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WATER LAW

Does the Doctrine of Equitable Apportionment Apply to Conflicts Between States over Groundwater Resources When Such Resources Are Derived from an Aquifer That Lies Beneath More than One State?

CASE AT A GLANCE

The Middle Claiborne Aquifer is a large sand formation that contains groundwater within its sand's porous spaces. The Aquifer spans beneath Mississippi, Tennessee, and at least six other neighboring states. Since 1886, the City of Memphis has withdrawn water from the aquifer to supply drinking water. Memphis also has withdrawn water for irrigation and industrial purposes. Due to increased water pumping, water levels in the aquifer have dropped, lowering the piezometric head (water pressure) in different locations, including between the two states' borders. In 2005, Mississippi filed suit against the City of Memphis and the Memphis Light, Gas and Water Division (MLGW) on territorial property rights theory, claiming that the city and MLGW were stealing Mississippi's groundwater resources. The District Court for the Northern District of Mississippi dismissed the case on a procedural ground. Mississippi subsequently filed a new complaint within the Supreme Court's original jurisdiction, this time including Tennessee. Mississippi is seeking declaratory and injunctive relief as well as more than \$600 million in damages for conversion of the groundwater. Mississippi argues its territorial property rights are being invaded. The suit explicitly disclaims reliance on equitable apportionment, which is the typical remedy supplied by the Supreme Court for disputes between states involving interstate water resources. The Court appointed a Special Master who found that the water of the aquifer was not "owned" by Mississippi and was, instead, an interstate resource subject to equitable apportionment. Both states objected to aspects of the Special Master's Report.

Mississippi v. Tennessee

Docket No. 220143

Argument Date: **October 4, 2021** From: **On Exceptions to the Report of the Special Master**

by **Robert "Bo" Abrams and Monik Markus**

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Issues

1. Did Special Master Siler err in concluding that the groundwater in question is an interstate resource?
2. Did Special Master Siler err in concluding that, due to the groundwater's interstate characteristic, the action did not merit any remedy other than equitable apportionment?
3. Did Special Master Siler err in recommending dismissal of Mississippi's claim with leave to amend the complaint to include an equitable apportionment claim?
4. Will the Court ultimately preclude Mississippi from filing an original action seeking equitable apportionment as a remedy due to issue preclusion, given that it has strategically disclaimed this remedy in its prior complaints?

Facts

The Middle Claiborne Aquifer extends beneath Tennessee, Mississippi, and at least six other neighboring states. Groundwater contained in the aquifer is extracted by pumping the water through wells or capturing springs supported by the aquifer. Contained within the larger aquifer are geologically distinctive elements, two of which are the Memphis and Sparta sands, which specifically underlie Tennessee and Mississippi. This section of the aquifer varies in terms of its thickness and geologic materials. As an interconnected system sitting beneath the earth's surface, one state's pumping practices within its own borders can affect the water pressure and availability of water around the wells in other locations. High-capacity wells cause what hydrogeologists call a "cone of depression." Such cones have their apex at the bottom hole of the well and get wider in a conical shape as they extend toward the surface. Within the cone, the pore spaces in the subsurface rock, sand, or other subsurface materials that formerly were part of the zone of saturation from which pumping could produce water now have so much of the water removed that they are part of the zone of aeration, from which pumping draws mostly air. Long-standing pumping from a wellfield having numerous wells can cause a regional lowering of the underground water table in addition to localized cones of depression. From predevelopment to date, a cone of depression has developed between Tennessee and Mississippi and gradually has lowered the water pressure and water accessibility of water close to the surface in the portions of Mississippi closest to the western part of the Mississippi-Tennessee border.

In 2005, Mississippi filed a complaint against the City of Memphis and the Memphis Light, Gas and Water Division (MLGW) in federal district court alleging that the latter had converted groundwater that belonged to Mississippi and that their pumping practices made it more difficult for the citizens of Mississippi to pump groundwater. The case was ultimately dismissed pursuant to Federal Rule of Civil Procedure 19(b) for failure to join an "indispensable" party, the state of Tennessee, which refused to waive its sovereign immunity, and because suits between states would fall within the Supreme Court's original jurisdiction. *See Hood, ex rel. Mississippi v. City of Memphis*, 533 F.Supp. 2d 646 (N.D. Miss. 2008) *aff'd* by 570 F.3d 625 (5th Cir. 2009). The court of appeals affirmed, holding that equitable apportionment is the only proper remedy for their claimed injury because the groundwater is an interstate water resource.

Mississippi subsequently filed for a writ of *certiorari* for the Supreme Court to review the dismissal and in the alternative for leave to file a bill of complaint against Tennessee, the City of Memphis, and MLGW. The Court denied those requests. In 2014, Mississippi again applied for leave to file in the Supreme Court. This time leave was granted, and Judge Siler was appointed Special Master. In the instant case, the Court will hear arguments on the parties' exceptions to his 2020 report.

In its Bill of Complaint against Tennessee, Mississippi is again disclaiming an equitable apportionment remedy, seeking instead to obtain declaratory and injunctive relief it alleges is owed because the groundwater in question is not an interstate resource. Specifically, Mississippi claims the water would not flow to Tennessee but for MLGW's pumping practices. As such, Mississippi argues equitable apportionment does not apply, citing the aquifer's interaction with interstate waters; its slow, yet eventual flow across the state border; the interconnectedness of the water as evidenced by the consequences of groundwater pumping; and the characterization of the aquifer as a single hydrogeological unit. In his Report, Special Master Siler found otherwise and recommended dismissal of the Bill of Complaint without prejudice, and to allow Mississippi to file leave to amend the complaint to include an equitable apportionment remedy.

The Special Master summarized the findings of the Report as follows:

The Special Master agrees with Tennessee. Accordingly, it is recommended that the Supreme Court find: (1) the groundwater contained in the Middle Claiborne Aquifer is the resource at issue; (2) that resource is interstate; and (3) equitable apportionment is the appropriate remedy for the alleged harm. Because Mississippi has explicitly not requested equitable apportionment in this action, it is also recommended that the complaint be dismissed with leave to amend, unless Mississippi declines the favor, in which case the complaint should be dismissed with prejudice. (Report of Special Master Siler, November 5, 2020, at 2.)

Both Tennessee and Mississippi took exceptions to the Report.

Case Analysis

Mississippi argues that MLGW is knowingly engaging in pumping practices that are contributing greatly to a

cone of depression or decline in the water table, allowing for water to escape into Tennessee that otherwise would not. It further argues that none of the Supreme Court's holdings dealing with equitable apportionment have applied specifically to groundwater resources and that, therefore, their case is one of first impression. The Special Master concedes that equitable apportionment has not broadly applied to all "interstate water resources" nor to "natural resources," leaving a space for Mississippi to point out differences between surface water and groundwater. The implication is that their divergent properties make equitable apportionment inapposite.

The doctrine of equitable apportionment involves the just and equitable allocation of interstate resources by the Court. The doctrine, as the Court has developed it, now requires the complainant state to show "real or substantial injury or damage," under a clear and convincing evidence standard. At present, Mississippi is likely unable to make that threshold showing because its citizens are not suffering a shortage of water due to MLGW's continued withdrawals.

Mississippi attempts to characterize groundwater resources located within its borders as intrastate because the underground movement of water within the aquifer is extremely slow such that it cannot be considered to be regularly crossing state lines. Mississippi further urges the Court to view the Middle Claiborne Aquifer not as a single unit, but as a series of disconnected and differing aquifers, which must be viewed in isolation. On that basis the Sparta-Memphis Aquifer, which predominantly underlies Mississippi, should be viewed as Mississippi property that would not reach Tennessee in the absence of MLGW pumping.

The Supreme Court's jurisprudence on interstate water resources has embraced the doctrine of equitable apportionment between states for more than 100 years. While only quite recent cases have involved groundwater due to the impact on surface water flows, various cases have shed light on how the resource should be treated. In *Kansas v. Colorado*, 206 U.S. 46 (1907), the Court held that when removing water in one state from one body of water directly affects the availability of water in another state, the water is an interstate resource for which the Court's role is to find an equitable sharing. Quite importantly, in this case, Tennessee is making its withdrawals from the aquifer in its own territory, an indicium that points toward allocating a share of the aquifer's water to Tennessee. The Court also has shown a

marked preference for protecting existing economic uses of water over potential future uses in the complainant state. For example, in *Colorado v. New Mexico II*, 467 U.S. 310 (1984), to protect existing uses in New Mexico from any diminution where New Mexico claimed it was using all of the flow of the Vermejo River, the upstream source state, Colorado, was refused any water from the river for planned future use. Most recently in *Florida v. Georgia*, 141 S.Ct. 1175 (2021), a dispute involving the Apalachicola-Chattahoochee-Flint River basin, the Court dismissed Florida's Bill of Complaint that sought to establish uses of water in Georgia, particularly irrigated farming in the Flint River basin. Florida's principal claim of injury was damage to oystering in the Apalachicola estuary, due to reduced flows caused by Georgia's water uses. The Special Master had meticulously found that the failure of the oyster fishery was a function of over-harvesting rather than low-flow induced increases in salinity. As a result, Florida was unable to obtain a decree requiring greater flow in the lower reaches of the basin.

A final issue raised in this case is whether the Court should preclude Mississippi from amending its complaint to add a claim seeking equitable apportionment, given that they have specifically argued against it. Should the Court find Mississippi is not entitled to relief based on its theory of ownership of groundwater located within its borders, Tennessee argues that Mississippi is issue precluded from raising an equitable apportionment claim. Allowing Mississippi to add an equitable apportionment claim now, after having explicitly disclaimed it in both this action and in its prior complaint that ended in the Fifth Circuit dismissal, would impermissibly and unfairly expand the scope of the litigation. *See*, Restatement 2d of Judgments § 24. The usual standard for amending pleadings in the closing stages of a case involving the Supreme Court's original jurisdiction does not permit a state to make a claim that it previously disavowed. On the other side of that issue, however, is the fact that the Court has always recognized that an equitable apportionment decree can be reopened due to changed circumstances. That general right to seek an equitable apportionment would be unlikely to benefit Mississippi now because so little time has passed since its previous opportunity to seek an equitable apportionment and there is no indication in the record that Mississippi has suffered a markedly different harm. *See, Nebraska v. Wyoming*, 507 U.S. 584 (1993).

Significance

“Water is uniquely vital, and it cannot be ‘owned’ by anyone, whether a state sovereign or otherwise.” (Brief for Law Professors in Support of Defendants as Amici Curiae, p. 19.) Groundwater shouldn’t be treated any differently.

A significant issue that will be addressed by this case is whether *groundwater* stored within large aquifer systems that span state lines will be treated as an interstate resource. The Supreme Court has ruled in many cases involving surface water that such a resource is an interstate resource, but its jurisprudence concerning groundwater is murkier. If the Court finds that groundwater is also to be treated as an interstate resource, it will mean that (in the absence of congressional intervention) states will have to resolve groundwater disputes through equitable apportionment, or negotiation of an interstate compact, just as states resolve surface water disputes.

If the Court rules that the groundwater in question is considered an *intrastate* resource, the decision will affect groundwater management for decades to come by presenting many as yet unanswered (and some unposed) questions of managing groundwater from aquifers that underlie more than one state. Other states will attempt to stake a Supreme Court validated claim to the groundwater in their soils. States, no doubt, will be tempted to utilize their newly declared sovereign rights over “native” groundwater, by trying to capture all of the benefit of the water for their own citizens. The Court has waded into the dormant commerce clause issues that might arise after passage of protectionist state water laws once to date. *See, Sporhase v. Nebraska, ex rel. Douglas*, 458 U.S. 941 (1982). Allowing a state ownership and regulatory hegemony over water in an aquifer that does touch other states is a recipe for increased litigation where two or more sovereigns are creating independent but potentially overlapping entitlement to the same water. Such a system would prove difficult to administer and destabilize water entitlement throughout the country.

Alternatively, should the Court adopt the Special Master’s recommendations, this decision will appear to be little more than a minor addition to the jurisprudence indicating that groundwater is to be treated similarly to surface water when addressing disputes between states. That may understate the significance of the case. Regardless of the outcome, in the absence of action by Congress, the Court likely will face a “stream” of cases in which it will have to face highly fact-dependent

determinations. Already, equitable apportionment cases and interstate water compact cases involving groundwater uses in one state that affect stream flows in another present disputes about allocation that rely on what often are disputes about the hydrogeological models. Any cases involving apportionment of groundwater will add a layer of complexity because the boundaries of groundwater basins are seldom coincident with those of the overlying surface water basins. In the current era of climate change–induced variations in historic precipitation and stream–flow patterns, groundwater becomes an even more valuable asset due to its greater reliability. This ensures that the stakes in state versus state groundwater disputes will be high. As reliance on groundwater grows, instances of aquifer depletion are likely to follow, adding yet another variable to the Court’s equitable apportionment calculus. The Supreme Court will be playing an increasing role in allocating the nation’s waters. That will be an uncomfortable policy-making role—determining an appropriate response to aquifer overdraft, should interstate aquifers need to be pumped at rates in excess of recharge. These will not be simple cases.

It seems appropriate to give Special Master Siler the final summary of where things stand as the case moves toward resolution by the Court:

Water is finite. Especially the usable kind. And the Middle Claiborne Aquifer holds lots of it. Unsurprisingly, both Mississippi and Tennessee want it. Luckily, instead of war, the law requires they share it.

(Report of Special Master Siler at 32, citations omitted.)

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