# In The Supreme Court of the United States

STATE OF FLORIDA,

Plaintiff,

v.

STATE OF GEORGIA,

Defendant.

# GEORGIA'S MOTION TO EXCLUDE OPINIONS AND TESTIMONY BY FLORIDA BASED ON THE "LAKE SEMINOLE" MODEL

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#### **INTRODUCTION**

In order to have any chance of relief, Florida must show that reductions in Georgia's water use will pass through the federal reservoir system at the state line and into Florida. But when Florida's own expert on the "hydrological impacts" of Georgia's water use, Dr. George Hornberger, modeled the impact of reductions in Georgia's water use in the Flint River Basin, he found that even draconian cutbacks often produced little to no increase on flows into Florida—especially during the low-flow periods when Florida claims it needs water the most. During those times, Dr. Hornberger's modeling showed that the federal reservoir operations in the ACF Basin often reduce, and even eliminate completely, the impact of reductions in Georgia's upstream water use on state-line flows into Florida.

Dr. Hornberger's modeling was conducted using a modified version of "ResSim," the U.S. Army Corps of Engineers' official model of the ACF Basin reservoir system. Because the Corps treats the reservoirs in the ACF Basin as a single, integrated system in order to determine the timing and quantity of flow crossing the state line, the ResSim model shows that increased flows generated by reductions in Georgia's water use on the Flint River are often offset by decreased releases from the upstream Corps reservoirs on the Chattahoochee River. Consequently, Dr. Hornberger's ResSim modeling showed that decreases in water use on the Flint River would lead to little or no increased flow at the state line and into Florida.

But Dr. Hornberger chose not to report these results in his expert report; in fact, the report does not even mention that he conducted this particular modeling analysis. Georgia only discovered these modeling results during its review of Dr. Hornberger's supporting materials. Instead of reporting these results—which are diametrically at odds with Florida's litigation position in this case—Florida tasked a team of consultants working with Dr. Hornberger with creating a new, different model with the goal of substantiating Florida's litigation position.

Florida's custom-built litigation model, which Dr. Hornberger calls the "Lake Seminole" model, looks nothing like ResSim. Instead of accounting for all five reservoirs, like ResSim does, the "Lake Seminole" model represents only a single reservoir in the ACF Basin, Lake Seminole, which sits immediately above the state line. Lake Seminole is a "pass-through" facility, which means it is designed for water to pass through rather than be placed in storage; therefore, it has limited storage capacity.

Florida's "Lake Seminole" model, never before utilized by anyone—including the Corps, Georgia, or Florida—is a litigation-driven device that admittedly does nothing more than "mimic" Florida's litigation position by forcing increased flows generated on the Flint River through a single pass-through reservoir and into Florida, irrespective of the realities of how the Corps operates. Because the model eliminates the four upstream reservoirs, which account for virtually all of the ACF system's storage capacity, the model dictates that increased flows generated on the Flint River (for example, flows generated by reductions in Georgia's water use) will

always immediately pass through to Florida because those increased flows simply have nowhere else to go and no other reservoirs available to offset them. By deliberate design, the "Lake Seminole" model mathematically guarantees Florida's preferred result.

When pressed as to why he created such a new and unique model that ignores the entire upstream reservoir system, Dr. Hornberger admitted that the "Lake Seminole" model was specifically engineered to be "consistent with" Florida's "position" in this litigation. After rigging the "Lake Seminole" model to deliver only results consistent with Florida's "view" that any and all additional Flint River flows will automatically pass through to Florida, Dr. Hornberger then relies on that model to offer the circular opinion that reductions in Georgia's water use will produce "marked improvements" in flows to Florida.

To justify his use of this litigation-driven model, Dr. Hornberger also manipulated the results of a model performance analysis (called a "goodness of fit" analysis) to support his claim that the "Lake Seminole" model was superior in performance to his first ResSim model. But Dr. Hornberger's "goodness of fit" analysis was also result-oriented: as Dr. Hornberger admitted, his first ResSim model actually showed far better performance than the "Lake Seminole" model by nearly all metrics, and the cherry-picked "goodness of fit" results he relied on to reach the opposite conclusion admittedly used only 5% of the total data set. Using the full data set, he admitted that his own "goodness of fit" analysis showed that his "Lake Seminole" model was the inferior model.

Dr. Hornberger's result-oriented "Lake Seminole" modeling does not meet the legal standard for admissibility under Federal Rule of Evidence 702, particularly where he initially used a more defensible, scientifically accepted model and rejected it for the sole reason that it undermined Florida's allegation against Georgia. Dr. Hornberger's failure to report the results of his initial modeling study that contradict his opinions, his failure to report the complete "goodness of fit" analysis that contradicts his opinions, and his decision to put forward only results that support Florida's litigation position show that the "Lake Seminole" model is not "objective," "independent," or "based on scientifically valid principles." Moore v. Ashland Chem., Inc., 151 F.3d 269, 276 (5th Cir. 1998) (en banc). Florida's opinions based on the "Lake Seminole" model are fundamentally unscientific, unprincipled, and litigation-driven. For these reasons, any such opinions fail to meet the threshold requirements of admissibility for expert or technical opinions set forth in Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993), and Florida should be precluded from offering any opinions or testimony based on its "Lake Seminole" model.

#### LEGAL STANDARD

Under Federal Rule of Evidence 702, "the trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable." *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993); Fed. R. Evid. 702. To be reliable, the expert's testimony must be "based on sufficient facts or data" and must be "the product of reliable principles and methods." Fed. R. Evid. 702. Moreover, "the expert [must] reliably appl[y] the principles and methods to the facts

of the case." *Id.* A court should consider the following factors to assess the reliability and validity of an expert's method: (1) "whether [the method] can be (and has been) tested"; (2) "whether it has been subjected to peer review and publication"; (3) "its known or potential rate of error and the existence and maintenance of standards controlling its operation"; and (4) whether the method has achieved "widespread acceptance" within the relevant community. *Daubert*, 509 U.S. at 580 (internal citations omitted).

To meet *Daubert's* standard for reliability, an expert's methodology and analysis must be "scientifically valid"—i.e., it must be independent and objective, and not based on "subjective belief." *Id.* at 590, 592-93. An expert's opinion may be unreliable because "there is simply too great an analytical gap between the data and the opinion proffered." *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) ("[N]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert."). The proponent of the expert testimony must demonstrate that the expert's conclusions are reliable. *Moore* 151 F.3d at 276 ("The proponent... must prove by a preponderance of the evidence that the testimony is reliable.").

#### **ARGUMENT**

# I. THE "LAKE SEMINOLE" MODEL IS ADMITTEDLY DESIGNED TO PRODUCE ONLY RESULTS CONSISTENT WITH FLORIDA'S LITIGATION POSITION

Dr. Hornberger's "Lake Seminole" model is a result-oriented litigation tool that is rigged to deliver only results consistent with Florida's litigation position.

The model is unreliable and inadmissible because it abandons "any pretense of the

use of mathematics and statistics in any objective, independent or disciplined way." Remien v. EMC Corp., 2008 WL 597439, at \*2 (N.D. Ill. Mar. 3, 2008). This type of result-oriented "modeling" does not meet the legal standard for admissibility of expert testimony.

# A. Dr. Hornberger's Initial Modeling Using ResSim Shows Results Inconsistent With Florida's Litigation Position.

Initially, Dr. Hornberger conducted a modeling analysis of the impact of reductions in Georgia's water use on state-line flows using a slightly modified version of ResSim, the Corps' reservoir model for the ACF Basin. Dr. Hornberger refers to his model as the "data-driven ResSim" model. Although the "data-driven ResSim" model contains some differences from ResSim, it is fundamentally the same model used by the Corps.<sup>1</sup>

The ResSim model was developed and is used by the Corps for reservoir modeling in the ACF Basin and other river basins throughout the country. ResSim can be used, and is used, to determine how much water is flowing into, being stored in, and flowing out of the reservoirs under different hydrological conditions, upstream water use amounts, and reservoir operating rules. The reservoir operating rules of the Corps are built into the model, thereby allowing ResSim to

Hornberger Deposition Transcript ("Hornberger Tr.") at 12:10-13:1 (testifying that the "data driven ResSim" model was modified from the Corps ResSim model only to the extent that Dr. Hornberger changed the inflow inputs to the reservoirs). Although the differences between Dr. Hornberger's "data-driven ResSim" model and the Corps' ResSim model are relatively minor for purposes of modeling the impact of reductions in Georgia's water use, the "data driven ResSim" model contains a number of significant errors and shortcomings regarding the inflow inputs selected by Florida, as well as other assumptions made in developing the model, that are not directly relevant to this motion.

replicate the complex operations of the particular Basin the Corps is analyzing. One of the outputs of the ResSim model for the ACF Basin is the outflow from Woodruff Dam, which sits at the southern edge of Lake Seminole, the downstreammost reservoir. The outflows from Woodruff Dam reflect the flow crossing the state line and entering Florida. Dr. Hornberger confirmed that his "data-driven ResSim" model, like the Corps' ResSim model, is suitable for assessing the impacts of both increases and reductions in Georgia's water use on state-line flows.<sup>2</sup>

Dr. Hornberger admitted that the modeling results from his "data-driven ResSim" model show that even significant reductions in Georgia's water use routinely have no impact on state-line flows, especially during the summer and fall months of dry and drought years:

Q. . . . The results from the model run you did of your data-driven ResSim—Sim model, where you looked at scenarios in which Georgia's consumptive use was decreased, showed that there were several months in different years where there was no impact at the state line as a result of any of the reductions in the scenarios that you modeled; correct?

A. Yes.

(Hornberger Tr. at 417:11-418:1.) For example, Dr. Hornberger's "data-driven ResSim" modeling shows that even a hypothetical cutback of *over 50*% in Georgia's agricultural water use would generate *0 cfs* (cubic feet per second) in additional state-line flows into Florida in recorded drought periods, including:

Hornberger Expert Rep. at 51 (Feb. 29, 2016) (noting that the "data-driven ResSim" model can be used to calculate the impact of reductions in Georgia's water use on state-line flows); Hornberger Tr. at 448:2-448:8 ("Q: [Y]our data-driven ResSim has the ability to model reduction scenarios . . . . A: That is correct.").

- 0 cfs for most of June and July 2000;
- 0 cfs for May 24 through June 19, 2007;
- 0 cfs for all of August 2007;
- 0 cfs for all of July 2012; and
- 0 cfs for all November 2012.<sup>3</sup>

That means that even if Georgia cut its agricultural water use by half, Florida would not see any increased flows under conditions similar to these time periods. Dr. Hornberger's initial modeling results show that because the Corps' operating rules call for maintaining a steady daily release of approximately 5,000 cfs into Florida under seasonal low-flow or drought conditions, while also trying to maintain adequate reservoir storage levels, the Corps' operations would offset increased flows from the Flint River by releasing less water from the upstream reservoirs on the Chattahoochee River.

This finding is not reported or discussed anywhere in Dr. Hornberger's report:

Q. You actually did run the data-driven ResSim model to look at decreases; right?

A. We did.

Q. Okay. But your report doesn't discuss those results, does it?

A. No.

(Hornberger Tr. at 415:21-416:5.) Dr. Hornberger and Florida chose not to reveal that his analysis with the Corps' nationally used reservoir planning model—a model which he admitted at his deposition had the ability to model water-use reduction scenarios and which he relies on for other opinions—demonstrates that even

<sup>&</sup>lt;sup>3</sup> Hornberger model run: "Gradient\_USACE\_OIF\_02192016\_HalfAgIBTAddBack."

extreme reductions in agricultural water use in the Flint River Basin would often fail to result in any increased flow to Florida during the times it claims to need it the most.

## B. Dr. Hornberger Created A New "Lake Seminole" Model To Mimic Florida's Litigation Position.

Instead of reporting these modeling results, Dr. Hornberger—at Florida's request—created a completely different model, with the goal of delivering a different result. That model, the "Lake Seminole" model, looks nothing like his or the Corps' ResSim models: it includes only a single reservoir, Lake Seminole, and eliminates all of the upstream Corps reservoirs in the ACF Basin.<sup>4</sup> Three of those four upstream reservoirs—Lake Lanier, West Point, and Walter F. George represent virtually all of the ACF reservoir system's composite conservation storage capacity, which is used to store and release water as needed to satisfy downstream flow requirements and other federally authorized project purposes. By ignoring these upstream reservoirs and the Corps' stated practice—reflected in both ResSim and Dr. Hornberger's "data-driven ResSim"—of operating the reservoirs as a single, integrated system, Dr. Hornberger's "Lake Seminole" model is mathematically engineered to force all increased flows from the Flint River to immediately pass through to Florida, regardless of what the Corps' reservoir system or what the hydrologic conditions are:

Hornberger Tr. at 58:15-19 ("Q. [The "Lake Seminole" model] doesn't look at any of the reservoirs, like Lanier or West Point; right? A. It doesn't look at them in the sense of doing a calculation.").

Q. [D]oes your Lake Seminole model have the ability, mathematically, to evaluate the possibility of additional inflow on the [F]lint affecting storage at upstream reservoirs?

A. No.

(Hornberger Tr. at 66:17-67:1.)

The problem with Florida's "Lake Seminole" model is not just that it incorrectly shows increased flows from Georgia will automatically pass through to Florida. The fundamental problem under *Daubert* is that Dr. Hornberger and Florida rigged the model to make it impossible to generate a result that is inconsistent with Florida's litigation position. Mindful that the model should not show anything inconsistent with Florida's litigation posture, Dr. Hornberger admitted that he created the "Lake Seminole" model to "mimic" Florida's "view":

Q.... My question was: Is it a function of your model that it only considers Lake Seminole storage, not upstream storage, and, therefore, increased flows from the Flint will get passed through?

A. Yes.... Our model mimics what the Corps does and passes water through, additional water from the Flint; yes.

Q. Your model mimics your view of what the Corps does?

A. It mimics our analysis that led to our view of what the Corps does.

(Hornberger Tr. at 786:2-786:17.)

Because Dr. Hornberger's "Lake Seminole" was built to substantiate Florida's litigation position rather than to faithfully reflect the reality of Corps operations, this model can produce absurd results. For example, the model does such a poor job of simulating changes to inflow into Lake Seminole from the Flint River that the modeling program itself crashed when trying to perform a simple scenario involving

hypothetical increases in Georgia's water use. The results from this scenario—another model run that Dr. Hornberger conducted but did not report or discuss anywhere in his report—show that Dr. Hornberger's "Lake Seminole" model allows Lake Seminole to "go dry," i.e., reach a state of zero reservoir storage. In reality, the Corps would never allow any of its reservoir projects to "go dry," nor has this ever occurred in the ACF Basin. While the model shows Lake Seminole as literally running dry, it also predicts that the empty reservoir would be simultaneously releasing over 200,000 cfs of water from Woodruff Dam into Florida, a flow rate rarely if ever seen even during major flooding events.<sup>5</sup> Even Dr. Hornberger admits that these model results do not reflect actual Corps operations or any objective reality:

Q. Is it your testimony that this is faithful to the actual operational actions of the Corps?

A. No. . . . This sort of demonstrates it's not an appropriate model.

. . .

Q. You don't think in real life that if Lake Seminole was running dry, the Corps would be releasing hundreds of thousands of cfs; right?

A. Absolutely not. . . .

(Hornberger Tr. at 793:12-20; 794:16-20.) Once again, Dr. Hornberger admitted that while he was aware of the results showing his model crashing prior to submitting his report, he decided not to disclose them.<sup>6</sup> These flawed results, along

Hornberger Tr. at 792-793.

Hornberger Tr. at 740:22-25. Dr. Hornberger also analyzed this same scenario of increased water use by Georgia using his ResSim model (which follows

with Dr. Hornberger's admission that the model is built to guarantee only a result consistent with Florida's case, are yet another indication that the "Lake Seminole" model is fundamentally flawed and wholly inconsistent with Corps operations.

It is impermissible for an expert witness to offer only result-oriented opinions designed to be consistent with a litigant's position. See Remien, 2008 WL 597439, at \*3 (excluding expert analysis because "the methods he employed and the studies he made were, indeed, oriented to results the Plaintiff's sought"). In Remien, the plaintiff's expert ignored relevant data and variables "that could have been used to arrive at more complete and accurate assessments" when running his statistical analysis. Id. at \*1. Instead, he structured his protocol according to the plaintiffs' allegations in the complaint, and thus "any pretense of the use of mathematics or statistics in any objective, independent or disciplined way [could not] be sustained." Id. at \*2. Because the "Lake Seminole" model is rigged to deliver only results consistent with Florida's case—and Dr. Hornberger admitted as much—there is no question that Dr. Hornberger's "Lake Seminole" model was oriented to Florida's litigation position and structured to achieve the results Florida desired.

"It is improper for an expert to take a results-driven approach to a question, molding his methodology and selectively relying upon data so as to confirm his preconceived opinion." *In re Zoloft (Sertraline Hydrocloride) Prod. Liab. Litig.*, 2015

Corps reservoir operating rules) and that model analysis did not crash and did not show that Lake Seminole would go dry; rather, it showed that such changes in inflows to the river system would be offset by the Corps' integrated operations of its reservoirs such that at times there would be no change in flows crossing the state line and into Florida. See Hornberger Tr. at 641:17-656:18.

WL 7776911, at \*10, \*16 (E.D. Pa. Dec. 2, 2015) (excluding expert's statistical analysis because he "selectively emphasize[d]" certain data and studies "only when such [studies] support his opinion[s]" and "inconsistently applied methods and standards to the data so as to support his *a priori* opinion"). Instead of rendering an impartial and objective opinion, Dr. Hornberger offered opinions based on a model that was engineered to be consistent with Florida's "a priori" position. Because it is admittedly designed to be consistent with Florida's "belief," the "Lake Seminole" model does nothing more than put an expert witness's gloss on Florida's litigation position. *Id.* This is precisely the type of "subjective belief" that cannot form the basis of admissible expert testimony. *Daubert*, 509 U.S. at 590.

The "Lake Seminole" model does not and cannot provide objective information about the Corps' operations, nor can it objectively inform the Court about factual matters that are in dispute. Since the "Lake Seminole" model was built from scratch for this litigation, it has never before been tested or validated, nor has it been "subjected to peer review and publication." See id. at 593-94. Unlike the well-accepted ResSim model, the "Lake Seminole" model has no acceptance in any scientific community, and thus cannot compare to the "general acceptance" of ResSim. See id. Therefore, any opinions or testimony based on the "Lake Seminole" model will not "assist the trier of fact to understand the evidence or to determine a fact in issue." Id. at 591-93 (internal quotation omitted). Dr. Hornberger's result-oriented, litigation-driven "Lake Seminole" model analysis is improper and plainly inadmissible.

# II. IN RELYING ON THE "LAKE SEMINOLE" MODEL, DR. HORNBERGER IGNORED ANY RESULTS CONTRARY TO FLORIDA'S LITIGATION POSITION

Dr. Hornberger's "Lake Seminole" model is also unreliable and inadmissible under Daubert because Dr. Hornberger justified his use of the model by simply ignoring the results he didn't like (and that didn't support Florida's litigation position). First, Dr. Hornberger relied solely on the "Lake Seminole" model as the basis for his opinions on the impact of reductions in Georgia's water use on flows into Florida, even though the model's results are diametrically at odds with his prior, undisclosed analysis using the "data driven" ResSim model, a model that Dr. Hornberger relied on for other opinions. Second, Dr. Hornberger's rationale for relying on the "Lake Seminole" model in the first place is based only on results from a "goodness of fit" analysis that was intentionally manipulated after the first "goodness of fit" analysis plainly showed that the "Lake Seminole" model is inferior to the "data-driven ResSim" model. Because Dr. Hornberger ignored results that are inconsistent with Florida's position and reported only cherry-picked results that are consistent with Florida's position, his analysis is unreliable. See MDG Int'l, Inc. v. Australian Gold, Inc., 2009 WL 1916728, at \*5 (S.D. Ind. June 29, 2009) (excluding expert report because his assumptions "were not supported by evidence, but were, in fact, controverted by the facts available to him" and "[t]his failure renders his opinions inadmissible"); see also Holden Metal & Aluminum Works, Ltd. v. Wismarg Corp., 2003 WL 1797844, at \*2 (N.D. Ill. Apr. 3, 2003) (finding expert "cherry-picked' the facts he considered to render his opinion, and such selective use of facts failed to satisfy the scientific method and *Daubert*").

In ABS Entm't, Inc. v. CBS Corp., the plaintiff's expert deliberately failed to report results from an initial test which contradicted the opinions he ultimately offered (as well as the plaintiff's litigation position). 2016 WL 4259846, at \*7 (C.D. Cal. May 30, 2016). The expert's opinions were excluded by the court as "unscientific" because he "abandoned this methodology and did not directly disclose the results in his report." Id. That is exactly what Dr. Hornberger did here. He failed to disclose materially adverse results from another model, and instead "abandoned this methodology" in favor of one that would support Florida's view. In LeClercq v. Lockformer Co., the court excluded the testimony of a hydrogeologist because he failed to discuss seventeen samples adverse to his opinion in his analysis of the data. 2005 WL 1162979, at \*4 (N.D. Ill. Apr. 28, 2005). Because these omitted samples were material and relevant to his conclusions, the court found that his analysis was unreliable. Id. So, too, with Dr. Hornberger, whose "selective use of facts" and "failure . . . [to] even mention . . . material facts" that contradict his opinions is basis alone for rendering his analysis inadmissible. *Id.* 

Dr. Hornberger's next step only magnifies the problems with his analysis.

Dr. Hornberger justified his decision to rely on the "Lake Seminole" model instead of the "data-driven ResSim model" with a "goodness of fit" analysis, which he claimed showed that the "Lake Seminole" model was the "superior" model in that it

"better predicts flows" into Florida than the "data driven ResSim" model.<sup>7</sup> A "goodness of fit" analysis is typical in evaluating a model and essentially evaluates how well a model "fits" the data (in this case, how well the model can predict the 37-year historical flow record in the ACF Basin).<sup>8</sup> The "goodness of fit" analysis assigns each model a numerical score for different attributes of "fitness" according to well-established numerical indices. Dr. Hornberger initially reported that his "Lake Seminole" model showed better "goodness of fit" than his "data-driven ResSim model." But Dr. Hornberger inadvertently reversed the results when he first reported them: he had accidentally switched the "goodness of fit" scores for each of his models in his report. Because of this error, his original analysis actually showed that the "data-driven ResSim" model had achieved substantially better "goodness of fit" than did the later-created "Lake Seminole" model.<sup>10</sup>

When Dr. Hornberger later realized his error, he submitted a second set of "goodness of fit" results in a supplemental memorandum, designed to amend his expert report. But instead of renaming the report columns so they correctly acknowledged the superiority of his "data-driven ResSim" model under his original analysis, he changed the underlying analysis itself so that it compared the models' performance against a different subset of data (i.e., not the full 37-year flow record). Not surprisingly, this intentionally revised and precisely tailored "goodness of fit" analysis in the supplemental memorandum suggested that the "Lake Seminole"

<sup>&</sup>lt;sup>7</sup> Hornberger Tr. at 459:3-11.

<sup>8</sup> Hornberger Rep. at 47 (Feb. 29, 2016).

<sup>&</sup>lt;sup>9</sup> *Id.* at 47-48.

Id.

model was superior to the "data-driven ResSim" model. But just like the "Lake Seminole" model itself, Dr. Hornberger's revised "goodness of fit" analysis purporting to show better performance by the "Lake Seminole" model was manipulated to show only results that favored Florida's litigation position.

Dr. Hornberger's litigation-driven efforts regarding his "goodness of fit" analysis were later disclosed when he was examined under oath. In his deposition, Dr. Hornberger admitted that the "Lake Seminole" model showed superior performance only for his hand-picked sub-period of 20 months—out of a total of 37 years of flow data. In other words, Dr. Hornberger's conclusion that the "Lake Seminole" model purportedly showed better performance than the "data-driven ResSim" model in his revised analysis—and the table purporting to support that assertion—was based on 5% of the flow record against which his models could be tested (and against which he had originally tested his models). 11 Dr. Hornberger had no choice but to admit that for the entire period of record, for the other 95% of the data set (more than 35 years), and for a number of other key sub-periods (including all dry years since 2000), the "data driven ResSim" model consistently performed far better than the "Lake Seminole" model. 12 Yet none of these results were reported or discussed in Dr. Hornberger's report.

"When an expert 'ignores critical data' in forming his opinions, he fails to satisfy *Daubert*." *MDG*, 2009 WL 1916728, at \*4. The fact that the "data driven ResSim" model performed far better than the "Lake Seminole" model for 95% of the

Hornberger Tr. at 492:13-493:3.

Hornberger Tr. at 498:25-499:9.

flow record—a 35-year period of time—is certainly critical to Dr. Hornberger's choice of model, and yet it goes completely unreported by Dr. Hornberger. Instead, Dr. Hornberger only reports the "goodness of fit" results that are consistent with Florida's case. In other words, Dr. Hornberger relies on a "selective use of facts." Holden Metal, 2003 WL 1797844, at \*2; LeClercq, 2005 WL 1162979, at \*4 (same); see also MDG, 2009 WL 1916728, at \*4 (excluding expert report because he relied on "a small fraction of the total data available" and failed to consider other relevant evidence). Dr. Hornberger's cherry-picking of evidence and selective use of facts to support the use of Florida's custom-built litigation model that can only generate Florida-approved results "makes any opinion he offers . . . inherently incomplete and thus unreliable to a trier of fact." MDG, 2009 WL 1916728, at \*4.

#### **CONCLUSION**

Dr. Hornberger's "Lake Seminole" model is fundamentally unscientific and result-oriented, and cannot satisfy the threshold requirements of admissibility mandated by Rule 702 and *Daubert*. This Court should exclude any and all opinions or testimony based on the "Lake Seminole" model.

Date: September 16, 2016 Respectfully submitted,

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# In The Supreme Court of the United States

STATE OF FLORIDA,

Plaintiff,

v.

STATE OF GEORGIA,

Defendant.

Before the Special Master

Hon. Ralph I. Lancaster

### CERTIFICATE OF SERVICE

This is to certify that the STATE OF GEORGIA'S MOTION TO EXCLUDE OPINIONS AND TESTIMONY BY FLORIDA BASED ON THE "LAKE SEMINOLE" MODEL has been served on this 16th day of September, 2016, in the manner specified below:

### For State of Florida

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