

No. 142, Original

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IN THE  
**Supreme Court of the United States**

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STATE OF FLORIDA,

*Plaintiff,*

v.

STATE OF GEORGIA,

*Defendant.*

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**On Exceptions To The Report  
Of The Special Master**

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**GEORGIA'S REPLY TO FLORIDA'S  
EXCEPTIONS TO THE REPORT OF THE  
SPECIAL MASTER**

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## TABLE OF CONTENTS

INTRODUCTION .....	1
STATEMENT OF THE CASE .....	3
A. The ACF Basin .....	3
B. Florida's Lawsuit.....	5
1. The Court's Prior Opinion.....	5
2. Proceedings on Remand .....	6
SUMMARY OF THE ARGUMENT .....	9
ARGUMENT.....	11
I. Special Master Kelly Followed The Court's Instructions By Issuing Factual Findings On All Relevant Issues.....	13
II. Florida Failed To Prove That Georgia Caused Harm To Florida.....	15
A. Florida Failed To Prove That Georgia Harmed The Bay .....	15
B. Florida Failed To Prove That Georgia Harmed The River.....	22
C. The Special Master's Analysis Is Consistent With <i>New Jersey v. New York</i> .	23
III. The Special Master Correctly Found That Georgia's Use Of ACF Waters Is Reasonable...	25
A. Georgia's Consumptive-Use Estimates Are Accurate And Reliable.....	26
B. Georgia's Consumptive Use Is Reasonable.....	34
C. Georgia's Conservation Efforts Are Extensive .....	35

IV. The Benefits Of A Decree Would Not Substantially Outweigh The Costs.....	38
A. The Benefits Of A Cap Would Be Small, Rare, And Speculative.....	40
1. Florida's Cap Would Not Meaningfully Increase State-Line Flows.....	40
2. Even Assuming All Water Generated By A Cap Would Pass To Florida, The Ecological Benefits Would Be Minimal .....	45
B. The Costs Of A Decree To Georgia Would Be Massive.....	48
V. Florida Cannot Obtain A Decree Without Proving Its Case On The Merits .....	51
CONCLUSION .....	53

## TABLE OF AUTHORITIES

## Page(s)

## Cases

<i>Colorado v. Kansas</i> , 320 U.S. 383 (1943) .....	12
<i>Colorado v. New Mexico</i> , 459 U.S. 176 (1982) ( <i>Colorado I</i> ) .....	11, 12, 39, 51
<i>Colorado v. New Mexico</i> , 467 U.S. 310 (1984) ( <i>Colorado II</i> ) .....	3, 12, 39
<i>Florida v. Georgia</i> , 138 S. Ct. 2502 (2018) .....	<i>passim</i>
<i>New Jersey v. New York</i> , 283 U.S. 336 (1931) .....	23, 24
<i>Washington v. Oregon</i> , 297 U.S. 517 (1936) .....	3

## Other Authorities

Report of the Special Master, <i>New York v. New Jersey</i> , 283 U.S. 336 (1931) (No. 16, Original) .....	24
U.S. Army Corps of Engineers, <i>ACF Signed Record of Decision</i> (Mar. 30, 2017), <a href="http://bit.ly/2sSRdp6">http://bit.ly/2sSRdp6</a> .....	45



## INTRODUCTION

After more than six years of litigation, it is now clear that Florida's case was built on rhetoric and not on facts. Special Master Kelly thoroughly canvassed the extensive trial record and answered every question necessary for the Court to determine whether Florida is entitled to an equitable apportionment. His 81-page report carefully details how Florida's case fails in every respect. Indeed, Florida's evidentiary failings were so glaring that Special Master Kelly concluded that Florida had failed to prove its case *even after* giving Florida the benefit of the doubt on a number of key legal and factual disputes. This Court should accept the Special Master's well-reasoned recommendation and deny Florida's request for a decree.

Florida's primary argument (at 17) is that Special Master Kelly's findings should be ignored because he supposedly "dismissed the conclusions" reached by Special Master Lancaster. But Special Master Lancaster expressly limited his findings to the "single, discrete issue" of whether the Court could craft a remedy without a decree binding the U.S. Army Corps of Engineers (the "Corps"). Report of Special Master Lancaster 30-31 (Feb. 14, 2017) ("2017 Report"), Dkt.636. By the very terms of his own report, he did not resolve the many *other* factual questions that were necessary to determining whether Florida was entitled to a decree. It was precisely because he had not made factual findings on those issues that the Court remanded the case to a new Special Master—this time with instructions to "address in the first instance many of the evidentiary and legal questions

the answers to which ... [the Court] assumed or found plausible enough to allow [it] to resolve the threshold remedial question.” *Florida v. Georgia*, 138 S. Ct. 2502, 2527 (2018). As part of that remand, the Court explicitly invited Special Master Kelly to make “more specific factual findings and definitive recommendations” than Special Master Lancaster had made. *Id.* Florida’s criticism of Special Master Kelly for doing exactly what the Court directed him to do is both unfair and misplaced.

On the merits, Special Master Kelly correctly found that Florida’s arguments suffered from a multitude of evidentiary failures that cut across nearly every aspect of the case. The trial record showed that Georgia’s water use had not caused harm to Florida, that Georgia was using far less water than Florida alleged, and that the cap Florida seeks would yield only minuscule benefits to Florida while inflicting enormous costs on Georgia. Special Master Kelly therefore correctly concluded that Florida’s own fishery mismanagement, combined with natural drought conditions, had much more to do with the 2012 oyster collapse than Georgia’s upstream water consumption. He also correctly found that Georgia consumes dramatically less water than Florida claimed, averaging around 6% of total state-line flows in dry years (and far less in normal years). And he was right to conclude that the costs of Florida’s cap significantly outweigh its minimal benefits: Florida’s cap would increase oyster biomass in the Bay by only 1.4% at most, while imposing hundreds of millions of dollars in costs on Georgia. Those costs dwarf the *entire value* of the Apalachicola Bay oyster industry,



which even before the 2012 collapse produced annual revenues of only \$5-8 million.

This is far from the type of “high equity that moves the conscience of the court in giving judgment between states.” *Washington v. Oregon*, 297 U.S. 517, 523 (1936). The Court has said time and again that an equitable apportionment is an extraordinary remedy. And before the Court will exercise its authority to control the behavior of one state at the behest of another, the complaining state must prove its case with hard facts, grounded in actual science and data, and show that the benefits of an equitable apportionment substantially outweigh the harm that might result. *See Florida*, 138 S. Ct. at 2527; *Colorado v. New Mexico*, 467 U.S. 310, 320-21 (1984) (*Colorado II*). After years of discovery and a five-week trial, Florida failed to make those showings.

## STATEMENT OF THE CASE

### A. The ACF Basin

This dispute concerns the Apalachicola-Chattahoochee-Flint River Basin (“ACF Basin” or the “Basin”), a network of rivers, dams, and reservoirs that begins in northern Georgia and ends in the Florida panhandle. *Florida*, 138 S. Ct. at 2508. Though Georgia accounts for more than 90% of the population, employment, and economic output in the Basin, Ga.’s Proposed Findings of Fact & Conclusions of Law ¶31 (“SOF”), Dkt.655, it uses only “a relatively small share of the ACF waters,” Report of Special Master Kelly 47 (Dec. 11, 2019) (“2019 Report”), Dkt.670. Georgia’s total annual “consumptive use”—*i.e.*, the water Georgia uses, but does not return to the system, Mayer Direct ¶26—is just 2.4% of state-line

flow in wet or normal years and 6.1% of state-line flow in dry years, SOF ¶19.

Georgia puts the limited water it consumes to vital uses. The Chattahoochee River is the primary water supply for the 4.2 million people who live in the Atlanta metropolitan area. *Id.* ¶32; Kirkpatrick Direct ¶9. The Flint River and the aquifers that underlie it are the primary source of irrigation for southwestern Georgia's agricultural industry, which generates \$4.7 billion in annual revenue. SOF ¶¶20 n.2, 33-34. The Flint and Chattahoochee Rivers meet at Lake Seminole, a reservoir created by Woodruff Dam. *Florida*, 138 S. Ct. at 2508-09. From Woodruff Dam, situated at the Florida-Georgia border, the Apalachicola River flows south to the Apalachicola Bay. *Id.* at 2509.

The Corps operates five dams and four reservoirs in the ACF Basin, including Woodruff Dam. Br. for the United States as Amicus Curiae 4, 6-7 (Aug. 2017) ("U.S. Amicus"). Through its operations, the Corps controls how much water flows into Florida at any given time—especially during dry periods, when water is scarce and the Corps tightly regulates state-line flows. *See id.* at 10-12. The Corps operates these dams and reservoirs to meet federally mandated purposes in accordance with its Master Water Control Manual ("Manual"). *Id.* at 4-5. During times of low streamflow or drought, the Corps maintains the flow of the Apalachicola at roughly 5,000 cubic feet per second ("cfs") regardless of fluctuations in basin inflow from Georgia. *Id.* at 18, 22-23; SOF ¶47.

## B. Florida's Lawsuit

### 1. *The Court's Prior Opinion*

In 2014, the Court granted Florida leave to file its complaint to equitably apportion the interstate waters of the ACF Basin. The parties then engaged in more than 18 months of discovery, producing more than 7 million pages of documents, serving 130 third-party subpoenas, issuing more than 30 expert reports, and conducting nearly 100 depositions, including 29 expert depositions. *Florida*, 138 S. Ct. at 2510-11; *id.* at 2541 (Thomas, J., dissenting). After a five-week trial, Special Master Lancaster recommended denying Florida relief based on the “single, discrete issue” of “redress[ability].” 2017 Report 30-31. In his view, Florida failed to prove that its alleged injuries could be remedied without a decree binding the Corps. *Id.* Special Master Lancaster confined his conclusions to that single issue, and explained that if the Court disagreed, “[m]uch more could be said and would need to be said” on the many other issues in the case. *Id.* at 34.

In reviewing Florida's exceptions, the Court “reserve[d] judgment as to the ultimate disposition of this case,” and addressed “only the narrow ‘threshold’ question” presented by Special Master Lancaster's report. *Florida*, 138 S. Ct. at 2518. A divided Court concluded that he had “applied too strict a standard” to that threshold question and that Florida had made a “legally sufficient showing as to the possibility of fashioning an effective remedial decree.” *Id.* at 2516, 2527. Like the Special Master's, the Court's analysis of the “threshold” question of “redressability” assumed

without deciding that some issues favored Florida. *Id.* at 2518-21, 2525-27.

The Court then remanded, highlighting five questions that needed “specific factual findings” and “definitive recommendations” from the Special Master: (1) the reasonableness of Georgia’s water use; (2) Florida’s alleged injuries and whether they were caused by Georgia; (3) the extent to which a cap on Georgia would increase streamflow from the Flint into Lake Seminole; (4) the extent to which a cap would result in additional Apalachicola River streamflow; and (5) the extent to which any additional streamflow would ameliorate Florida’s alleged injuries. *Id.* at 2527. In issuing these directives, the Court recognized that Special Master Lancaster had not conclusively resolved any of these questions, and charged newly appointed Special Master Kelly with both answering these questions “in the first instance” and “mak[ing] other factual findings he believes necessary.” *Id.*

## 2. *Proceedings on Remand*

On remand, Special Master Kelly denied Florida’s request for additional discovery, explaining that the voluminous record already covered all relevant issues and that the parties had incurred substantial burdens in compiling that record. *See* 2019 Report 5. Following a thorough review of the record, extensive briefing, and oral argument, the Special Master recommended denying Florida relief, finding for Georgia on each of the issues the Court identified.

***Harm and Causation.*** The Special Master found that Florida’s alleged harms “only have an attenuated connection to Georgia’s consumptive use or they are not concrete.” *Id.* at 8. At the outset, he

determined that Florida presented no evidence of harm during non-drought years, and therefore rejected Florida's request for an every-year cap. *Id.* Florida does not challenge that conclusion.

Turning to drought years, the Special Master found that, of the many harms that Florida alleged in its complaint, Florida had proven only one: an injury to the oysters in Apalachicola Bay. *Id.* at 8, 21-22. But while the Special Master recognized that the oyster fishery suffered harm, he found that Florida failed to prove that Georgia's water use *caused* that harm. *Id.* at 21-22. Other explanations for the collapse abounded—particularly, overharvesting and insufficient re-shelling efforts, combined with natural drought. *Id.* at 16. As for the Apalachicola River, the Special Master found a “complete lack of evidence of any harm caused by Georgia to the ecosystems of the River and floodplain.” *Id.* at 22.

***Georgia's Water Use.*** The Special Master next addressed whether “Georgia take[s] too much water from the Flint River.” *Florida*, 138 S. Ct. at 2527. Because the parties' estimates of Georgia's water use “vary dramatically”—with Georgia calculating its *highest ever* monthly Flint consumption as 1,407 cfs, and Florida estimating Georgia's *average* dry-month consumption as 4,000 cfs—the Special Master carefully analyzed the parties' competing calculations. 2019 Report 26. Ultimately, he found that Georgia's figures were “more reliable,” and that Florida's estimates “contain[ed] significant uncertainties,” were “inconsistent,” and were based on modeling that “was unreliable for several reasons.” *Id.* at 34-37 & n.24. He also found that Georgia uses the water it consumes

“for [i]mportant [p]urposes,” and that its “state-wide conservation measures” “appear to have been quite effective.” *Id.* at 48, 52. For all those reasons, he found that Georgia “does not take too much water from its portion of the ACF Basin.” *Id.* at 25-45.

**Corps Operations.** The Special Master next found that, even if the Court were to enter a decree in Florida’s favor, “very little streamflow generated by a potential decree would pass through to Florida at the times it claims to need additional streamflow under [the Corps’] existing operational rules.” *Id.* at 55. As directed by the Court, the Special Master paid “particular attention to the possibility that increased flows will allow the Corps to postpone the onset of drought operations or hasten the return to normal operations.” *Id.* He found that neither event would occur. *Id.* at 55-61. Instead, his evaluation showed that “increased flows in the Apalachicola River during low-flow periods would only be ‘rare and unpredictable.’” *Id.* at 56 (citation omitted). The Special Master had invited Florida to argue about “reasonable modifications” to Corps operations, Case Mgmt. Order No.27 at 2 (“CMO No.27”), Dkt.649, but Florida never proposed what modifications the Corps should make or analyzed how those modifications would benefit Florida or affect the Corps’ other federally mandated purposes.

**Cost-Benefit Balancing.** Because “very little of the additional streamflow generated by a decree would result in increased Apalachicola flows” during drought, the Special Master found that “Florida would receive no appreciable benefit from a decree.” 2019 Report 62. Recognizing, however, that the Court

would “benefit[] from detailed factual findings,” he did not end his analysis there. *Id.* (citation omitted). Instead, he “also evaluate[d] the cost-benefit balancing question while assuming without deciding” that the Corps would “immediately pass through to the Apalachicola River” “all extra streamflow generated by a decree.” *Id.* He also assumed that the equitable-balancing inquiry did not require a heightened burden of proof. *Id.* at 64.

Even with those generous assumptions, the Special Master found that Florida failed to show that “the benefits of an apportionment would substantially outweigh the harm that might result.” *Id.* Quite the opposite: “the potential harms to Georgia would substantially outweigh the benefits to Florida.” *Id.* “Florida’s own evidence ... only showed small benefits to the amount of oyster biomass,” and “the evidence on benefits to the River shows similarly small, if any, incremental increases.” *Id.* at 78. Moreover, “the cost of a decree to reach nearly 801 cfs during summers of dry years would be over \$100 million per dry year.” *Id.* at 78-79. In comparison, Florida’s Apalachicola fishing and oyster industries produced total annual revenues of only \$11.7 and \$6.6 million before the oyster collapse, respectively. *Id.* at 79.

## SUMMARY OF THE ARGUMENT

1. Special Master Kelly did not, as Florida claims (at 19), do “a 180-flip from Special Master Lancaster,” nor did he “contravene[] this Court’s mandate.” The Court remanded this case precisely because there had not been the “extensive and specific factual findings” necessary “for the Court to properly apply the doctrine of equitable apportionment.” *Florida*, 138 S. Ct. at

2515. Special Master Kelly followed the Court's instructions and made, in the first instance, the multitude of factual findings identified in the Court's opinion.

2. Florida's case fails at the outset because it has not proven that it "suffered a wrong through the action of the other State." *Id.* at 2514. The only harm Florida proved at trial was to the Apalachicola Bay oyster industry during the drought year of 2012. But Florida did not prove that Georgia's water use *caused* that harm. Instead, the evidence showed that climatic conditions and Florida's own fishery policies played a far greater role. In 2012, Florida allowed record levels of oyster harvests, while making deficient efforts to rebuild the oysters' habitat through re-shelling—a fatal combination. And even if flows into the Bay decreased in 2012, an unprecedented stretch of drought, not Georgia's consumptive use, was the cause.

3. Even assuming Florida had proven injury and causation, it did not prove that Georgia "take[s] too much water from the Flint." *Florida*, 138 S. Ct. at 2527. The Special Master correctly rejected Florida's made-for-litigation models in favor of real-world data that Georgia scientists and the federal government have collected, analyzed, and relied on for many years. Georgia verified its consumptive-use data through satellite imagery, on-the-ground measurements, and field mapping, while Florida's models were found to be wholly unreliable, with inherent errors ranging from 2,000 to 10,000 cfs—amounts that dwarf the *total* water Georgia uses from the Flint River. The real-world data shows that Georgia consumes far less



water than Florida believes—just 2.4% of state-line flow in wet or normal years and 6.1% of state-line flow in dry years. The Special Master properly found that Georgia’s water use is reasonable, and that Georgia puts the water it uses to important purposes.

4. Finally, Florida’s case fails because it did not “show[] that ‘the benefits of the [apportionment] substantially outweigh the harm that might result.’” *Id.* (alteration in original) (citation omitted). Imposing a cap on Georgia would not provide Florida materially more water at the times it purports to need it—both because Georgia does not use that much water to begin with and because of the way the Corps operates its dams and reservoirs in the ACF Basin. But even setting those facts aside, a cap would yield no meaningful ecological benefit. Florida’s own experts found that increasing Apalachicola River flows by 1,000 cfs or more during drought would have a negligible impact on oysters in the Bay—increasing oyster biomass by just 1.4%—or on allegedly harmed species in the River. The costs of such a cap on Georgia, moreover, would be enormous, running more than \$100 million in each drought year by Florida’s estimate, and far higher by Georgia’s estimate.

## ARGUMENT

To obtain an equitable apportionment, Florida must prove two things: (1) it has suffered a serious injury caused by Georgia’s consumptive use, *id.* at 2514; and (2) “the benefits of the [apportionment] substantially outweigh the harm that might result,” *id.* at 2527 (alteration in original) (quoting *Colorado v. New Mexico*, 459 U.S. 176, 187 (1982) (*Colorado I*)). Florida must make those showings by clear and

convincing evidence—"a burden that is 'much greater' than the burden ordinarily shouldered by a private party seeking an injunction." *Id.* at 2514 (citation omitted); see *Colorado II*, 467 U.S. at 316-17; *Colorado I*, 459 U.S. at 187 & n.13; *Colorado v. Kansas*, 320 U.S. 383, 393-94 (1943).

Those requirements serve important purposes. The heightened burden of proof reflects the "sovereign status and 'equal dignity' of States" and the fact that the Court must tread carefully before "exercis[ing] its extraordinary power under the Constitution to control the conduct of one State at the suit of another." *Florida*, 138 S. Ct. at 2514 (citations omitted). Moreover, it has been "this Court's long-held view that a proposed diverter"—here, Florida—"should bear most ... of the risks of erroneous decision," because "[t]he 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." *Colorado II*, 467 U.S. at 316. For those reasons, "the equities supporting the protection of existing economies will usually be compelling." *Colorado I*, 459 U.S. at 187.

Under these well-established principles, Florida is not entitled to an equitable apportionment because it failed to prove—either by clear-and-convincing evidence or under the lower, preponderance-of-the-evidence standard—that Georgia caused it harm or that the benefits of a decree substantially outweigh the costs. In finding that Florida failed to prove its case, Special Master Kelly did not reverse prior conclusions by the Court or Special Master Lancaster

and, in all events, he reached manifestly correct conclusions supported by the extensive record.

# **I. Special Master Kelly Followed The Court's Instructions By Issuing Factual Findings On All Relevant Issues.**

Dissatisfied with the Special Master's across-the-board findings that Florida failed to prove its case, Florida argues (at 2) that Special Master Kelly "improperly threw out" and "inexplicably dismissed" Special Master Lancaster's "core conclusions." In particular, Florida claims (at 17) that Special Master Lancaster "made 'clear' his conclusions on harm" and Georgia's consumptive use. This revisionist history misconstrues both the prior Special Master's report and the Court's opinion. Special Master Lancaster limited his findings to the threshold issue of redressability, and the Court specifically recognized that *no* finder of fact had resolved the many other questions relevant to an equitable apportionment—including injury, causation, the reasonableness of Georgia's water use, and the costs and benefits of Florida's proposed cap. That is precisely why the Court charged Special Master Kelly with resolving those issues "in the first instance" on remand. *Florida*, 138 S. Ct. at 2527.

Start with Special Master Lancaster's own words: He recommended resolving this case on the "single, discrete issue" of redressability. 2017 Report 30-31. He also stressed that he was not making findings on any other issue. *Id.* at 30-31, 34. For example, he "*assum[ed]*" that Florida has sustained injury as a result of unreasonable upstream water use by Georgia." *Id.* at 30 (emphasis added). And while

Special Master Lancaster did mention that Florida had suffered “real harm,” *id.* at 31, and did suggest that Georgia’s agricultural use was “largely unrestrained,” *id.* at 32, he stopped short of making actual findings on those issues. To drive the point home, Special Master Lancaster emphasized that “[m]uch more could be said and would need to be said on these issues” if the Court disagreed with him on redressability. *Id.* at 30-31, 34.

The Court likewise recognized that Special Master Lancaster limited his analysis to a single issue and did not resolve the many questions that would be necessary to determine whether Florida was entitled to relief. *Florida*, 138 S. Ct. at 2511. The Court consistently referred to Special Master Lancaster’s statements on injury, causation, and Georgia’s water use as “assumptions,” not factual findings. *Id.* at 2518-19, 2526-27. In fact, the absence of findings on these issues is exactly why the Court found a “remand [wa]s necessary” in the first place. *Id.* at 2519; *see id.* at 2526 (“Further findings ... are needed on all of these evidentiary issues on remand.”).

It is therefore incredible for Florida to claim (at 2, 14, 17) that Special Master Kelly “dismissed” or “flipped” Special Master Lancaster’s findings. The entire point of the remand was that no such findings had ever been made. Indeed, it was for that very reason that the Court specifically identified the various evidentiary questions that needed to be addressed and charged Special Master Kelly with resolving those questions in the first instance. Based on his detailed review of the lengthy trial record, and the parties’ supplemental briefing and oral argument,

Special Master Kelly recommended denying Florida's request for relief.

## **II. Florida Failed To Prove That Georgia Caused Harm To Florida.**

Both parties agree that, before the Court ever gets to questions of equitable balancing, Florida must first prove by "clear and convincing evidence" that it has suffered a serious injury "through the action of the other State." *Florida*, 138 S. Ct. at 2514 (citation omitted). Florida failed to meet that burden.

### **A. Florida Failed To Prove That Georgia Harmed The Bay.**

Although Florida alleged a variety of harms in its complaint, the only harm Florida actually proved at trial was the collapse of the Apalachicola Bay oyster industry in the extreme drought year of 2012. No one disputes that Florida's "oyster fishery suffered significant harm" in 2012. 2019 Report 9. The question, however, is whether Florida met its evidentiary burden of proving that Georgia's water use *caused* that harm. It did not. As the Special Master found: "Florida has not shown by clear and convincing evidence that the oyster collapse was caused by Georgia rather than another cause (like mismanagement of the resource or drought)." *Id.* 21-22.

***Florida's Mismanagement.*** Before, during, and after the 2012 collapse, Florida made several devastating management decisions that ravaged oyster populations in the Bay. In particular, both "overharvesting and a lack of re-shelling were significant causes of the collapse." *Id.* at 16. In the

words of Florida Department of Agriculture and Consumer Services ("FDACS") Bureau Chief Berrigan, whom Florida lauds as "Florida's most knowledgeable and experienced employee regarding oyster resources in Apalachicola Bay," Fla.'s Post-Trial Br. 37 ("Fla. Post-Trial"), Dkt.630, Florida's management practices "bent" the oyster fishery "until [it] broke," GX-1357.

Florida's own data shows that overharvesting played a central role in the collapse. After the Deepwater Horizon oil spill, Florida was concerned that oil from the spill might reach the Bay and force the fishery to close. Tr.767:2-11 (Berrigan). As a result, in 2010 and 2011, Florida jettisoned oyster-harvesting restrictions in favor of a "use it or lose it" attitude." JX-77 at FL-ACF-3386197. More oysters were harvested in 2011 and 2012 than in any of the prior *25 years*. SOF ¶12. Making matters worse, Florida simultaneously failed to enforce harvesting size and bag limits, which led to overharvesting of the juvenile and undersized oysters that should have been left for later seasons. JX-50 at 3-5. Unsurprisingly, when Georgia's oyster expert examined data comparing pre- and post-collapse oyster abundance, he found that oyster density at heavily fished bars plummeted by 78%, while oyster density at bars that were not heavily fished *rose* by 3-13%. Lipcius Direct ¶¶39-44 & Demos.3-4. The direct relationship between Florida's overharvesting and oyster density could not be more stark.

Florida knew its shortsighted practices risked the long-term health of the oyster fishery. It had "serious concerns about the health of the oyster fishery" by at

least August 2012, Sutton Direct ¶38, and admitted that “[h]arvesting pressures and practices were altered to increase fishing effort,” which “led to overharvesting of illegal and sub-legal oysters” and “further damaging [of] an already stressed population,” JX-77 at FL-ACF-3386187. Yet Florida did not limit overharvesting until November 2012 and, even then, merely applied restrictions required by existing law. GX-1304; Sutton Cross Demo.2; Fla. Admin. Code R. 68B-27.17.

Florida exacerbated the effects of overharvesting by failing to adequately re-shell its depleted oyster reefs. Because oyster larvae must settle on “substrate” (dead or living oyster shells) to survive, and harvesting removes substrate, re-shelling is vital to ensure habitat for new oysters. Tr.1374:9-22 (Sutton); Tr.908:19-909:10 (Berrigan). Yet while Florida should have re-shelled at least 200 acres of oyster habitat *per year*, it only re-shelled a *total* of 180 acres during the *entire ten years* preceding the 2012 collapse. GX-568 at 5, 15; Tr.1691:18-1692:17 (White); Tr.4390:12-4391:15 (Lipcius).

**Drought.** Throughout this litigation, Florida has tried to downplay its own fishery mismanagement and instead attribute the 2012 collapse to reduced freshwater flows from the Apalachicola. That theory, however, has long been in tension with Florida’s own pre-litigation conclusions. In April 2013, University of Florida Professors Havens and Pine published a report that found no “connection between oyster population dynamics and river flow,” “nutrients,” or “salinity.” GX-1355 at 222:13-18, 223:19-225:5; GX-1349 at 128:19-24. Years of additional research did

not change those conclusions: Pine concluded in 2015 that the “overall relationships between freshwater flows, drought frequency and severity, oyster recruitment, and harvest dynamics remain unclear,” GX-789 at 6, and testified in this case that there is no “clear” or “convincing” evidence “of a connection between Apalachicola River flows and oyster mortality,” GX-1355 at 291:14-292:14. As Georgia’s oyster expert explained, data and modeling by Florida’s oyster experts further “supports the position that [low] river flow did not cause the collapse,” because it shows only a 1.1% “maximum difference in the [oyster] population” if Georgia eliminated 50% of its agricultural irrigation (among other cuts). Tr.4409:24-4411:2 (Lipcius).

Even if there were evidence that reduced freshwater flows into the Bay caused the 2012 oyster collapse, the primary cause of those reduced flows was drought—not Georgia’s water use. In the decade immediately prior to the 2012 collapse, the ACF Basin was pummeled by three historic, multi-year droughts (1999-2001, 2006-2008, 2011-2012). *Infra* pp.32-33. Florida’s wasteful management practices occurred during the most-recent severe drought period of 2011-12. It was the succession of those historic droughts, not Georgia’s water use, that caused any reduction in freshwater flows into the Bay. See Panday Direct ¶¶60, 122; Bedient Direct ¶¶124-29. As Florida’s own expert explained, regardless of Georgia’s water use, “oyster[] [populations] in Apalachicola Bay would have declined in 2012 as a result of natural drought and natural reductions in freshwater discharge from the Apalachicola River.” Kimbro Direct ¶101. Proving the point, six other rivers and tributaries in northern



Florida saw similar streamflow declines during this period—even though Georgia uses only trivial amounts of water from those sources. Zeng Direct ¶¶149-152 & Demo.21; Menzie Direct ¶28 & Demo.5.

Natural drought plays a far more significant role than Georgia's water use, because, as discussed below, *infra* Parts III-IV.A, Georgia's water use is far too minimal to meaningfully affect Bay salinity. Modeling by Florida's own salinity expert confirmed that Georgia's total consumption generally affects Bay salinity by less than 1 part per thousand ("ppt"). SOF ¶18. A 1-ppt change in salinity is well within the range of natural variability to which Bay organisms have adapted, would essentially be unnoticeable, and would not meaningfully affect oyster abundance. *Id.* ¶71. Indeed, another Florida expert found that even 5-10 ppt reductions in salinity did not significantly reduce the number of oysters killed by snails, and that Bay salinity would need to decrease by 20 ppt to "significant[ly]" reduce oyster predation. *Id.* ¶17. In light of this evidence, the Special Master correctly found that, "to the extent that low flows caused the decline, drought was a more significant cause of the low flows than Georgia's consumption." 2019 Report 14.

***Florida's Arguments.*** Florida's attempts to undermine the Special Master's conclusions (at 24-27) all fail. *First*, Special Master Kelly's findings on causation do not conflict with Special Master Lancaster's Report. While Special Master Lancaster acknowledged that the 2012 oyster collapse constituted "real harm," 2017 Report 31, he did not make any findings on whether Georgia's water use

*caused* the collapse, *id.* at 34. To the contrary, he reserved judgment on that question, recognizing that “[m]uch more could be said and would need to be said” on “causation” if his recommendation were rejected. *Id.*

*Second*, Special Master Kelly gave appropriate weight to testimony from former Bureau Chief Berrigan and Apalachicola oysterman Ward. 2019 Report 12-13, 19. In the end, however, what mattered most was the mountain of scientific data and analysis compiled by numerous experts on both sides, all of which sought to determine the cause of the 2012 collapse. After closely parsing that evidence, the Special Master found that Florida failed to establish a clear and convincing causal connection between Georgia’s water use and the collapse, notwithstanding Berrigan’s self-serving observations (which conflicted with his own contemporaneous statements) and Ward’s anecdotal testimony.

*Third*, the Special Master did not “improperly dismiss[]” the National Oceanic and Atmospheric Administration’s “expert views.” Exceptions 26. As the Special Master explained, “the NOAA evidence is not persuasive because NOAA had to decide whether to grant relief quickly based in part on socioeconomic considerations ... and NOAA did not have the benefit of evidence gathered through an adversarial process” such as the extensive record in this case. 2019 Report 14. Regardless, the NOAA evidence Florida invokes is conflicting at best and, if anything, only further underscores the fishery mismanagement described above. A draft NOAA report from September 2012 concluded that “[h]arvesting pressure and practices”

were “contributing to low oyster numbers,” FX-412 at NOAA-0003818, and NOAA scientists who reviewed the report recognized that “Florida continues to allow harvest of undersized oysters, big time,” GX-572. That draft created problems for Florida, prompting Florida officials to scramble to change the narrative by producing partial and misleading information, misrepresenting the facts, and selectively using official state documents. GX-1244 at FL-ACF03685533; see Ga.’s Resp. to Fla.’s Post-Trial Br. 30-31 (“Ga. Post-Trial Resp.”), Dkt.632. Despite Florida’s efforts, NOAA’s final report *still* concluded that Florida’s fishery mismanagement was in part to blame for the collapse—identifying increased harvesting pressure, undersized-oyster harvesting, and failure to comply with regulations as affecting the oyster population. FX-413 at NOAA-0022897-98.

*Fourth*, Florida’s attacks (at 27) on Georgia’s oyster expert, Dr. Lipcius, fall flat. Lipcius is a distinguished oyster ecologist and fisheries-management expert with more than three decades of experience researching the eastern oyster (the species that lives in Apalachicola Bay). He performed several analyses to assess the relationship, if any, between low river flows and the Bay’s oyster population, and found none. Lipcius Direct ¶¶27-61. In doing that work, Lipcius examined oyster bars that “spanned the ranges of salinity observed in the Bay.” 2019 Report 15. Of particular significance, Lipcius found that “Hotel Bar (which was not heavily harvested) experienced one of the largest increases in salinity, yet the oyster population after the collapse was *greater* there than before the collapse,” 2019 Report 15-16; Lipcius Direct ¶48(b)-(c). That fact, among many

others, strongly suggests that proper fishery management has far more to do with oyster abundance than freshwater flows from the Apalachicola.

### **B. Florida Failed To Prove That Georgia Harmed The River.**

Beyond the Bay, Florida's complaint tried to argue that Georgia had caused harm to the Apalachicola River. The evidence failed to support those allegations. Most significantly, Florida failed to prove population-level harm to any species in the River. Florida tried to prove River harm through its expert, Dr. Allan, but Allan provided no evidence of *actual* harm to any species, relying instead on artificial "harm" metrics that had no connection to real-world species population trends. SOF ¶3, Tr.546:17-548:1 (Allan); Menzie Direct ¶¶153-54. The Special Master was correct to find Allan's testimony "not ... credible." 2019 Report 23.

To the extent Florida identified *any* harmful changes in the floodplain or isolated mussel die-offs, Florida failed to prove they were caused by Georgia rather than by Corps activities or natural drought. As Florida's own witnesses conceded, the Corps' construction of Woodruff Dam lowered water levels in the upper Apalachicola River by up to five feet. SOF ¶6. The Corps also dredged the riverbed and deposited the spoils on the banks, which clogged tributaries and sloughs and created a deeper, wider channel, resulting in "overflows onto the floodplain (and through sloughs) occur[ing] less frequently and for shorter periods of time." SOF ¶¶7-8. Indeed, USGS previously found that the Corps' channel deepening

changed the types of trees found in the floodplain forest—the same changes for which Florida now tries to blame Georgia. *Id.* ¶10.

Florida maintains (at 29) that it “provided numerous examples” of mussel die-offs. But these isolated examples do not indicate population-level harm. To the contrary, USFWS found that the relevant mussel population numbered more than 18 million, was “stable or improving,” and, in suitable habitat, was “common to abundant.” SOF ¶4. Further, all the mussel habitats Florida identifies were in areas affected by channel changes resulting from Corps dredging. For example, Swift Slough, a stream on which Florida focused at trial, formerly connected to the Apalachicola River at less than 4,500 cfs but, because of Corps-driven channel changes, later connected only at 5,600 cfs. *Id.* ¶9; see GX-88 at 29-30 (Kentucky Landing); Kondolf Direct ¶48 and Tr.2598:7-10 (Kondolf) (Hog Slough and Dog Slough). In sum, the construction of the dam and the “dredging of the channel by the Corps”—not Georgia’s upstream water use—caused any injuries Florida suffered on the River. 2019 Report 24.

### C. The Special Master’s Analysis Is Consistent With *New Jersey v. New York*.

Florida relies heavily (at 15-16, 30-31) on *New Jersey v. New York*, 283 U.S. 336 (1931). But that case has no bearing on the resolution of Florida’s claims. While the Court did cite harm to New Jersey’s “oyster fisheries” as one of many harms that had been shown, *id.* at 345, the *New Jersey* Special Master actually reached a similar conclusion as the Special Master here when he observed that “[t]he oyster ... adapts

itself to a wide range of salinities, and a change in salinity of .5 to even 1.5 parts per thousand is a small change compared to the natural changes in salinity which occur from year to year, month to month and from day to day,” Report of the Special Master 175, *New Jersey v. New York*, 283 U.S. 336 (1931) (No. 16, Original) (“*New Jersey Report*”).

What drove the outcome in *New Jersey*, moreover, was a factual record that differed dramatically from the record in this case. New Jersey had established at least some “damage to navigation, agriculture, municipal water supply, shad fisheries and industrial uses of the Delaware River, and ... recreational uses of the river” in addition to harm to its “oyster industry.” *Id.* at 193. It was the “total[ity]” of these harms that were found “greater than New Jersey ought to bear.” *New Jersey*, 283 U.S. at 345. The *New Jersey* Special Master also found that New Jersey had “carefully fostered, protected, and policed” the oyster industry and “done more than any other state in preventing the destruction of a great natural resource.” *New Jersey Report* 162.

The same cannot be said for Florida. As discussed, the *only* harm Florida proved at trial was the 2012 collapse of the Apalachicola Bay oyster fishery, and that collapse stemmed from Florida’s own mismanagement and natural drought. *Supra* Part II. Further, Florida’s own experts found that dramatically restricting Georgia’s consumption would have only a *de minimis* impact on oyster abundance. *Supra* p.19. Given these fundamentally different facts, *New Jersey* does not help Florida here.

### III. The Special Master Correctly Found That Georgia's Use Of ACF Waters Is Reasonable.

Florida's failure to prove that Georgia caused it harm would ordinarily conclude the case and result in judgment for Georgia. 2019 Report 25. But the Special Master nonetheless went on to address the second requirement for obtaining a decree: whether the benefits of the apportionment substantially outweigh the harm that might result. *Florida*, 138 S. Ct. at 2527. In evaluating that question, the Special Master made the "full range of factual findings" identified by the Court, *id.* at 2515, including whether Georgia "take[s] too much water from the Flint River," *id.* at 2527. Understanding how the Special Master correctly analyzed that issue is a necessary preliminary step to evaluating the costs and benefits of a decree.

At trial, the parties advanced starkly different estimates of how much water Georgia consumed in the ACF Basin. Relying on real-world data that its hydrologists collected and updated in the ordinary course, Georgia put forth evidence that it consumed an average of 804 cfs from the Flint River in May-September of dry years and its *highest-ever* consumption was only 1,407 cfs in a single month of a severe drought. SOF ¶¶21, 23. In contrast, Florida relied on made-for-litigation models to argue that Georgia's monthly consumption was substantially higher, including as high as 5,500 cfs in the peak summer months of drought years. Hornberger Direct p.46 (Table.8).

After carefully reviewing the record, including a wealth of expert testimony, Special Master Kelly

found that Georgia's real-world data was reliable, while Florida's made-for-litigation estimates were not. 2019 Report 34-45. The Special Master also concluded that Georgia's consumptive use is reasonable relative to its population and economic output. *Id.* at 45-54.

**A. Georgia's Consumptive-Use Estimates Are Accurate And Reliable.**

***Georgia's Real-World Data.*** The Special Master had good reason to find that Georgia's consumptive use numbers were "more reliable" than Florida's estimates. 2019 Report 34-45. Beginning long before Florida initiated this litigation, Georgia has tracked total municipal and industrial ("M&I") and agricultural consumptive use in the ACF Basin. Zeng Direct ¶¶22, 30, 63. Georgia directly measures M&I consumption by monitoring hundreds of withdrawal and return facilities to capture 100% of M&I consumptive use every month. *Id.* ¶¶24-26. Agricultural-use data likewise comes from thousands of field measurements collected and refined over many years by state agencies, state universities, and regional and local water-planning districts. *Id.* ¶5; SOF ¶24. These contemporaneous, real-world measurements are accurate and reliable, and the data reflects thousands of hours of analysis, calibration, and modeling by Georgia's Environmental Protection Division ("EPD"), which continually tests and refines the calculations in the ordinary course. SOF ¶24; Zeng Direct ¶5.

Georgia has taken particular care to ensure the accuracy of its agricultural-use estimates. Georgia maintains and regularly updates a Wetted Acreage Database—a painstaking and detailed accounting of



irrigated acreage in the State. This database combines satellite-based remote imaging with on-the-ground field mapping to measure 100% of irrigated acreage in ACF Georgia. Tr.3699:11-14 (Masters); Masters Direct ¶¶13, 31-36; Zeng Direct ¶¶51, 58. The database is particularly reliable in the lower Flint Basin—the area where groundwater pumping has the greatest impact on streamflow—because members of Georgia’s Water Planning and Policy Center personally visited each irrigation source, verified exact irrigated acreage, and gathered additional information about the irrigation source for inclusion in the database. Tr.3699:19-3701:24 (Masters). Georgia also measures farmers’ actual water use: Georgia has installed more than 6,000 irrigation flowmeters in the ACF Basin, including on approximately 80% of irrigation systems in the lower Flint Basin alone. Masters Direct ¶41; Tr.3713:2-22 (Masters). Using all of this data—including the number of irrigated acres and irrigation-depth estimates derived from on-the-ground metering information—Georgia calculates its ACF Basin agricultural water use to a high degree of certainty. Zeng Direct ¶¶15-76.

Experts in Georgia EPD’s Hydrology Unit use Georgia’s data to calculate consumptive-use statistics as part of their regular work. *Id.* ¶¶5, 62-63. They run this data through a state-of-the-art hydrologic model that USGS developed to determine the precise impact of groundwater pumping on ACF streamflow levels. *Id.* ¶¶56-63. As Georgia’s in-house hydrologist testified, this model provides “the best available analysis” of Georgia’s consumptive use. *Id.* ¶57. Indeed, multiple federal agencies—including the

Corps, USGS, and USFWS—rely on Georgia’s water-use data in executing their own responsibilities in the region. SOF ¶24. None of these agencies has ever questioned the accuracy or reliability of Georgia’s consumptive-use data. Tr.3312:2-3313:7 (Zeng).

***Florida’s Unreliable Models.*** In contrast to Georgia’s reliable consumptive-use calculations, Florida created new, untested models specifically for this litigation. As the Special Master found, Florida’s models are unreliable and cannot credibly be used to determine Georgia’s water use. 2019 Report 34-37. Florida’s expert admitted he did not independently verify any consumptive-use data. Tr.2013:25-2015:14 (Hornberger). Instead, Florida attempted to estimate Georgia’s consumptive use by simulating purported “unimpacted” flow conditions, comparing those numbers to historical flows, and attributing the difference exclusively to Georgia’s consumptive use. See SOF ¶25. No state or federal agency has *ever* used Florida’s models to estimate water use in the ACF Basin (or anywhere else, to Georgia’s knowledge). This Court should not break new ground by endorsing such an unproven method.<sup>1</sup>

Beyond being untested, Florida’s models are also deeply flawed. They suffer from such a high degree of

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<sup>1</sup> Florida claims (at 34) that rainfall-runoff modeling is used by “multiple federal agencies” and GWRI, but that is misleading. Florida identifies no federal agency that uses rainfall-runoff modeling to calculate consumptive use, and GWRI (an independent entity associated with Georgia Tech) suggests only that rainfall-runoff models *could* be used “[a]s an alternative” in the absence of real-world consumptive-use data. FX-534 at 193; see Ga. Suppl. Resp. 8-9.

inherent error that they are simply not a reliable basis on which to estimate Georgia's actual water use. Bedient Direct ¶¶215-17, 225-44. Dr. Hornberger, Florida's chief hydrology expert, admitted that his "PRMS" model contains inherent error of 2,000-6,000 cfs—a margin so large that it exceeds the total streamflow depletions he attributes to Georgia. SOF ¶26. In fact, Hornberger's model over-predicted historic flows measured by USGS in the summer months of one drought year by an average of approximately 4,000 cfs. Bedient Direct ¶¶ 232-33 & Demo.62. The model of Florida's other expert is even less accurate. Dr. Lettenmaier's model has an inherent error of 10,000 cfs—more than double the peak streamflow depletions he attributes to Georgia—as he was forced to concede on cross-examination. SOF ¶28; Tr.2402:6-13 (Lettenmaier).

Worse, the errors in both models are even greater for the dry and drought years that are the exclusive focus of Florida's case. Bedient Direct ¶¶216, 230-44. For example, Florida claims that Georgia's peak streamflow depletion in drought years exceeds 5,000 cfs. Hornberger Direct ¶95 (Table.8). But that inflates Georgia's actual consumptive use by a factor of ten in a non-drought year, a factor of five in a drought year, and a factor of three in the single highest month *ever recorded*. Tr.3308:1-3309:9 (Zeng).

The Special Master also found that Hornberger was not a credible witness. In addition to presenting unreliable models, *supra*; 2019 Report 29, 37, Hornberger both "failed to report several basin yields that did not support his conclusion in a demonstrative," and "did not report some of his [ ]

modeling results that confirmed Georgia's theory until forced to during cross-examination," *id.* at 37 & n.24. The bottom line is that Florida's expert used unreliable models, did not report data that contradicted his opinion, and provided untrustworthy testimony. The Supreme Court has never based an equitable apportionment on the flawed testimony of a discredited expert, and it should not do so here.

***Florida's Incorrect Arguments.*** Florida advances three attacks on Georgia's estimates, all of which the Special Master considered and rightfully rejected. 2019 Report 37-45. Florida first claims (at 33-34) that as irrigation has "soared" in the Basin, state-line flows have dropped, so Georgia's irrigation must be the cause. But once recent drought years are excluded, the data shows no material difference between pre- and post-irrigation periods when comparing the number of days with flows less than 6,000 cfs. Bedient Direct ¶¶213-14 & Demos.52-53. Recent droughts—not Georgia's irrigation practices—are responsible for lower state-line flows. *Id.* ¶¶128-29 & Demo.34; *infra* pp.32-34.<sup>2</sup>

Florida next argues (at 35) that Georgia dramatically undercounts its agricultural water use and claims that "hundreds of thousands of irrigated acres" are "missing from Georgia's estimates." That too is wrong. Georgia estimates that, as of 2011,

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<sup>2</sup> Florida also cannot rely on its graph (at 33) purporting to plot acreage data and "illustrate[] the steep increase [in irrigation] since 1970," because (i) the graph is not in the record and (ii) the underlying data comes from Dr. Flewelling, a Florida expert who did not testify at trial and whose testimony was never admitted into evidence.

approximately 582,000 acres in ACF Georgia were irrigated by water drawn from either the Flint River itself or the Upper Floridan Aquifer (“UFA”)—the only sources that have a hydrologically relevant connection to the Flint River. Zeng Direct ¶¶51-52, 61 & Demo.7.<sup>3</sup> That estimate is based on the Wetted Acreage Database, which was prepared in the ordinary course, is by far the most reliable and comprehensive effort ever undertaken to map irrigated acreage in ACF Georgia, and maps 100% of the irrigated acreage in the Basin. *Supra* pp.26-28.

Florida’s higher estimates are outdated and inaccurate. One estimate (projecting 920,000 irrigated acres, FX-219 at 9) was prepared in 2003, reflected only “rudimentary understandings” of actual use, did not involve remote-imaging or on-the-ground field mapping, and resulted in an “overstatement” of hundreds of thousands of irrigated acres, Zeng Direct ¶46 & Demo.7. Another of Florida’s estimates (projecting 826,877 irrigated acres, FX-D-24) is simply incorrect: it wrongly counted “throw acres” in its calculation, inflating its estimate dramatically, Tr.3225:10-3226:15 (Zeng). Both estimates also suffer from an even more fundamental problem: They include hundreds of thousands of acres irrigated from deeper aquifers (below the UFA) that have only a negligible impact on Flint River flows. Panday Direct ¶¶73-81 & Demos.25-28. In contrast, the current Wetted Acreage Database on which Georgia relies

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<sup>3</sup> Georgia’s more-recent data shows that 568,425 acres were irrigated in 2014. Zeng Direct p.18 (Demo.7). However, Florida’s irrigated-acreage estimates were based on data from 2011, so briefing below focused on that year. SOF ¶37.

“more accurately captures the true number of irrigated acres” that are hydrologically relevant to streamflow. Masters Direct ¶29.

Georgia also is not “undercount[ing] irrigation consumption by ‘up to 70%.’” Exceptions 35 (citation omitted). The GWRI report on which Florida relies for that argument identifies variations of up to 70% between two methods of estimating consumptive use; it does not say that “irrigation consumption” is understated by 70%. FX-534 at 10. In any event, Florida’s critique is irrelevant: in calculating agricultural consumptive use, Georgia *does not even use* the methods referenced in the GWRI report. Rather, as explained, Georgia uses measurements of actual withdrawals from thousands of sites. Zeng Direct ¶¶46-52. The GWRI statement is therefore entirely irrelevant to Georgia’s calculation of its actual water use.<sup>4</sup>

Finally, bereft of actual, real-world data, Florida questions (at 33, 36) “where all the water that Georgia supposedly is *not* consuming actually goes.” But the evidence shows that “repeated multi-year droughts and a shift in intra-annual rainfall patterns”—not Georgia’s use—have been the overriding causes of decreased flows in the Basin. 2019 Report 42-43.

Recent flow declines in the Apalachicola River are part of a broader regional pattern. The past 20 years saw the ACF Basin suffer three back-to-back, multi-

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<sup>4</sup> Florida’s farm-pond critique is similarly flawed. The GWRI report only weakly supports Florida’s argument, and the Special Master found that farm ponds “might actually augment rather than deplete streamflow,” because they “store water for use later during dry times.” 2019 Report 38-39.

year droughts. These events were longer, more frequent, and more severe than the mostly single-year droughts of earlier decades. Panday Direct ¶¶60, 122; Bedient Direct ¶¶127-29. And because less rainfall equates to less streamflow, it is unsurprising that hydrologic data shows a “strong, direct correlation” between less rainfall from these droughts and lower flows in the Basin. Bedient Direct ¶¶124-29; Ga.’s Suppl. Resp. Br. 6 (“Ga. Suppl. Resp.”), Dkt.656. Proving the point: the same streamflow decline is occurring in other rivers in the region that are not influenced by Georgia’s consumptive use, showing that broader climatic changes are having an impact on streamflow. Zeng Direct ¶¶149-152.<sup>5</sup>

The evidence further shows that while *annual* average rainfall has not changed significantly in recent decades, *seasonal* rainfall swings have widened considerably. In particular, in drought times from 1895-1975, Georgia experienced more than 50% more rainfall in July than it received in July during the period from 1975-2013. *Id.* ¶¶144-48; Tr.2416:14-2421:5 (Lettenmaier). As the Special Master recognized, “a shift of precipitation from the hotter

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<sup>5</sup> Florida is wrong to suggest (at 36) that historical droughts were “more severe” than recent ones. Hornberger’s comparison of the 1954-55 drought to the 2011-2012 drought is inapposite because the 1954-1955 drought occurred *before* the Corps’ reservoirs existed. Because Corps operations now control the timing and duration of flows, pre-reservoir data makes for an inappropriate comparison. 2019 Report 43. Moreover, Florida artificially inflates 1954 streamflow levels by overlooking significant “carry-over” flooding from 1953. Bedient Direct ¶¶205-08; Tr.4008:1-4009:19 (Bedient).

and drier times of year to wetter times can reduce streamflow during dry months.” 2019 Report 45.

In short, none of Florida’s critiques provide grounds for the Court to adopt Florida’s error-riddled estimates of Georgia’s consumptive use over Georgia’s contemporaneous, real-world data.

### **B. Georgia’s Consumptive Use Is Reasonable.**

“[R]elative to its population and economic output, Georgia consumes a relatively small share of the ACF waters.” 2019 Report 47. Georgia accounts for more than 92% of the population, 96% of the employment, and 99% of the economic output in the ACF Basin. SOF ¶31. Georgia’s land area in the Basin is also five times larger than Florida’s, and Georgia’s Gross Regional Product (“GRP”) is 129 times greater, generating \$283 billion in GRP every year. *Id.*

Despite this disparity, Florida receives more than 93% of total annual ACF Basin streamflow—even during drought years. *Id.* ¶19. That is because Georgia’s total annual consumptive use is merely 2.4% of state-line flow in wet or normal years and only 6.1% of state-line flow in dry years. *Id.* Georgia’s consumption from the Flint River has an even smaller effect on state-line flow. Georgia consumes an annual average of just 282 cfs from the Flint in non-drought years, and an annual average of 425 cfs from the Flint in dry years—only 3.4% of the 12,424 cfs that flows from Georgia to Florida in the average dry year. SOF ¶20.

Florida has received the great majority of ACF waters even at the historical apex of Georgia’s



consumptive use. Georgia's highest ever Flint River consumption was 1,407 cfs during extreme drought conditions in July 2012, yet Florida still received its Corps-guaranteed flow of 5,000 cfs, as it does during all droughts. *Id.* ¶¶23, 47. Thus, during the single worst drought month in the Basin's history, Florida still received more than 3.5 times the water Georgia consumed from the Flint.

The overall amount of Georgia's existing consumptive use is reasonable in light of the highly beneficial purposes for which Georgia uses ACF waters. Georgia unquestionably uses ACF waters for "[i]mportant [p]urposes." 2019 Report 52-53. Flint waters support Georgia's ACF Basin agricultural industry, which produces annual revenues of approximately \$4.7 billion. SOF ¶33. Agriculture is also a key input to businesses that add \$687 million to Georgia's yearly GRP. *Id.* And other ACF waters supply water to more than five million Georgians, including those in metropolitan Atlanta. *Id.* ¶32.

### **C. Georgia's Conservation Efforts Are Extensive.**

Unable to undermine Georgia's reasonable use of ACF waters, Florida resorts (at 33, 37-40) to cherry picking 1990s-era statements by Georgia officials. The Special Master appropriately gave these statements "little weight" in determining whether Georgia's *current* consumption is reasonable. 2019 Report 42 n.31. As the former Director of Georgia's EPD explained at trial, the concerns from three decades ago about Flint water use were based on "rudimentary" models and crude, outdated estimates. Tr.703:8-705:17 (Reheis) (there was "a lot of doubt"

about how many acres were irrigated and Georgia “didn’t know” how 1990s-era groundwater modeling “calibrated to real life ... situations”). In the 1990s, those officials did not have the detailed, reliable scientific data that Georgia subsequently developed.

Even so, Georgia long ago acted on the available information to substantially improve agricultural conservation in the Basin. In 1999, Georgia imposed a six-year moratorium on new irrigation permits in the ACF Basin and immediately instituted measures to increase irrigation efficiency and conservation. Ga. Suppl. Resp. 11. Georgia also launched a multi-year study to document how many acres were being irrigated, calculate how much water was being used, and study the effect of irrigation on streamflow. Ga. Post-Trial Resp. 66. These efforts produced extensive irrigated-acreage mapping, expanded water metering and (in conjunction with USGS) a state-of-the-art hydrologic model. The study also debunked the 1990s-era concerns on which Florida relies. *Id.* at 66-67; Reheis Direct ¶¶37-40. As EPD Director Reheis explained, “I am glad that we did research these issues more thoroughly, because the more extreme outputs” of the 1990s-era modeling “turned out to be wrong.” Reheis Direct ¶34.

***Agricultural Conservation Efforts.*** Georgia has acted as a responsible steward to increase agricultural conservation. It overhauled its regulatory program with the 2006 Flint River Basin Plan, which prohibited new permit applications in areas of the lower Flint Basin where withdrawals have the greatest effect on streamflow, Tr.2293:9-2294:19 (Cowie), and placed stringent efficiency requirements

on permits issued in other sensitive areas, Cowie Direct ¶¶17-18. In 2012, Georgia stopped accepting applications for *all* new surface water and UFA groundwater withdrawals in the lower Flint Basin, essentially capping the number of irrigated acres that withdraw water from sources hydrologically connected to the Flint River. SOF ¶¶81-84; Ga. Post-Trial Resp. 67. And Georgia's 2014 advanced-irrigation-efficiency legislation has resulted in approximately 93% of acreage in the lower Flint Basin using irrigation systems with at least 90% center-pivot-irrigation efficiency. SOF ¶¶83-84.

Florida claims (at 38-39) that Georgia issued additional irrigation permits from 2006-2015 and that irrigated acreage has continually increased. But the permits issued in this timeframe were "almost entirely" for withdrawals from aquifers disconnected from the Flint or in areas that have little to no effect on Flint flow, including areas entirely outside the ACF Basin. Masters Direct ¶55; Tr.3705:5-3706:13 (Masters). Those permits are hydrologically irrelevant to the issues in this case. In fact, looking only at hydrologically relevant acres, the number of irrigated acres in the ACF Basin has remained flat, or even decreased, over the past 15 years. Zeng Direct p.18 (Demo.7) (calculating surface and UFA groundwater sources).

***M&I Conservation Efforts.*** Florida has largely abandoned its claims regarding Georgia's M&I conservation efforts, and for good reason: Georgia is a national leader in M&I water conservation and has invested billions in water conservation and efficiency programs in metropolitan Atlanta, including leak-

abatement programs, bans on outdoor water use during drought, and dozens of other conservation measures. SOF ¶¶76-77; Ga.'s Suppl. Br. 35 ("Ga. Suppl."), Dkt.654; Ga. Suppl. Resp. 10. To the extent Florida argues (at 49 n.10) that the Special Master overlooked Florida's leak-abatement argument, that is wrong. He found that claim "not credible" because "Georgia has already made great progress in this area," and concluded that, in any event, Florida's proposal would cost "at least \$260 million" to generate a meager 42 cfs. 2019 Report 67; Mayer Direct ¶¶97-100.

#### **IV. The Benefits Of A Decree Would Not Substantially Outweigh The Costs.**

Finally, a decree is not warranted because the benefits of Florida's proposed cap do not substantially outweigh the costs it would impose on Georgia. *Florida*, 138 S. Ct. at 2527.

The benefits to Florida are small and speculative. Because Georgia uses much less water than Florida claims, and given the Corps' regulatory role in the Basin, Florida's proposed caps would not meaningfully increase Apalachicola River flow during drought. Even if one assumes counterfactually that Florida's caps *could* increase streamflow by 1,000 cfs or more, Florida's own experts found that such an increase would not decrease salinity in the Bay, would have little to no effect on oyster biomass, and would not benefit allegedly harmed species in the River.

The costs to Georgia, in contrast, are certain and severe. Implementing sufficient cuts to generate the additional streamflow Florida seeks would cost Georgia hundreds of millions of dollars each drought

year. And implementing Florida's more extreme proposals would cost Georgia hundreds of millions more. Those costs far exceed the *entire value* of the oyster fishery that Florida claims has been harmed—which, even prior to the 2012 collapse, generated \$5-8 million in revenue per year. SOF ¶93. Further, the potential benefits of a cap to Florida's oyster and blue crab industries would only be about \$40,000 per year. *Id.* ¶94. The outcome of the balancing inquiry is therefore clear.

Florida makes two incorrect arguments about the burden and standard of proof that apply to this cost-benefit analysis. *First*, Florida claims (at 18) that *Georgia* bears the burden of showing “that the costs of a decree outweigh its benefits.” That is wrong: “the State *seeking a diversion*” must prove “that the benefits of the diversion substantially outweigh the harm that might result.” *Colorado I*, 459 U.S. at 187 (emphasis added). Here, Florida seeks to disrupt Georgia's established uses by imposing a consumption cap, so Florida bears the burden.

*Second*, Florida claims (at i, 19-20) that the clear-and-convincing-evidence standard does not apply to the balancing question. That also is wrong. The Court has long held that the plaintiff in an equitable-apportionment action must prove its case by “clear and convincing evidence,” and that requirement extends to the balancing inquiry. *Colorado II*, 467 U.S. at 317; *see Colorado I*, 459 U.S. at 186-87. In any event, the applicable standard of proof is ultimately not dispositive, because the Special Master concluded that “the benefits of an apportionment would not substantially outweigh the harm that might result”

under either a clear-and-convincing or a preponderance-of-the-evidence standard. 2019 Report 7, 62-64. “If anything, it appears that the potential harms to Georgia would substantially outweigh the benefits to Florida.” *Id.* at 64.

### **A. The Benefits Of A Cap Would Be Small, Rare, And Speculative.**

For two independent reasons, Florida would not receive significant benefits from its proposed cap: (1) its cap would not meaningfully increase state-line flows, and certainly not the 1,000-2,000 cfs that Florida claims is possible; and (2) even if its cap *could* increase Apalachicola flows by 1,000 cfs or more during drought, Florida’s own experts conceded (and Georgia’s experts confirmed) that such an increase would have virtually no effect on the species Florida alleges were injured.

#### *1. Florida’s Cap Would Not Meaningfully Increase State-Line Flows.*

Florida’s proposed cap would not meaningfully increase state-line flows during drought for two reasons.

*First*, Georgia does not consume nearly as much water as Florida claims. Throughout this case, Florida has pointed to testimony from its expert economist, Dr. Sunding, to explain why caps could increase Flint River flows. Sunding—who is not a hydrologist—proposed conservation measures that he claimed could achieve 1,687, 1,251, and 834 cfs increases in Flint River flow during drought. Sunding

Direct pp.44-45 (Tables.4-6).<sup>6</sup> Yet, on average, Georgia consumes only 804 cfs from the Flint in May-September of dry years, and its highest ever monthly consumption was 1,407 cfs during a single month of an extreme drought. *Supra* p.25. In most dry years, it therefore would be physically impossible for Georgia to generate the increases Sunding seeks. And even attempting to achieve Sunding's more modest scenarios would require eliminating nearly all irrigation in ACF Georgia, Tr.3310:20-3311:15 (Zeng), and would cost hundreds of millions of dollars, *infra* Part IV.B.

Making matters worse, Sunding drastically overstated the streamflow increases his conservation measures could produce by making several methodological errors. For example, Sunding overstated irrigated acreage in ACF Georgia by more than 35% because he erroneously counted acres irrigated by disconnected aquifers that have a negligible impact on Flint flow. SOF ¶¶37-38; Sunding Direct ¶86. Sunding also overstated the streamflow impact of groundwater pumping by using an inflated impact factor (0.6) rather than the correct impact factor (0.43) that Georgia's experts used, the Special Master credited, and that Sunding himself had used in his expert report. SOF ¶39; 2019 Report 69-70; Ga. Suppl. 16-17.

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<sup>6</sup> Sunding's three scenarios are based on 2,000, 1,500, and 1,000 cfs increases, but 313, 249, and 166 cfs, respectively, must be subtracted because those amounts are attributable to purported M&I conservation measures along the Chattahoochee, Ga. Suppl. 15, and the Court's remand focused solely on a Flint-based cap, *Florida*, 138 S. Ct. at 2518.

For these reasons and others, the Special Master found Sunding's claims to be inaccurate and unreliable. 2019 Report 66. The truth is that, far from generating the thousands of cfs that Sunding projected, capping Georgia's agricultural water use would only minimally increase Flint River flows. SOF ¶41. And even those cuts would not result in an immediate flow increase to Florida, as streamflow increases are realized only several months after groundwater pumping ceases. *Id.* ¶42.

*Second*, any increases in Flint flows would result in only rare and unpredictable increases in Apalachicola flows during drought because of Corps operations. Under existing operating rules, whenever the Corps is in drought operations or basin inflow is below 5,000 cfs, the Corps limits releases into Florida to roughly 5,000 cfs and stores any extra basin inflow in its upstream reservoirs. United States' Post-Trial Br. as Amicus Curiae 12-13 ("U.S. Post-Trial"), Dkt.631; SOF ¶¶45-47. One or both of those circumstances—drought operations or flows below 5,000 cfs—will almost always be present during times of climatic drought. Bedient Direct ¶39; *id.* at pp.27, 29 (Demos.13-14). Thus, as the United States has explained, state-line flow during drought will remain "very similar with or without a consumption cap" on Georgia. U.S. Post-Trial 17-18.

In remanding this case, the Court surmised that Florida might obtain a benefit from a cap from either (i) pass-through flows or (ii) shortening the amount of time the Corps spends in drought operations. *Florida*, 138 S. Ct. at 2520-23. Neither supposition turned out to be correct.



The evidence confirms that Florida would receive no meaningful benefit from pass-through flows, because the conditions that trigger pass-through flows almost never exist during times of actual drought. The Corps permits increased basin inflow to “pass through” into Florida when basin inflow is more than 5,000 but less than 10,000 cfs (in June-November) or 16,000 cfs (in March-May). Bedient Direct ¶¶38-58; SOF ¶56. But expert modeling shows that pass-through operations occurred 0% of the time during the summer and fall months of 2012 (a drought year). *Id.* And under the Corps’ new Master Manual, a 30% cap on Georgia’s Flint River use would provide 0 cfs in pass-through flows in May-September of years matching the hydrologic conditions of drought years 2000, 2002, 2007, and 2008. *Id.* When pass-through flows would exist, they would be insignificant: a 30% cap would produce 20 pass-through days in May-September in a year matching 2011 drought-year conditions, for an average flow increase of only 350 cfs (2.9%) over those 20 days; and 31 pass-through days in May-September in a year matching 2006 drought-year conditions, for an average flow increase of 28 cfs (0.19%) over that period. *Id.* Overall, any pass-through flows in the dry months of dry years would be rare, unpredictable, short-lived, and negligible. *Id.* ¶¶56-57; Bedient Direct ¶58.

A cap also would not meaningfully shorten drought operations. Georgia was the only party that used modeling of actual reservoir operations to analyze this issue, and that modeling showed no material shortening of drought operations in historical drought periods. *Id.* ¶¶48-57, 60-65, 78-87; GX-866 at 69. A 30% cap on Georgia’s Flint River consumption

would not have shortened drought operations by *a single day* during any dry or drought month in *the entire hydrologic record*. SOF ¶60. And a nearly 50% cap would affect reservoir storage by only 180 cfs in a year matching 2000 conditions, 57 cfs in a year matching 2006, 187 cfs in a year matching 2007, 21 cfs in a year matching 2008, and 234 cfs in a year matching 2011. *Id.* ¶64. These small increases would not generate enough reservoir storage to delay the onset of drought operations or meaningfully quicken the return to non-drought operations. *Id.*

Because Florida cannot obtain meaningful relief under the Corps' *existing* reservoir operations, it clings to the possibility (at 43) that the Corps could make unspecified "reasonable modifications" to its Manual. But Florida waived this issue below. Early in the remand, the Special Master amended his case management order—at Florida's request—to allow Florida to brief the issue of reasonable modifications. CMO No.27 at 2. But after asking for and receiving permission to make those arguments, Florida never identified what "reasonable modifications" the Corps might adopt, how much additional water those modifications would yield for Florida, or when those increases would occur. Florida also never explained how any such modifications for the exclusive benefit of Florida would simultaneously comport with the Corps' overall charge "to operat[e] the dams to accomplish [other] congressionally authorized purposes." United States' Stmt. of Cont. Participation 2 ("U.S. Stmt."), Dkt.643.

Even if Florida *had* advanced arguments in support of "reasonable modifications," a fundamental

problem would remain: implementing any such modifications would generate a lengthy, uncertain administrative process involving “other Basin interests and a process of public notice and involvement.” U.S. Amicus 30-31. The United States has stated that it “cannot prejudge those required processes” or guarantee that they would result in changes to Florida’s benefit. *Id.* The last time the Corps updated its Master Manual, the administrative process dragged on for nearly a decade; involved multiple rounds of federal agency review and public notice-and-comment; included three separate scoping periods; and produced a total of 3,621 comments from 965 individuals, organizations, and agencies. U.S. Army Corps of Engineers, *ACF Signed Record of Decision* 1 (Mar. 30, 2017), <http://bit.ly/2sSRdp6>; GX-544 at ES-2. And litigation would inevitably follow the outcome of any new administrative process. In short, “[w]hether it would be possible for the Corps to implement particular, as-yet-unidentified modifications to the existing Master Manual that might provide redress to Florida, and the process, review, or congressional authorization any such modifications would require ... cannot be resolved within the bounds of this proceeding.” U.S. Stmt. 5.

2. *Even Assuming All Water Generated By A Cap Would Pass To Florida, The Ecological Benefits Would Be Minimal.*

Notwithstanding the Corps’ own skepticism about the prospect of regulatory change, the Special Master “assum[ed] without deciding that the Corps *could* modify its reservoir operations to pass any additional flows to Florida when [he] evaluate[d] the benefits of

a decree.” 2019 Report 61 n.41 (emphasis added). Even after making that counterfactual assumption, however, the evidence *still* showed that Florida would obtain no meaningful benefits from the cap it seeks.

At trial, Florida put forth a “Remedy Scenario” whereby Georgia would eliminate 50% of its agricultural water use in the Basin (among other cuts) and all increased water would be immediately passed through to Florida. SOF ¶67. Florida’s experts then modeled the benefits the Remedy Scenario would have on wildlife in the Basin.

The results were devastating for Florida’s case. Florida’s salinity expert, Dr. Greenblatt, testified that the Remedy Scenario would have changed oyster-bar salinity from 2010-2012 by less than 1 ppt on average, and never more than 3 ppt anywhere in the Bay. *Id.* ¶68. As a result, Florida’s model showed that oyster biomass would have increased insignificantly under the Remedy Scenario—by *at most* 1.4%. *Id.* ¶72. The River saw similar results. Under the Remedy Scenario, 11 out of 15 of Allan’s harm metrics showed a change of less than 2.5% in “harm days”—which, again, measure only the number of days that certain streamflow parameters are exceeded, not actual population trends. His other four metrics showed similarly small changes: 3.4% (Sturgeon YOY60); 5.1% (Mussels Hog Slough); 7% (Fish Swift Slough), and 8.3% (Mussels MC 6k). *Id.* ¶¶73-74. Indeed, in some instances, Allan’s model showed that the Remedy Scenario caused *more* modeled harm than doing nothing. Tr.407:23-408:8 (Allan).

Florida’s own expert findings thus show that even draconian reductions in Georgia’s water use would

have only minuscule benefits to species in the Apalachicola Bay and River. And Georgia's experts reached the same conclusions. Georgia's salinity expert, Dr. McAnally, found that—even if Flint flows were 1,000 cfs higher in 2011—salinity would not have changed by more than 1 ppt *anywhere* in the Bay. SOF ¶70. Georgia's ecology expert, Dr. Menzie, similarly found that increasing River flows by 1,000 cfs (setting aside the impossibility of that assumption), would result in merely 1% more floodplain inundation. *Id.* ¶75. No evidence shows that such small changes would remedy Florida's purported harms.

Florida now claims (at 46) that even a 1-ppt decrease in salinity in East Bay, which is close to the mouth of the River, “can make a life-or-death difference for the Bay's oysters.” The Special Master correctly dismissed this claim as speculation because Florida never presented evidence of changes in oyster population in East Bay. See 2019 Report 77-78. In contrast, Dr. Lipcius (Georgia's expert) studied oyster populations at reefs throughout the Bay and found no correlation between River proximity and population collapse. Ga.'s Post-Trial Br. 25-26 (“Ga. Post-Trial”), Dkt.629. In any event, the evidence shows that small salinity changes like these would not materially affect oyster populations or oyster-snail predation. As explained, a change in salinity of approximately 1 ppt is well within the range of natural variability to which Bay organisms have adapted and would essentially be unnoticeable to the species. SOF ¶71. Indeed, Florida's own expert found that even 5-10-ppt reductions in salinity did not significantly reduce the number of oysters killed by snails, and that Bay salinity would need to decrease by 20 ppt in order to

“significant[ly]” reduce oyster predation. FX-797 at App.II p.38.

## **B. The Costs Of A Decree To Georgia Would Be Massive.**

The minimal benefits a cap would yield to Florida pale in comparison to the considerable costs it would impose on Georgia. Florida tries to obscure these costs by continually moving its remedy target: at trial, it requested a 2,000-cfs drought-year remedy, Fla. Post-Trial 78, but it now claims (at 42) that 1,000 cfs would be sufficient. Regardless, the cost of implementing either remedy would overwhelm the benefits.

Florida’s own expert (Sunding) estimated in his expert report that generating 1,000 cfs in streamflow would cost Georgia \$190 million each drought year the cap was implemented. Tr.2787:10-13; *id.* at 2783:19-2784:12 (Sunding assumed droughts occur every three years). Inexplicably, however, Sunding changed his opinion at trial. There, he said Georgia could deliver twice the streamflow at half the cost: 2,000 cfs for less than \$105 million each drought year. Sunding Direct p.44 (Table.4); Tr.2786:12-2787:9. Sunding accomplished that by redefining “costs” to mean only fiscal costs, rather than also including welfare costs that would be imposed on Georgia’s citizens. *Id.* at 2791:12-2792:23.<sup>7</sup> As the Special Master recognized, there is “no support in the case law” for Florida’s proposal to “set to zero” “the conservation measures

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<sup>7</sup> Sunding also inexplicably assigned \$0 in costs for all of his M&I proposals despite previously assigning costs to those measures in his expert report. Fixing those errors would add an additional \$141 million to Sunding’s cost estimate. FX-784 at 81 (Table.15); Ga. Suppl. Resp. 15.

[that] produce no fiscal cost to Georgia.” 2019 Report 66. Instead, “[t]o make an apples-to-apples comparison with th[e] benefits,” one must “consider all costs.” *Id.*

Even Sunding’s \$100-million estimate paints too rosy a picture. Georgia’s economist, Dr. Stavins, testified that just one of Florida’s measures—deficit irrigation—would cost more than \$335 million to implement, plus \$322 million in lost GRP and \$15.4 million in lost tax revenue *each year it was enforced*. SOF ¶¶87-88. And buying irrigation permits for 20% of irrigated acreage—another measure Florida proposed—would cost Georgia another \$809 million in lost-crop yields. *Id.* ¶89. Sunding’s M&I cost estimates are even more understated. His leak-abatement proposal would cost Georgia at least \$260 million, plus \$1.2-2.4 *billion* in line-replacement costs. A 50% reduction in outdoor water use would cost Georgia more than \$445 million in welfare costs each drought year. And Sunding’s proposal to eliminate interbasin transfers would cost Georgia *billions*. *Id.* ¶¶90-92.

Florida disparages Stavins’ cost estimates (at 50-51) by arguing that he (1) considered only the costs of halting irrigation rather than limiting it; and (2) failed to measure the costs of certain proposals, like irrigation scheduling. But as a hydrological matter, it would in fact be necessary to halt all irrigation in the ACF Basin to generate the amount of water Florida seeks. SOF ¶86. In any event, Stavins *did* evaluate the cost of limiting irrigation in drought years, finding that a 20% reduction would cost \$69 million per dry year and generate only 246 cfs, a 50% reduction would

cost \$161 million and generate only 515 cfs, and a 75% reduction would cost \$240 million and generate only 650 cfs. Stavins Direct p.32 (Demo.12). Moreover, Stavins did not measure the costs of proposals like irrigation scheduling because Sunding failed to include them in his own proposed remedies or calculate their costs himself. 2019 Report 71 n.46; Tr.4444:10-15 (Stavins).

To overcome these staggering numbers, Florida labels some of Georgia's water use as "wasteful and inefficient" and claims (at 47-48) that the costs of restricting such use should be excluded from the balancing analysis. Florida's argument is logically, factually, and legally wrong.

As a matter of logic, Florida cannot indict the responsible water use of an entire region by cherry-picking a few instances it deems excessive and labeling them as "wasteful." Rather, the reasonableness of Georgia's use must be judged in the aggregate, taking account of the overall level of Georgia's consumptive use in the ACF Basin and the purposes for which Georgia uses that water. Under that approach, Georgia's aggregate water use is reasonable. *Supra* Parts III.B-C. As a factual matter, Georgia's water use is not "wasteful and inefficient" for the reasons explained. Even Florida's experts admitted that the majority of Georgia farmers in the ACF *under water* their crops, Tr.2822:23-2825:12 (Sunding), and that per-capita M&I use has dropped so dramatically that "water conservation measures are being appropriately implemented," Mayer Direct ¶8 (quoting Florida expert Dr. Dracup).



Moreover, as a matter of law, the Court measures costs from the existing status quo. *See Colorado I*, 459 U.S. at 187 (“the equities supporting the protection of existing economies will usually be compelling”). As the Special Master explained, “consideration of reasonable conservation measures is part of the cost-benefit inquiry ... because cost is certainly a necessary factor in determining whether a proposed measure is reasonable,” and “[s]etting the baseline at the status quo ... account[s] for all the incremental costs and benefits that Florida’s proposed conservation measures would produce.” 2019 Report 65.<sup>8</sup>

## **V. Florida Cannot Obtain A Decree Without Proving Its Case On The Merits.**

Faced with a factual record that comes nowhere close to justifying the extreme remedy of an equitable apportionment, Florida closes its brief with a plea that the Court grant it relief regardless of its evidentiary failings. According to Florida (at 54-55), the Court “should hold that Florida is entitled to a decree,” then “order further proceedings on fashioning such a decree.”

That request only underscores that Florida has not carried its burden. Florida wants a decree in its favor without any findings about what the decree will require or the costs and benefits that it would create.

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<sup>8</sup> The Special Master did not “dismiss[]” Florida’s proposal to eliminate irrigation on supposedly unpermitted acreage (at 48-49); rather, he *included* it in his balancing analysis, finding that it would increase streamflow by 125 cfs in peak summer months at \$0 cost. 2019 Report 69-70. Even with that inclusion, however, the benefits of Florida’s proposals did not outweigh their enormous costs. *Id.* at 78-80.

As the Court has made clear, that is not how equitable-apportionment cases work: “Florida will be entitled to a decree *only if* it is shown that ‘the benefits of the [apportionment] substantially outweigh the harm that might result.’” *Florida*, 138 S. Ct. at 2527 (emphasis added) (alteration in original) (citation omitted). The nature of the decree, the costs it would impose, and the benefits it would generate are precisely what Florida must prove *to get a decree in the first place*—not trivial details to work out after a decree is entered. Moreover, no “further proceedings” are warranted here. The parties have litigated this case for more than six years and conducted a five-week trial presenting evidence on what the scope of a decree could look like, the benefits it would yield, and the costs it would inflict. The problem for Florida is not that the record includes no such evidence (it surely does), but that Florida has come nowhere close to proving that it is entitled to an equitable apportionment.

Finally, Florida is wrong to claim (at 15) that denying its request for a decree would give Georgia “free rein to consume as much as it wants, regardless of the consequences.” Declining to issue a decree would not relieve Georgia of its responsibility to make reasonable use of the shared water resources of the ACF Basin, and Georgia will continue to take that responsibility seriously, as its decades-long conservation efforts show. Denying Florida’s request means just one thing: on this comprehensive record, Florida has failed to prove its case.

**CONCLUSION**

This Court should deny Florida's request for relief.

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