On October 4, the U.S. Supreme Court heard oral arguments in *Mississippi v. Tennessee* (Case No. 22O143). The questions Mississippi presented are: (1) whether Mississippi has sole sovereign authority over and control of groundwater naturally stored within its borders; and (2) whether Mississippi is entitled to damages, injunctive, and other equitable relief for the groundwater taken by Tennessee.

At oral argument, Mississippi emphasized again that they were not seeking equitable apportionment, which redresses a different type of injury. They argued that by pumping groundwater near the state border and creating a "vacuum" or cone of depression, Tennessee was crossing the border into Mississippi's sovereign territory and taking their water resources.

Chief Justice Roberts and Justices Kagan and Sotomayor pressed Mississippi on the issue of whether the groundwater was really an interstate resource subject to equitable apportionment, similar to diversions from or dams on surface water flows. Justice Breyer added his perception that groundwater "runs all over the place," easily crossing state borders. Several of the justices compared groundwater to wild horses, fog, valuable minerals, and saturated sand on the beach in their efforts to find analogies for the underground resource.

Justice Kagan noted that Tennessee had not trespassed onto Mississippi's land to pump the water, but that Tennessee's groundwater pumping occurred on their own land, resulting in extraterritorial effects. "That is often true when it comes to water, that one can take action in one state and have effects in another state."

Justice Barrett asked if the only reason to treat this groundwater differently from surface water was that it travels slowly, over a period of centuries, and if so, when is that travel time fast enough to consider groundwater flow in the same category as surface flow?

Justice Kavanaugh asked Mississippi to respond to the assertion in the amicus brief from eight states (Colorado, Idaho, Nebraska, North Carolina, North Dakota, Oregon, South Dakota, and Wyoming) that Mississippi's position would "inject dangerous uncertainty into established systems of natural resource management and undermine an established process to resolve disputes over a natural resource."

On April 29, 2021, the states filed an amicus brief arguing that, without an interstate compact or equitable apportionment: (1) a state has no duty to manage shared natural resources for the benefit of another state; (2) states cannot obtain damages or an injunction for intrastate use of shared natural resources; and (3) the court should not create a claim for damages or enjoin uses, because it would incentivize lawsuits over compact negotiations, it would undermine the doctrine of judicial equitable apportionment, and it would create uncertainty for states as they administer natural resource use within their borders.

Mississippi responded that states can only exercise sovereign control over a resource within their own borders, and here, there is a "known duty" similar to the principles recognized in *Tarrant Regional Water District v. Herrmann*, 569 U.S. 614 (2013).

Chief Justice Roberts asked if Tennessee could bring counterclaims in situations where Mississippi wells take water from Tennessee. Mississippi agreed that they could, noting that such a situation would be a motivating factor for states to negotiate an interstate compact. Chief Justice Roberts said, "that starts to sound a lot like equitable apportionment. How is it different at the end of the day?"

Justice Gorsuch asked Tennessee if the Supreme Court's doctrine of equitable apportionment should have any limited principles when it comes to groundwater. "Is every aquifer in the country that might have some interstate effect now going to be part of this Court's original jurisdiction?" Justice Breyer also expressed concerns about inviting further similar equitable apportionment lawsuits over interstate resources. Tennessee suggested that the outer bounds might be where the Court recognizes that the public trust doctrine applies. But the Court has already extended the equitable apportionment doctrine to groundwater when substantial pumping has affected surface flows. "Now, with respect to the fact that aquifers are under many, many states, in fact, most of the states in the country, respectfully, the question ought to be is there scarcity and, if there is scarcity, is there a doctrine that calls for conservation, calls for historic uses, calls for weighing the harms and benefits, calls for prospective action that would enable the scarce resource to be shared? And the answer is yes."

Chief Justice Roberts noted that he had trouble following the science and asked, “Is this really water we’re talking about?” He asked if it was mixed up with silt and small particles of sand in the aquifer, and if it was really water before it was pumped out of the aquifer. Tennessee noted that “the definition of an aquifer is a fully saturated formation, hydrogeologic formation, in which there are usable quantities of water.” Roberts asked if they should view it just like the interstate water cases, if it’s the pumping that separates the water from the silt and sand and makes it usable. Tennessee responded: “Well, Mr. Chief Justice, I think you would say that it is water because it's some of the finest water that anyone can drink in the United States. This artesian water is absolutely spectacular water that they have pumped, and they have run it over filters that filter out some of the iron and some of the other minerals, but it is very pure water and it is delicious. And I would urge the Court to consider the aquifer – just because it is mixed in with sediment does not distinguish what it actually is, which is water when it is pulled out, and it is not a sophisticated scientific operation to do that.”

Justice Barrett asked, “What if you could separate out some other thing from the silt, like some sort of mineral, and find some sort of way to pump it and pull it into Tennessee? How would that fare? Would that be subject to equitable apportionment?” Tennessee responded: “No, Your Honor. Minerals have not been subjected to the Equitable Apportionment Doctrine because they're not covered by public trust. They are privately owned, usually through surface ownership rights by personal property. Sometimes they get severed in some states where you can own the surface land and sever off the mineral rights. Those would be treated separately under well-established law.”

The U.S. Department of Justice acknowledged that the Supreme Court has never directly addressed the question of how to deal with the allocation of water in an aquifer, and in that sense it is a case of first impression. However, two groundwater characteristics justify the application of the doctrine of equitable apportionment, even considering the differences between surface water and groundwater: (1) the resource moves naturally across state lines, and (2) one state’s use of the resource within its borders affects the presence of the resource in the other. “When those characteristics exist, you're inevitably going to have a conflict of sovereign interests of, on the one hand, the sovereign interest of the state's right to use the water here in Tennessee and, of course, the interests of the other sovereign to protect its citizens from whatever effects that use may have. And because one state can't simply impose its policy on the other, the Doctrine of Equitable Apportionment does the best we can do, which is to treat each state as an equal sovereign, take account of all their interests, put both states' interests on the balance, and then reconcile them as best as we can.”

The Department of Justice added that this issue is resolved for intrastate groundwater disputes “every day of the week.” “We have state courts that look at, well, how do we allocate groundwater between one owner or the other? And the way they do it isn't the way Mississippi wants you to do it. No one pulls up water from a well and then says, well, some of these molecules came under the landowner's property; I have to put those back in the water. No, all these jurisdictions apply some sort of equitable principle where they share the water that's underneath them. So I think the upheaval would come not from adopting our approach, which is continuous with not only this Court's equitable apportionment precedents but also how states deal with this issue, but rather in adopting my friend from Mississippi's position.” https://www.oyez.org/cases/2021/143-orig