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.**

# POST-HEARING REPLY BRIEF OF THE CITY OF MEMPHIS, TENNESSEE, AND MEMPHIS LIGHT, GAS & WATER DIVISION

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## GLOSSARY

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| 2016 Op. | Memorandum of Decision on Tennessee's Motion to Dismiss, Memphis and Memphis Light, Gas & Water Division's Motion to Dismiss, and Mississippi's Motion to Exclude, *Mississippi v. Tennessee, et al.*, No. 143, Orig. (U.S. Aug. 12, 2016) (opinion of Special Master) (Dkt. No. 55) |
| 2018 Op. | Memorandum of Decision on Defendants' Motion for Summary Judgment, *Mississippi v. Tennessee, et al.*, No. 143, Orig. (U.S. Nov. 29, 2018) (opinion of Special Master) (Dkt. No. 93) |
| Compl. | Complaint, *Mississippi v. Tennessee, et al.*, No. 143, Orig. (U.S. June 6, 2014) (Dkt. No. 1) |
| Defs.' Joint Mot. to Preclude Two Aquifer Theory | Defendants' Joint Motion in Limine to Preclude Mississippi from Arguing that there are Two Aquifers at Issue, *Mississippi v. Tennessee, et al.*, No. 143, Orig. (U.S. Nov. 1, 2018) (Dkt. No. 78) |
| Defs.' PFOF | Defendants' Joint Proposed Findings of Fact, *Mississippi v. Tennessee, et al.*, No. 143, Orig. (U.S. Sept. 5, 2019) (Dkt. No. 115) |
| *Hood* Litigation | *Hood ex rel. Mississippi v. City of Memphis*, 533 F. Supp. 2d 646 (N.D. Miss. 2008), *aff'd*, 570 F.3d 625 (5th Cir. 2009), *cert. denied*, 559 U.S. 904 (2010) |
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| Memphis/MLGW Br. | Post-Hearing Brief of Defendants, The City of Memphis, Tennessee, and Memphis Light, Gas & Water Division, *Mississippi v. Tennessee, et al.*, No. 143, Orig. (Sept. 19, 2019) (Dkt. No. 113) |

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## I. THE UNDISPUTED FACTS CONFIRM THAT THE AQUIFER AT ISSUE IS AN INTERSTATE RESOURCE.

In its Post-Hearing Brief ("Brief"), Mississippi fails to offer any argument or present any evidence to refute the following factors identified by the Special Master that indicate the Aquifer is an interstate water resource:

- The Aquifer underlies multiple states, including Tennessee and Mississippi;
- Under predevelopment conditions, groundwater in the Aquifer naturally and constantly flowed across state lines including across the border from Mississippi to Tennessee;
- Pumping from the Aquifer in Tennessee impacts the groundwater in the same Aquifer in Mississippi and vice versa; and
- The groundwater in the Aquifer is hydrologically connected to interstate surface water.

*See* Memphis/MLGW Br. at 11-17.

These factors—all of which are conceded by Mississippi's own experts[1]—are conclusive of the Aquifer's interstate character and, therefore, dispositive of the issue before the Special Master at the evidentiary hearing. Factually, legally, equitably, and logically, the Aquifer at issue is an interstate resource.

The Special Master previously held that, if the Aquifer is an interstate resource, then the doctrine of equitable apportionment is the exclusive judicial remedy available to address Mississippi's claims about Defendants' use of the

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[1] *See, e.g.*, Defs.' PFOF ¶¶ 59, 64, 76-77, 117-118, 120-121, 123-124, 135, 139-141, 176-178, 183.

Aquifer. Because Mississippi has expressly disclaimed equitable apportionment as its intended or desired relief, Mississippi has failed to state a viable cause of action. The Special Master should recommend that Mississippi's Complaint be dismissed with prejudice.

## II. MISSISSIPPI'S BRIEF RE-ASSERTS PREVIOUSLY REJECTED THEORIES.

### A. Mississippi's "Territorial Theory" Fails Because Mississippi Cannot Own Water.

Mississippi's territorial sovereignty theory is based on the erroneous notion that the equal footing and public trust doctrines grant Mississippi sovereign ownership of the groundwater in the Aquifer within its borders. Pl.'s Br. at 9-11, 33-35. This "territorial theory" has already been twice rejected by the Special Master, *see* 2016 Op. at 20-23; 2018 Op. at 20-24, and is addressed in detail in Memphis/MLGW's Post-Hearing Brief, *see* Memphis/MLGW Br. 31-34. In this Reply Brief, Memphis/MLGW will not restate the Special Master's prior opinions or their own arguments again here. Instead, Memphis/MLGW highlight the most significant flaws in Mississippi's Post-Hearing Brief, which further demonstrate that Mississippi's "territorial theory" is spurious.[2]

[2] On pages 7-8 of its Brief, Mississippi asserts: "The fact that groundwater eventually leaves Mississippi under natural conditions as it is replaced by natural recharge in Mississippi is irrelevant for the purposes of territorial sovereignty." In support of that contention, Mississippi cites to page 466 of the hearing transcript. Nothing on page 466 (or 467) of the transcript supports or even relates to

### 1. Mississippi's claim of sovereign ownership over the groundwater in the interstate Aquifer conflicts with Mississippi's own state law.

Mississippi argues that its own state law supports the notion that Mississippi became "vested with ownership, control, and dominion" over the groundwater at issue. Pl.'s Br. at 9. Mississippi points to a state statute that describes the water within Mississippi's borders as "among the basic resources of the State" and subject to the "control and development" of the State "for all beneficial purposes." Pl.'s Br. at 11 (quoting Miss. Code Ann. § 51-3-1). Yet the fact that Mississippi state law grants the state the power to regulate and efficiently manage the use of water in Mississippi does not mean that Mississippi owns the water.

Mississippi completely ignores another of its own statutes that grants Mississippi's Department of Environmental Quality the power to negotiate its "share of ground water" in a resource—such as the Aquifer at issue here—"where a portion of those waters are contained within the territorial limits of a neighboring state." Miss. Code. Ann. § 51-3-41 (emphasis added). If, as Mississippi asserts, it already "owned" the water in an interstate river or aquifer (such as the Aquifer at issue here), there would be no need for such a law. Mississippi also disregards its own highest court's pronouncement that water is not susceptible of absolute

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Mississippi's assertion. Notably, Mississippi does not deny that groundwater is constantly moving through the Aquifer and being replaced by natural recharge.

ownership: In *Dycus v. Sillers*, 557 So. 2d 486 (Miss. 1990), the Supreme Court of Mississippi denied Mississippi's claim of "sovereign ownership" over *in situ* water, holding that "'[i]n 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.'" *Id.* at 501-02 (emphasis added) (quoting *State Game & Fish Comm'n v. Louis Fritz Co.*, 193 So. 9, 11 (Miss. 1940)).

**2. The public trust doctrine does not apply to Mississippi's claims.**

The authority cited by Mississippi in its Brief does not support Mississippi's argument that the public trust doctrine applies here. For example, Mississippi cites *United States v. Alaska*, 521 U.S. 1 (1997), in support of its contention that "Mississippi's authority under the Constitution to preserve, control, and protect groundwater located within its borders is an 'essential attribute of sovereignty.'" Pl.'s Br. at 10 (citing *United States v. Alaska*, 521 U.S. at 5). Yet groundwater was not at issue in *United States v. Alaska*. Instead, that case concerned "dispute[d] ownership of lands underlying tidal waters off Alaska's North Slope." *United States v. Alaska*, 521 U.S. at 1 (emphasis added). The Court's reference to an "essential attribute of sovereignty" was in regard to "ownership of submerged lands, and the accompanying power to control navigation, fishing, and other public uses of water," *id.* (emphasis added), not groundwater as Mississippi wrongly

asserts. Mississippi's reliance on other decisions suffers the same flaw—they all concern submerged land. *See* Pl.'s Br. at 10 (citing *Oregon ex rel. State Land Bd. v. Corvallis Sand & Gravel Co.*, 429 U.S. 363, 365 (1977) (noting that plaintiff sued "to settle ownership of certain lands occupying the Willamette River"); *Cinque Bambini P'ship v. Mississippi*, 491 So. 2d 508, 510 (Miss. 1986) (noting that plaintiff brought suit "to confirm title and remove clouds from title to 2400 acres of largely undeveloped property"); *PPL Mont. LLC v. Montana*, 565 U.S. 576, 581 (2012) (addressing Montana's claim against plaintiffs for their use of "riverbeds for hydroelectric projects") (emphasis in parentheticals added)). None of these cases supports the notion that a state owns *in situ* water resources.

The Special Master has already criticized Mississippi's reliance on *Tarrant Regional Water District v. Herrman*, 569 U.S. 614 (2013), as misplaced. *See* 2016 Op. at 23-24. *Tarrant* was a suit alleging breach of an interstate compact, which is not the case here. Moreover, interstate groundwater was not at issue in *Tarrant*. In *Tarrant*, as in *U.S. v. Alaska*, the Court spoke of "ownership of submerged lands," *id*. at 631 (quoting *U.S. v. Alaska*, 521 U.S. at 5) (emphasis added), and found that "'[a] court deciding a question of title to [a] bed of navigable water [within a State's boundaries must] begin with a strong presumption' against defeat of a State's title," *id*. (quoting *U.S. v. Alaska*, 521 U.S. at 34). Despite the fact that *Tarrant* was decided in the context of an interstate compact dispute and has

nothing to do with rights to use interstate groundwater, Mississippi cited the above language to support its inaccurate assertion that "Tennessee has absolutely no claim of right in law or equity to groundwater while it is residing . . . within the territorial boundaries of Mississippi." Pl.'s Br. at 35. The Special Master already found that Mississippi's "territorial theory" "sails wide of its target," 2018 Op. at 21, and that *Tarrant* does not support Mississippi's reliance on the public trust doctrine, 2016 Op. at 23. Mississippi's Post-Hearing Brief offers nothing new.[3]

#### 3. Water law scholars also reject Mississippi's "territorial theory."

The consensus among water and land law scholars is that Mississippi's "territorial theory" is contrary to established precedent and should not be adopted. For example, legal scholars have noted that Mississippi's position in this case "sound[s] like an expression of the absolute ownership position that Colorado took in 1901-02. Under this theory, no other state can have an interest in Mississippi's groundwater. Nor can the federal government." John B. Draper, Matthew E. Draper, Jeffrey J Wechsler, *The Evolving Role of the Supreme Court in Interstate Water Disputes*, 31 Nat. Resources & Env't 3 (Fall 2016). "The idea that states

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[3] In its Complaint, Mississippi contends that the groundwater in the Aquifer must be considered separately from the geologic formation of the Aquifer. Compl. ¶ 50. However, in its Post-Hearing Brief, Mississippi reverses its position by asserting that the "[g]roundwater is … part of the subterranean structure." Pl.'s Br. at 7; *see also id.* at 8 ("[I]t is part and parcel of Mississippi's sovereign territory."). Mississippi cannot have it both ways.

have absolute ownership of their territory and natural resources was popular in the nineteenth century. The Supreme Court, however, has come to reject absolute state ownership of resources that move—or can be moved—across borders." *Id.*

"[T]he Supreme Court has made it abundantly clear that it has little patience with claims of absolute 'ownership' [of ground water] by either [state or federal] government[.]" *2 Water and Water Rights* § 36.02, at 36-8, 36-9 (Amy L. Kelley ed., 3d ed. 2011). "Even the dissent in *Sporhase*, 458 U.S. at 961-65, did not argue for recognition of absolute state 'ownership' of water, but rather for recognition of the authority of the state to define water rights." *Id*. § 36.02, at 36-9, 36-10 n.17.

Scholars have also voiced concerns about any ruling contrary to the Supreme Court's long-standing position that states do not own their natural resources, citing the practical implications of such an outcome:

> [Mississippi's] remarkable claim departs from the almost uniformly established position that states do not "own" the water within their borders, but instead are authorized to manage that water for the "use" of their citizens. It also departs from the U.S. Supreme Court doctrine of "equitable apportionment" under which the Court has resolved interstate surface water conflicts, determining relative rights of use rather than awarding monetary damages based on water ownership.
>
> This conflation of use and ownership has the potential to affect the outcome of this case, as well as distort future litigation involving equitable apportionment, regulatory takings, state water rights law, and other legal doctrines.

Christine A. Klein, *Owning Groundwater: The Example of* Mississippi v. Tennessee, 35 Va. Envtl. L.J. 474, 474 (2017).

"[T]he Special Master has already found Mississippi's [ownership contention and reliance on the equal footing and public trust doctrines] inconsistent with precedent and theory." 2018 Op. at 21. "It remains so." *Id.*

### B. Mississippi's Reliance on Irrelevant Arguments and Evidence and Unsupportive Authorities Does Not Alter the Interstate Character of the Aquifer.

#### 1. Mississippi's contention that the Aquifer is too "complex" is a transparent effort to distract from its failed legal theories.

Unable to rebut the undisputed facts of this case that confirm the Aquifer is an interstate resource, Mississippi resorts to a campaign of distraction—what the Special Master characterized as a "definitional attack." 2018 Op. at 11. The opening salvo of Mississippi's "definitional attack" is an unsupported attempt to somehow discredit the term "interstate aquifer." Mississippi contends that "[t]he phrase 'interstate aquifer' not only lacks any scientific meaning, it is useless as a legal designation and communicates both false equivalence and legal implications that do not exist." Pl.'s Br. at 6.

While some aspects of surface water and groundwater hydrology may be complex, "many of [groundwater hydrology's] basic principles and methods can be understood readily by nonhydrologists and used by them in the solution of ground-water problems." J-40, at 6 of 91. Further, the science of groundwater has made significant strides. As one judge observed more than thirty years ago, "[s]cientific knowledge in the field of hydrology has advanced in the past decade to the point

that water tables and sources are more readily discoverable. This knowledge can establish the cause and effect relationship of the tapping of underground water to the existing water level." *Cline v. American Aggregates Corp.*, 474 N.E. 2d 324, 389 (Ohio 1984) (Holmes, J. concurring).

The issue before the Special Master and addressed at the evidentiary hearing is straightforward. The concept of an interstate or transboundary aquifer is not, as Mississippi attempts to argue, overly complex. For example, the Supreme Court has recognized "[t]he multi-state character of the Ogallala aquifer—underlying tracts of land in Colorado and Nebraska, as well as parts of Texas, New Mexico, Oklahoma, and Kansas." *Sporhase v. Nebraska*, 458 U.S. 941, 953 (1982) (emphasis added). The United States-Mexico Transboundary Aquifer Assessment Act defines "transboundary aquifer" as "an aquifer that underlies the boundary between a Participating State[4] and Mexico." Public Law 109-448 (2006). And, of course, both of Mississippi's experts testified that a "transboundary aquifer" is an aquifer that underlies a political boundary. Defs.' PFOF 90 (citing Tr. 279:19-22 (Spruill); 491:15-20 (Wiley)).

Additionally, numerous treatises, law reviews, and scientific papers have recognized and characterized the specific Aquifer at issue here as an interstate aquifer. *See*, *e.g.*, Dan Tarlock, *Law of Water Rights and Resources* § 10:24 (July

[4] "Participating States" include Arizona, New Mexico, and Texas. Sec. (3)(4).

2017 Update); Robert H. Abrams, *The Boundary Waters Treaty of 1909 as a Model for Interjurisdictional Water Governance*, 54 Wayne L. Rev. 1635, 1640-41 (2008); Jacob D. Bielenberg, *When Heavyweights Get Thirsty, Contracts Fall to the Wayside: A Case for Common Contract Principles and Stare Decisis [Kansas v. Nebraska, 135 S. Ct. 1042 (2015)]*, 55 Washburn L.J. 759, 768 n.71 (2016); Emily Brophy, *The Importance of Regulating Transboundary Aquifers*, 10 Sustainable Dev. L. & Pol'y 19, 19 (Fall 2009); Draper, Draper & Wechsler, *supra* at 4; Noah D. Hall & Benjamin L. Cavataro, *Interstate Groundwater Law in the Snake Valley: Equitable Apportionment and a New Model for Transboundary Aquifer Management*, 6 Utah L. Rev. 1553, 1608-10 (2013); Noah D. Hall & Joseph Regalia, *Interstate Groundwater Law Revisited: Mississippi v. Tennessee*, 34 Va. Envtl. L.J. 152, 152, 153, 159 (2016); Noah D. Hall & Joseph Regalia, *Lines in the Sand: Interstate Groundwater Disputes in the Supreme Court*, 31 Nat. Resources & Env't 8, 8 (Fall 2016); John D. Leshy, *Interstate Groundwater Resources: The Federal Role*, 14 Hastings W.-Nw. J. Envtl. L. & Pol'y 1475, 1482 n.25 (2008); Matthew Ley, *What Are You Going To Do About It?: The Ramifications of the Edwards Aquifer Authority v. Day Decision on Interstate Groundwater Disputes*, 65 Baylor L. Rev. 661, 662 (2013); James G. Mandilk, *The Modification of Decrees in the Original Jurisdiction of the Supreme Court*, 125 Yale L.J. 1880, 1926 (May 2016); Rex A. Mann, *A Horizontal Federalism Solution*

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Mississippi again tries to confuse the issue before the Special Master by claiming that "[i]dentifying the 'aquifer at issue' is an exercise fraught with confusion, complexity, and arbitrariness." Pl.'s Br. at 23. Mississippi claims that the phrases and "core terminology" used by Defendants—*i.e.,* "interstate" and "interstate aquifer"—are "grounded in ambiguity and false analogies" and "misleading." Pl.'s Br. at 4-5.

Identifying the Aquifer at issue has never before been a problem for Mississippi. Since Mississippi filed its first complaint in the *Hood* Litigation,

Mississippi has asserted that this dispute has been about "[t]he Memphis Sand Aquifer, or 'Sparta Aquifer' as it is known in Mississippi." *Hood*. Am. Compl. ¶ 14. Mississippi's experts have submitted reports on the Aquifer at issue and testified to their opinions about it. Mississippi's experts have acknowledged that, while it is known by different names, there is only one Aquifer at issue in this case. *See* Defs.' Joint Mot. to Preclude Two Aquifer Theory, pp. 7-10. Every expert in this case—including Mississippi's experts—have conceded that the geographic extent of the Aquifer is generally agreed upon by scientists and that the Aquifer underlies portions of Mississippi, Tennessee, and six other states. Defs.' PFOF 61, 62, 64. Further, Mississippi's expert Richard Spruill testified that he used the term "interstate aquifer" in his expert report to mean an aquifer that exists beneath two states, Tr. 318:8-11 (Spruill), and conceded that based on his own definition, the Aquifer at issue is an interstate aquifer, Tr. 318:12-16 (Spruill). *See* Defs.' PFOF 95.[5]

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[5] According to Mississippi, the phrase "interstate in nature" is also "problematic because it implies some application of the Commerce Clause." Pl.'s Br. at 3. Mississippi notes that phrase has been used by the Supreme Court in only six decisions "which are not remotely related to natural resources residing in situ within a State's territorial borders." *Id*. Mississippi then urges the Special Master to adopt the "plain meaning" of the word "intrastate," citing two state law taxation cases that have nothing to do with natural resources. Pl.'s Br. at 8 (citing *AT&T Comm. of the Mountain States, Inc. v. Colorado*, 778 P.2d 677 (Colo. 1989) (addressing whether long-distance telephone access services are inter- or intra-state for purposes of taxation); *Florida Dept. of Revenue v. New Sea Escape Cruises,*

Mississippi's eleventh-hour attempt to cloud the waters is subterfuge. The Special Master should disregard it.

The Special Master's question of whether the Aquifer, including its groundwater, is an interstate resource, is straightforward. Mississippi's attempt to make it complicated should be denied. The geographic extent of the Aquifer beneath eight states is not disputed, and, therefore, the interstate character of the Aquifer is undisputed and indisputable. The legal implication of the Aquifer's interstate nature is clear, as the Special Master has previously declared: "equitable apportionment is appropriate if this case involves an interstate resource." 2018 Op. at 10; 2016 Op. at 20.[6]

**2. Mississippi's contention that the Memphis Sand and Sparta Sand are separate aquifers is contrary to both the proof and Mississippi's previous arguments.**

Mississippi's second attack on the definition of "interstate" reprises an argument raised and lost by Colorado more than a century ago in *Kansas v. Colorado*, 406 U.S. 46 (1907). Colorado argued that the Arkansas River was

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*Ltd.*, 894 So.2d 954 (Fl. 2005) (addressing whether all mileage of off-shore gambling cruises are inter- or intra-state for purposes of taxation). These two cases are clearly inapplicable.

[6] Mississippi's assertion that Aquifer is too complex for the Special Master to determine whether it is interstate is another example of Mississippi trying to have its cake and eat it too. Despite arguing about the Aquifer's complexity, Mississippi finds the science of the Aquifer sufficiently certain to claim "sovereign ownership" of some portion of its water and to assert baseless claims of injury and damage.

actually two different rivers: the first begins in the Rocky Mountains and flows to eastern Colorado where it disappears into the earth, *id*. at 52-53; the second "new river," Colorado argued, arises in Kansas, where rainfall collects to gradually become a flowing stream, *id*. at 53. The Supreme Court declined to adopt Colorado's "broken river" theory, *id*., finding that the Arkansas River was one resource over the entire length of its flow and had consistently been recognized as a single, continuous river by "geographers, explorers, and travelers" alike, *id*. at 115.

Mississippi merely repackages Colorado's failed argument and wrongly contends that the Aquifer at issue is actually two aquifers: the Memphis Sand and the Sparta Sand. Mississippi's position should be rejected. Every expert in this case—including Mississippi's own experts—testified that the "Sparta Aquifer," "Memphis Aquifer," and "Memphis-Sparta Aquifer," are all names that refer to the single Aquifer at issue here. Defs.' PFOF 59.[7] Scientists have documented the existence of the Aquifer beneath multiple states (including Mississippi and Tennessee) for a century. Defs.' PFOF 97. The groundwater model used by Mississippi's expert witness David Wiley simulates the Middle Claiborne Aquifer as a single, continuous resource underlying the entire modeled region—including

[7] Tr. 87:4-88:15 (Spruill); 523:7-15 (Wiley); 567:25-568:10 (Larson); 814:20-815:10 (Waldron); 986:7-987:14 (Langseth); D-194 at 5; J-4 at 20-21; J-5 at 21; J-55 at 326.

Mississippi and Tennessee. Defs.' PFOF 285. And Mississippi's allegation that pumping from the Aquifer in Tennessee is pulling groundwater in the same Aquifer from Mississippi across their shared border assumes and requires that the same, continuous Aquifer underlies southwest Tennessee and northwest Mississippi.[8]

The Special Master should follow the lead of the Supreme Court in *Kansas v. Colorado* and refuse to adopt Mississippi's contention. Additionally, the Special Master should exclude any argument by Mississippi that there are two aquifers at issue because Mississippi did not raise that argument until after the close of discovery, and thus after its experts had submitted their reports and been deposed. *See* Defs.' Joint Mot. to Preclude Two Aquifer Theory at 2.

**3. Mississippi's suggestion that groundwater be treated differently than surface water is contradicted by the authorities cited in its Brief and by its own state law and has previously been rejected by the Special Master.**

In Section III of its Post-Hearing Brief, Mississippi tries to avoid addressing the obvious interstate character of the Aquifer by purporting to point out distinctions between surface water and groundwater. Pl.'s Br. at 4. While the

[8] "The long-dead Colorado lawyers from *Kansas v. Colorado* (1902-07) would be proud of [Mississippi's] 'two aquifers' theory." Burke W. Griggs, *Reconciling Interstate Water Compacts with Groundwater Use: Lessons of the Past Fifty Years of Litigation*, Colorado Law/Getches-Wilkinson Center, June 7, 2018.

language quoted by Mississippi describing surface water and groundwater does appear in the textbook cited, Mississippi omitted the following sentence in which the author explains that surface water and groundwater are interconnected: "However," the textbook author cautions, "as groundwater is not isolated from surface water, a study of ground-water development necessarily encompasses many aspects of surface-water flow." J-27 at 441 (emphasis added). Mississippi also cites several pages from Trial Exhibit J-2 to support that same contention. However, of the six pages cited by Mississippi, only one actually compares groundwater to surface water.[9] The rest merely discuss characteristics of groundwater. Notably, Mississippi again omits a statement by the authors of that paper affirming that "ground water and surface water are closely related and in many areas comprise a single resource." J-2 at 9 of 68.

Mississippi's contention that water on and below the earth's surface should be treated differently is also contrary to its own State law. As described in Section II(A)(1) above, Miss. Code Ann. § 51-3-41 grants authority to the Mississippi Department of Environmental Quality to "negotiate and recommend . . . compacts and agreements concerning [Mississippi's] share of ground water *and* waters flowing in watercourses where a portion of those waters are contained within the

[9] That one page states as follows: "Velocities of ground-water flow generally are low and are orders of magnitude less than velocities of stream flow." J-2 at 15 of 86.

territorial limits of a neighboring state." Miss. Code Ann. § 51-3-41 (emphasis added). Accordingly, the State of Mississippi recognizes that it does not exercise sovereign ownership over interstate water resources whether above the ground or below the ground (such as the Aquifer at issue here); Mississippi's law treats interstate surface water and interstate groundwater the same.

Finally, Mississippi wrongly asserts that "Defendants' pumping is easily distinguished from the surface water equitable apportionment river cases." Pl.'s Br. at 35. Mississippi's contention is purportedly supported by the cases referenced in a footnote. Pl.'s Br. at 35 n.10. However, none of the cases in that footnote supports the notion that groundwater pumping is "easily distinguished" from river water pumping. *Id.* In fact, Mississippi's footnote actually refutes the very proposition it claims to support. For example, Mississippi acknowledges (as it must) that some of the Supreme Court's equitable apportionment cases involved rivers that were hydrologically connected to groundwater. *Id.* The Special Master has previously made this same finding. *See* 2016 Op. at 20 (citing *Texas v. New Mexico*, 462 U.S. 554, 556-58 n.2 (1983)).[10] Further, Mississippi's footnote includes *Idaho v. Oregon*, 462 U.S. 1017 (1983), a case in which the Supreme Court expanded the application of equitable apportionment beyond interstate

[10] The cases cited by Mississippi in its footnote did not include *Texas v. New Mexico*, 462 U.S. 554 (1983), the case cited by the Special Master.

surface water to include migratory fish, finding that case "sufficiently similar" to water rights. *Id.* at 1024; *see also* 2016 Op. at 20 (citing *Idaho v. Oregon* and finding that "[e]quitable apportionment has been applied to a variety of interstate water disputes—and even to runs of anadromous fish").

The Special Master has previously rejected Mississippi's attempt to distinguish between pumping surface water and pumping groundwater, finding that, "groundwater pumping generally resembles surface water pumping; both could have an effect on water in another state through the operation of natural laws." 2016 Op. at 20. Mississippi has not only failed to cite any authority or present evidence to change the Special Master's initial finding, Mississippi has also cited authority that actually confirms that the Special Master's analysis was correct.

### C. Mississippi's Contentions Regarding Damages Are Refuted by its Own Experts, Wholly Unsupported by the Proof, and Irrelevant.

Mississippi's claim of "substantial harm" is unsupported by the evidence and is contrary to the testimony of Mississippi's own experts. Pl.'s Br. at 18-21. For example, Mississippi's experts testified that:

- Water users in Mississippi have significantly increased their use of water from the Middle Claiborne Aquifer over the last few decades <u>without any difficulty withdrawing the desired quantities of water</u>. Defs.' PFOF 243.
- Mississippi pumpers are currently able to meet demand for water from the Middle Claiborne Aquifer beneath Mississippi, Defs.' PFOF 240, and there

is no evidence that water users in Mississippi have been unable to withdraw as much water as desired from the Aquifer, Defs.' PFOF 242.

- The volume of water beneath DeSoto County, Mississippi, has changed very little since pumping began more than 100 years ago. Defs.' PFOF 241.

In addition to the above testimony confirming that Mississippi's water users have not been injured, Mississippi's expert, Richard Spruill, testified that the Aquifer itself had not been injured—admitting that pumping has not caused any subsidence in the Middle Claiborne Aquifer, Defs.' PFOF 247, and conceding that he had no evidence of any degradation in water quality (from any cause) in the Middle Claiborne Aquifer in Mississippi, Defs.' PFOF 246.

Finally, Mississippi's claims of injury are unsupported given admissions by Mississippi's experts that they:

- made no attempt to quantify the potential cost of additional electricity needed to pump water from the Aquifer due to a decline in water levels, Defs.' PFOF 244;

- did not attempt to calculate the reduction in total available drawdown in Mississippi caused by the regional cone of depression, Defs.' PFOF 239; and

- have not estimated any costs allegedly associated with the impact of the cone of depression in the Middle Claiborne Aquifer, Defs.' PFOF 249.

Nor did Mississippi offer any proof that any well user in Mississippi has had to lower any well's pump as a consequence of the regional cone of depression, Defs.' PFOF 245, or for that matter, that pumping by MLGW or any other water user in the Memphis area has damaged the Aquifer, Defs.' PFOF 249.

### D. Mississippi's Arguments Are Hopelessly Conflicted.

Mississippi continues to demonstrate its willingness to assert any position that it believes is in its interest at the time—even when a new position directly contradicts a position it has previously taken.

In the *Hood* Amended Complaint, Mississippi referred to the Aquifer at issue as the "Memphis Sand Aquifer, or 'Sparta Aquifer as it is known in Mississippi" and alleged that it "underlies portions of West Tennessee and Northwest Mississippi." *Hood* Am. Compl. ¶ 14 (emphasis added). After the close of discovery in this case, Mississippi asserted that the Memphis Sand Aquifer and Sparta Aquifer are two distinct and separate aquifers and that the Sparta does not extend into Tennessee. Defs.' Joint Mot. to Preclude Two Aquifer Theory at 2. In the *Hood* Litigation, Mississippi alleged that this dispute concerned "interstate or transboundary ground water." *Hood* Am. Compl. at ¶ 8. In this case, Mississippi now alleges that the very same resource is not interstate. Compl. ¶ 50. And in Original Action No. 139, Mississippi made a provisional claim for equitable apportionment, *see* Pl.'s No. 139 Orig. Compl. ¶ 5(c), but, in this case, vigorously denies the application of equitable apportionment and disavows any relief under that doctrine, *see* Compl. ¶¶ 38, 48-50.

## III. CONCLUSION

The lack of merit in Mississippi's argument has been apparent from the filing of this Original Action. In response to Defendants' Motions for Judgment on the Pleadings, the Special Master found that Mississippi's "complaint appears to fail to plausibly allege that the [Aquifer] or the water in it is not an interstate resource" and because "Mississippi has made it explicit that it does not seek an equitable apportionment of the Aquifer—dismissal would likely be warranted under Rule 12." 2016 Op. at 1. Two years later, in response to Defendants' Motion for Summary Judgment, the Special Master "remain[ed] convinced that Defendants present a strong case" on the threshold question of whether "the Aquifer and water are interstate in nature." 2018 Op. at 3, 27.

Nonetheless, the Special Master found it appropriate and proper to create a robust record for the Supreme Court to consider. That record is now complete. Mississippi brought nothing new to the evidentiary hearing and has provided nothing new in its Post-Hearing Brief. The Special Master has previously considered and rejected every legal argument raised by Mississippi. As the evidentiary hearing revealed, Mississippi's factual contentions are not supported by credible evidence. Most importantly, Mississippi's expert witnesses have conceded every fact that confirms the interstate character of the Aquifer and

groundwater at issue. Both of Mississippi's expert witnesses have also admitted that, based on their own definitions, the Aquifer is "interstate" or "transboundary."

Based on the proof presented at the hearing, the arguments made in Defendants' Post-Hearing Briefs, and the entire record in this cause, Defendants City of Memphis, Tennessee, and Memphis Light, Gas & Water respectfully urge the Special Master to adopt Defendants' Joint Proposed Findings of Fact and Proposed Conclusions of Law and recommend that Mississippi's Complaint be dismissed with prejudice.

Respectfully submitted,

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## CERTIFICATE OF SERVICE

Pursuant to Paragraph 3 of the Special Master's Case Management Plan (Dkt. No. 57), I hereby certify that all parties on the Special Master's approved service list (Dkt. No. 26) have been served by electronic mail, this 21st day of October, 2019.

/s/ *Leo M. Bearman*

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