MEMPHIS, TENNESSEE,
	MPHIS LIGHT, GAS & WATER
DIVISIO	•
	DEFENDANTS
DESOTO	COUNTY, MISSISSIPPI
220010	PLAINTIFF
VS.	CIVIL ACTION NO. 2:05CV085-D-B
THE CIT	Y MEMPHIS, TENNESSEE,
	MPHIS LIGHT, GAS & WATER
DIVISIO	·
DIAIOIO	DEFENDANTS
	DEFENDANIS

NESBIT WATER ASSOCIATION, INC.;	)
MISSISSIPPI UTILITY COMPANY,	)
INC.; AND BILL J. ROBERSON, ON	)
BEHALF OF THEMSELVES AND	)
ALL OTHER ENTITIES AND PERSONS	)
SIMILARLY SITUATED	)
PLAINTIFFS	)
	)
VS. CIVIL ACTION NO. 2:05cv108-D-B	)
	)
THE CITY MEMPHIS, TENNESSEE,	)
AND MEMPHIS LIGHT, GAS & WATER	)
DIVISION	)
DEFENDANTS	)
	_ )

### VIDEOTAPE DEPOSITION OF MDEQ 30(B)(6) JIM HOFFMAN

Taken at Mississippi Department of Environmental Quality, 2380 Highway 80 West, Jackson, Mississippi, on Monday, July 30, 2007, beginning at 3:00 p.m.

\* \* \*

[p.7] \*\*:

- Q. Okay. Can you tell me what your current position is?
- A. I'm a geologist administrator with the Office of Land and Water Resources, which is [p.8] within the Department of Environmental Quality.
  - Q. What are your job duties?

A. I supervise several geologists and an engineer. We do investigations of groundwater resources in the state.

\* \* \*

Q. And is your primary area groundwater?

A. Yes, it is.

\* \* \*

[p.13]

\* \* \*

Q. Mr. Hoffman, when's the first time that you remember hearing about the fact that water might be moving from Mississippi into Tennessee? And specifically I'm talking about [p.14] groundwater moving in the Memphis Sands/Sparta aquifer.

A. I don't know that I could say a year, but it would -- it may have been Mr. Branch saying something about it or possibly Kerry Arthur with the USGS, but I couldn't tell you when. It would have been quite sometime ago.

Q. Do you remember the context it was brought up?

A. It was just mentioned in passing as something that was just, you know, uninteresting observation on Kerry's part, I think. And in Mr. Branch's case it was, I think, something that someone had brought up to him, and he just also was interested in it.

Q. Did you or your department do anything to confirm or to study what Mr. Arthur or Mr. Branch said?

A. No sir.

[p.15] Q. And you still haven't to this day, correct?

A. No sir.

\* \* \*

[p.24]

\* \* \*

Q. All right. Now, the water in the Memphis Sands aquifer, the groundwater, is flowing, correct?

A. Yes, sir.

Q. This is not a bathtub we're talking about where the water is just stuck in one place.

A. No, sir.

Q. And the water comes in at the recharge area on, for example, the eastern side of DeSoto County, correct?

[p.25] A. Yes, sir.

Q. And then moves through DeSoto County.

A. Yes, sir.

Q. Now, before there was any pumping in the Memphis Sands or Sparta aquifer, that water was moving through DeSoto County, correct?

- A. Yes, sir.
- Q. The water wasn't going to stay in DeSoto County.
  - A. Ultimately, no, sir.

\* \* \*

[p.26]

\* \* \*

Q. When you pump from a well in the Memphis Sands aquifer, at the same rate, doesn't matter what the rate is, a cone of depression would form in Mississippi and Tennessee or in Arkansas if you were pumping at a rate that would -- was such that a cone of depression would form in any of those wells, correct?

A. Yes, sir.

Q. It doesn't matter that you're in Arkansas or Tennessee or Mississippi.

A. No, sir.

[p.27] Q. You're aware, are you not, that there are pumping centers in Mississippi that have created cones of depression which extend into other states; isn't that right?

A. Yes, sir.



