

PUBLISHED

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

No. 15-2225

THE STATE OF NORTH CAROLINA, by and through its agency, the North
Carolina Department of Administration,

Plaintiff - Appellant,

v.

ALCOA POWER GENERATING, INC.,

Defendant - Appellee.

YADKIN RIVERKEEPER, INC.; NORTH CAROLINA WILDLIFE
FEDERATION, INC.; MICHAEL C. BLUMM, Jeffrey Bain Faculty Scholar and
Professor of Law, Lewis & Clark Law School, Portland, OR; MARY
CHRISTINA WOOD, Philip H. Knight Professor of Law, University of Oregon
School of Law, Eugene, OR; PATRICK C. MCGINLEY, Judge Charles H. Haden
II Professor of Law, West Virginia University College of Law, Morgantown, WV;
RACHAEL PASCHAL OSBORN, Adjunct Professor, Gonzaga University School
of Law, Spokane, WA; PATRICK PARENTEAU, Professor of Law and Senior
Counsel for Environmental and Natural Resources Law Clinic, Vermont Law
School, South Royalton, VT; ZYGMUNT J.B. PLATER, Professor of Law,
Boston College Law School, Boston, MA; WILLIAM RODGERS, Emeritus
Stimson Bullitt Professor of Law, University of Washington School of Law,
Seattle, WA; GERALD TORRES, Jane M.G. Foster Professor of Law, Cornell
Law School, Ithaca, NY; AMERICAN WHITEWATER,

Amici Supporting Appellant,

HIGH ROCK LAKE ASSOCIATION; TRADING FORD HISTORIC DISTRICT
PRESERVATION ASSOCIATION,

Amici Supporting Appellee.

Appeal from the United States District Court for the Eastern District of North Carolina, at Raleigh. Terrence W. Boyle, District Judge. (5:13-cv-00633-BO)

Argued: October 27, 2016

Decided: April 3, 2017

Before NIEMEYER, KING, and AGEE, Circuit Judges.

Affirmed by published opinion. Judge Niemeyer wrote the majority opinion, in which Judge Agee joined. Judge King wrote a dissenting opinion.

ARGUED: Robert Flynn Orr, Raleigh, North Carolina; Kelly Edward Greene, WYRICK, ROBBINS, YATES & PONTON, LLP, Raleigh, North Carolina, for Appellant. Erin Elizabeth Murphy, BANCROFT PLLC, Alexandria, Virginia, for Appellee. **ON BRIEF:** Roy Cooper, Attorney General, Donald R. Teeter, Sr., Special Deputy Attorney General, Ann W. Matthews, Special Deputy Attorney General, G. Mark Teague, Assistant Attorney General, Lewis W. Lamar, Jr., Assistant Attorney General, NORTH CAROLINA DEPARTMENT OF JUSTICE, Raleigh, North Carolina, for Appellant. Paul D. Clement, Christopher G. Michel, BANCROFT PLLC, Washington, D.C., for Appellee. James P. Longest, Jr., Shannon M. Arata, Duke Environmental Law & Policy Clinic, DUKE UNIVERSITY SCHOOL OF LAW, Durham, North Carolina, for Amicus Yadkin Riverkeeper, Inc. Patrick C. McGinley, Morgantown, West Virginia, for Amici Michael C. Blumm, Mary Christina Wood, Rachael Paschal Osborn, Patrick A. Parenteau, Zygmunt J.B. Plater, William Rodgers and Gerald Torres. Stephan C. Volker, Jamey M.B. Volker, M. Benjamin Eichenberg, LAW OFFICES OF STEPHAN C. VOLKER, Oakland, California; Thomas D. Blue, Jr., ELLIS & WINTERS LLP, Raleigh, North Carolina, for Amicus American Whitewater. James L. Conner, II, CALHOUN, BHELLA & SECHREST, LLP, Durham, North Carolina, for Amicus North Carolina Wildlife Federation, Inc. Ashley C. Parrish, Justin A. Torres, KING & SPALDING, LLP, Washington, D.C., for Amici High Rock Lake Association and Trading Ford Historic District Preservation Association.

NIEMEYER, Circuit Judge:

The State of North Carolina commenced this action against Alcoa Power Generating, Inc., seeking a declaratory judgment that North Carolina owns a 45-mile segment of the riverbed of the Yadkin River in North Carolina that, over the past 100 years, Alcoa purportedly acquired by deed and developed, with the construction of four hydroelectric dams to supply electrical power to its aluminum smelting plant in Badin, North Carolina.¹

In its complaint, North Carolina alleged that, at the time it attained statehood in 1789, the 45-mile segment of the Yadkin River was navigable and therefore that North Carolina had always “owned and continue[d] to own the submerged bed of the Relevant Segment of the Yadkin River in its entirety and [to] hold title to that submerged land in trust for the people of the State.” It alleged further that Alcoa had been using the segment only with North Carolina’s permission and that, when Alcoa announced in April 2010 that it was permanently shutting down its smelting plant and laying off its employees there, conditions changed so as to prompt North Carolina to withdraw its permission.

¹ After oral argument, Alcoa filed a motion to substitute Cube Yadkin Generation LLC as the party in interest, asserting that it has conveyed the property involved in this case to Cube Yadkin Generation. North Carolina opposed the motion.

Federal Rule of Appellate Procedure 43(b) provides that “[i]f a party needs to be substituted for any reason other than death, the procedure prescribed in Rule 43(a) [procedures for substitution upon death of a party] applies.” In view of the fact that North Carolina has opposed the motion; that we have not heard from Cube Yadkin Generation; and that we have not had the benefit of briefing to address the context of the conveyance and what reason is sufficient to satisfy Rule 43(b), especially when Alcoa continues as a viable corporation, we deny the motion but include this footnote to acknowledge Alcoa’s sale of the property.

The district court, in an opinion making findings of fact and conclusions of law following a bench trial, found that the relevant segment of the Yadkin River was not navigable at North Carolina's statehood so as to give it title to the riverbed as an aspect of sovereignty. The court also ruled as a matter of law that Alcoa successfully proved its title to 99% of the relevant segment under North Carolina's Marketable Title Act and to the remaining 1% under the doctrine of adverse possession.

On North Carolina's appeal, we affirm, concluding that the district court did not clearly err in its factual finding that the Yadkin River was not navigable at statehood and did not err in concluding, as a matter of law, that Alcoa has good title to the riverbed.

I

The Yadkin River rises in the northwestern part of North Carolina near the town of Blowing Rock and, for a stretch, flows eastward before flowing southward across the center part of the State to the North Carolina-South Carolina border, where it is known as the Pee Dee River. The dispute in this case involves a 45-mile segment of the river running through Rowan, Davie, Davidson, Stanly, and Montgomery Counties, which Alcoa purportedly acquired by deed and developed.

In 1915, Alcoa constructed its smelting plant in Badin and concurrently began acquiring riverbed land and constructing hydroelectric dams to supply the plant with electric power. It constructed one dam in 1917 in the area of the river known as the Narrows; another in 1919 in an area known as the Falls; and a third in 1927 near High Rock. When it sought to build a fourth dam in 1937 in Tuckertown, it filed a declaration

of its intent to do so with the Federal Power Commission (“FPC”) but stated in its declaration its belief that the federal government lacked regulatory jurisdiction because the stretch of the Yadkin River on which the dam was to be constructed was not navigable. North Carolina agreed with Alcoa’s position, stating to the FPC that the segment of the river “at the Tuckertown project and below is not now and has not been a navigable stream.” The State also represented to the FPC that Alcoa had acquired its riverbed rights “in every respect in accordance with” state law.

Some 20 years later, in 1956, when Alcoa applied to the FPC for a 50-year license for its dams, it again stated its belief that the FPC did not have jurisdiction. Alcoa acknowledged, however, that because the FPC had taken the position that the interests of interstate commerce and foreign commerce would be affected by Alcoa’s activities, it was applying for a 50-year license. Again, North Carolina supported Alcoa’s application and adopted Alcoa’s evidence, which included the deeds by which Alcoa had acquired the riverbed. The FPC granted Alcoa the 50-year license, as requested.

In 2006, when the FPC license expired and Alcoa applied for a renewal, North Carolina again received notice of Alcoa’s claim of ownership of the riverbed and again did not object to Alcoa’s claim.

For decades, Alcoa has paid property taxes on the riverbed parcels it acquired and posted signs on its property prohibiting trespassing. Alcoa has also granted North Carolina permits and licenses to enter its property.

In 2007, Alcoa decided to cease its aluminum smelting operations at Badin, and it ultimately closed that plant in 2010, laying off the plant’s employees. Nonetheless, it

continued to seek and obtain renewals of its licenses for the operation of its hydroelectric dams, enabling it to sell at wholesale the electricity produced by those dams.

In response to Alcoa's closure of the smelting plant, North Carolina commenced this action in 2013 in the Wake County Superior Court. It sought a declaratory judgment that the riverbed of the relevant segment of the Yadkin River was "the sole and exclusive property of the State." It claimed that Alcoa had been using North Carolina's property with its permission and that the closure of the Badin plant "so fundamentally changed the basis" of its relationship with Alcoa that North Carolina now wished to withdraw that permission. To support its claim of ownership, North Carolina alleged that the relevant segment of the Yadkin had always been and continued to be navigable in fact and that, as a consequence of the segment's navigability, it owned and had owned since statehood not only the riverbed of the relevant segment but also the entire river, as an incident of sovereignty.

Alcoa removed the case to the district court pursuant to 28 U.S.C. § 1441(a), contending that the issue of navigability for title was a question of federal law arising under the U.S. Constitution. North Carolina disagreed, however, and filed a motion to remand the case to state court, asserting that its complaint did not state a claim arising under federal law. The district court agreed with Alcoa's invocation of federal jurisdiction and denied North Carolina's motion to remand.

The parties filed cross-motions for summary judgment, which the district court denied, concluding that the question of navigability, which was central to the resolution of other issues, could not be resolved without a trial. At a bench trial on this issue, North

Carolina presented one witness — Professor Larry Tise, an expert in history — and Alcoa presented four witnesses, three of whom were expert witnesses — Dr. Michael Harvey, a fluvial geomorphologist; Dr. Mark Newell, an expert marine archeologist; and Dr. Dan Morrill, a historian. Alcoa’s fourth witness was Ray Barham, an Alcoa manager who testified as to Alcoa’s claim of ownership of the riverbed beneath the relevant segment and its activities there.

At the conclusion of the trial, the district court found that North Carolina had not carried its burden of proving that the contested segment of the Yadkin River had been navigable at statehood. The court concluded first that the geography of the relevant segment was characterized by “steep slopes, narrow valleys, rapids, falls, ledges, and exposed rock.” It found also that pole boats and flats, the primary means of commercial navigation in 1789, “would have had difficulty navigating shallow, steep, swift-moving, rocky rivers.” Finally, it concluded that while the historical record from the relevant area was somewhat sparse, it nonetheless revealed a lack of commercial navigation at statehood and repeated efforts thereafter directed at making the relevant segment navigable.

Based on its findings of facts relevant to navigability of the relevant segment, the court then applied the legal standard for determining navigability, as set forth in *PPL Montana, LLC v. Montana*, 132 S. Ct. 1215 (2012), concluding that the 45-mile segment had not been navigable at statehood. In particular, the court recognized *PPL Montana*’s requirement to consider the navigability of a river on a segment-by-segment basis and to treat portages within segments as defeating a finding of navigability.

Following the bench trial, the district court addressed Alcoa's undisputed evidence supporting its title to the segment's riverbed on its second motion for summary judgment and concluded, as a matter of law, that Alcoa had title to 99% of the contested riverbed under North Carolina's Marketable Title Act and title to the remaining 1% by reason of adverse possession.

From the district court's final judgment dated September 28, 2015, North Carolina filed this appeal challenging (1) the district court's subject matter jurisdiction; (2) its finding of navigability; and (3) its application of the Marketable Title Act and the doctrine of adverse possession.

II

North Carolina contends first that the district court lacked subject matter jurisdiction over the complaint and therefore should have remanded this case to state court, where the complaint had initially been filed. It argues that its complaint alleged a garden variety state law claim to quiet title under the North Carolina Declaratory Judgment Act and that therefore, under the well-pleaded complaint doctrine, its election to pursue a state law claim in state court should have been honored. *See Caterpillar Inc. v. Williams*, 482 U.S. 386, 392 (1987) (noting that the plaintiff, as "master of the claim," may avoid federal jurisdiction by alleging a claim under state law); *Am. Well Works Co. v. Layne & Bowler Co.*, 241 U.S. 257, 260 (1916) (noting that generally a suit "arises under the law that creates the cause of action"). As it asserts, "the State did not allege or

seek a judgment that its ownership of the riverbed was dependent upon federal law in any way.”

While North Carolina’s characterization of its complaint may be accurate as far as it goes, such a characterization will not always resolve whether federal jurisdiction exists. Regardless of the allegations of a state law claim, “where the vindication of a right under state law necessarily turn[s] on some construction of federal law,” the claim arises under federal law and thus supports federal question jurisdiction under 28 U.S.C. § 1331. *Franchise Tax Bd. v. Constr. Laborers Vacation Tr. for S. Cal.*, 463 U.S. 1, 9 (1983). The more relevant question, therefore, is whether the right that North Carolina seeks to vindicate — the right to title of riverbed land as determined by the river’s navigability *vel non* at statehood — turns on construction of federal law. The district court concluded that it did, relying on the Supreme Court’s statement in *PPL Montana* that “questions of navigability for determining state riverbed title are governed by federal law.” 132 S. Ct. at 1227.

Although North Carolina acknowledges the navigability principle announced in *PPL Montana*, it nonetheless argues that the principle is not applicable to the original 13 States because *PPL Montana* based its finding of federal jurisdiction on the Equal Footing Doctrine, which applies *only* to the 37 later-admitted States so as to make them coequal to the original 13.² It maintains that because it was one of the original 13 States,

² While *PPL* applied the Equal Footing Doctrine “to States later admitted to the Union, because the States in the Union are coequal sovereigns under the Constitution,” *PPL Montana*, 132 S. Ct. at 1227, it is not clear that all remaining 37 States, as North
(Continued)

the law governing navigability for title must be state law. Thus, it contends, “*PPL*, an equal footing case, has no bearing on the riverbed title of an original State. *PPL*’s language that ‘questions of navigability for determining state riverbed title are governed by federal law,’ 132 S. Ct. at 1227, applies solely to the ‘new’ equal footing States,” *i.e.*, the remaining 37.

In making this argument, however, North Carolina leaves out important steps in the historical analysis and misconstrues the scope of the Supreme Court’s holding in *PPL Montana* that questions of navigability for determining riverbed title are governed by federal law.

The Supreme Court long ago recognized that the title to a State’s navigable waters and their riverbeds vested in the State as an aspect of sovereignty obtained when separating from the British Crown and becoming a State. See *Martin v. Waddell’s Lessee*, 41 U.S. (16 Pet.) 367, 410 (1842). In *Waddell’s Lessee*, one party claimed title to oyster beds in the navigable waters of the Raritan River and Bay in New Jersey, tracing its title to a pre-statehood grant from the British Crown, and the other party asserted ownership by reason of a post-statehood New Jersey law. Because each party was thus able to trace ownership — one to the Crown and the other to the State of New Jersey —

Carolina suggests, are covered by the Equal Footing Doctrine. For instance, Maine and West Virginia might be considered in the class of the original 13 States, as they were originally part of Massachusetts and Virginia, both of which were among the original 13 States. Any resolution of this question, however, is not material to North Carolina’s argument that the original 13 States are treated differently under *PPL Montana* than are the later admitted States.

the dispute required the Supreme Court to analyze the nature of state sovereignty under the Constitution. The Court held that “when the revolution took place, the people of each state became themselves sovereign” and that the rights that flowed from that sovereignty upon the subsequent ratification of the Constitution meant that States “hold the absolute right to all their navigable waters, and the soils under them, for their own common use, subject only to the rights since surrendered by the constitution to the general government.” *Id.* The Court subsequently reiterated this constitutional basis for a State’s title to beds of navigable waters, stating that a “State receives absolute title to the beds of navigable waterways within its boundaries *upon admission to the Union*” and that its absolute title to the beds of navigable waters “is conferred not by Congress but *by the Constitution itself.*” *Oregon ex rel. State Land Bd. v. Corvallis Sand & Gravel Co.*, 429 U.S. 363, 372, 374 (1977) (emphasis added).

This constitutional insight — that with the formation of the Nation, the States gained title to all of the navigable waterways within their borders — was later expanded to new States as they joined the Union. In cases like *Pollard’s Lessee v. Hagan*, 44 U.S. (3 How.) 212 (1845), *Knight v. United Land Association*, 142 U.S. 161 (1891), and *Shively v. Bowlby*, 152 U.S. 1 (1894), the Supreme Court recognized that later-admitted States were co-equal sovereigns under the Constitution and accordingly applied the Equal Footing Doctrine.

Thus, it was the constitutional nature of state ownership of navigable waters that led the Court to determine that navigability for title was governed by federal law and was thus an appropriate basis for federal question jurisdiction. This basis for federal question

jurisdiction was explicitly invoked in *United States v. Utah*, 283 U.S. 64 (1931), where the Court explained, in resolving a property dispute between the United States and Utah, that, because Utah’s claim of ownership relied on the navigability of a segment of the Colorado River at statehood, the “question of navigability [was] thus determinative of the controversy, and that is a federal question.” *Id.* at 75. The Court then applied the federal standard of navigability, which was set out in *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1870) (articulating the criteria for navigability).

Thus, when the *PPL Montana* Court stated that “questions of navigability for determining state riverbed title are governed by federal law,” it was only reaffirming the federal nature of the issue of navigability for title, a nature evident since the founding and recognized in cases over the course of more than 150 years. 132 S. Ct. at 1227.

In response to our holding on federal jurisdiction, the opinion of our good colleague in dissent dismisses as irrelevant *Waddell Lessee*’s treatment of navigability for title as a federal question — based on the nature of state sovereignty under the Constitution — by focusing only on North Carolina’s pre-Constitution sovereignty at the time of the Revolution in 1776. Although *Waddell’s Lessee* noted that original States such as New Jersey did obtain sovereignty upon their separation from England in 1776, the Court nonetheless relied on the *post-Constitution* sovereignty of a State in treating navigability for title as a federal question. Accordingly, even though North Carolina did enjoy sovereignty before its ratification of the Constitution, the nature of its sovereignty emanating from ratification formed the basis for federal jurisdiction. This is the reading that the Supreme Court has repeatedly given *Waddell’s Lessee* in subsequent Supreme

Court decisions. See *PPL Montana*, 132 S. Ct. at 1227 (explaining *Waddell’s Lessee* to hold that “for the 13 original States, the people in each State, *based on principles of sovereignty*, hold the absolute right to all their navigable waters and soils under them” (emphasis added, internal quotation marks omitted)); *Corvallis Sand & Gravel*, 429 U.S. at 378 (explaining that under *Waddell’s Lessee* and *Pollard’s Lessee*, “the State’s title to lands underlying navigable waters within its boundaries is conferred . . . by the Constitution itself”); *United States v. Utah*, 283 U.S. at 440–441 (noting that the substantive “question of navigability is . . . a federal question,” after which it applied the standard for navigability from *The Daniel Ball*); *Pollard’s Lessee*, 44 U.S. (3 How.) at 230 (reiterating the law of *Martin’s Lessee* and concluding that the “right of eminent domain over the shores and soils under the navigable waters . . . belongs exclusively to the states within their respective territorial jurisdictions, and they, and only they, have the Constitutional power to exercise it” (emphasis added)). Accordingly, the dissenting opinion’s discussion of North Carolina’s pre-Constitution sovereignty simply avoids the relevant question.

In urging that the Equal Footing Doctrine could be the only basis for federal jurisdiction over this case, North Carolina argues, as does the dissenting opinion, that *PPL Montana’s* invocation of the Equal Footing Doctrine for federal jurisdiction creates a basis of federal jurisdiction applicable only to the later-admitted 37 States, leaving the remaining 13 States without federal jurisdiction for the same type of case. This argument, however, not only misunderstands the federal basis for federal jurisdiction over the issue of navigability for title, it also posits an unacceptable inequality among the

States in its effort to avoid federal jurisdiction. Indeed, its position is irreconcilable with the tenets of the Equal Footing Doctrine itself, which was designed to ensure that the new States enter the Union with “the *same* rights, sovereignty, and *jurisdiction* . . . as the original states.” *Pollard’s Lessee*, 44 U.S. (3 How.) at 230 (emphasis added). Application of the Equal Footing Doctrine was necessary to recognize that *all of the States*, both the original ones and the new ones, “are coequal sovereigns under the Constitution.” *PPL Montana*, 132 S. Ct. at 1227. In this manner, federal jurisdiction flows directly from the same original principle — *i.e.*, the constitutional nature of state ownership of navigable waters — that the Equal Footing Doctrine extends to the Nation’s later-admitted States.

The position advocated by North Carolina and the dissenting opinion would result in a bizarre state of affairs with two different classes of States under the Constitution. It posits that navigability for title presents a *federal* question in 37 States and a *state* question in the original 13 States, resulting in unequal footing among the States. Thus, for example, state courts in Georgia, one of the original 13 States, would apply state law to resolve the navigability for title issues for the Chattahoochee River, while federal courts in Florida, a later-admitted State, would apply federal law to rule on the navigability of the same river under the principles articulated in *PPL Montana*. Consequently, Georgia courts could hold that when a portion of the river is navigable, the entire river is navigable, as the State of Montana did in *PPL Montana*, rejecting any notion of segmentation for purposes of determining navigability and disregarding portages for unnavigable segments, whereas Florida would have to conclude, being

governed by *PPL Montana*, that segmentation was necessary and that portages precluded a finding of navigability. Such an outcome would place the States on unequal footing and would, indeed, challenge the supremacy of federal law and the equal application of Supreme Court cases to the States.

The dissenting opinion, in addressing this unacceptable inequality, conflates its discussion of federal question jurisdiction over issues of navigability for title with the substantive question of who has title to particular riverbeds. This confusion obscures the serious problems that would result if the reasoning of the dissent were adopted as law. Thus, the opinion suggests that our ruling on jurisdiction is based on the notion that all 50 states must have the same law with respect to land titles. *Post*, at 38–39. At no point, however, do we propose or imply such an idea; the States self-evidently possess title to lands differently from each other. Instead, we reject the arguments advanced by North Carolina and by the dissenting opinion because they would lead to States having different *jurisdiction over questions of title*. Thus, in our hypothetical discussion of the Chattahoochee River, the bizarre state of affairs that we seek to avoid is not concerned with an inequality of land titles or with different States having different substantive property laws. Our hypothetical is instead intended to highlight that North Carolina’s position would lead to an inequality of *jurisdiction* between the courts of two States. Both North Carolina and the dissenting opinion advocate for a legal paradigm in which the courts of Georgia can hear questions of a sort forbidden to the courts of Florida, a truly strange proposition which bears little resemblance to any other aspect of American jurisprudence.

At bottom, we conclude that the district court did have subject matter jurisdiction over the issue of navigability for title under 28 U.S.C. § 1331 and therefore did not err in denying North Carolina’s motion to remand to state court.

III

On the merits of whether the relevant segment of the Yadkin River was navigable for title, the district court found that it was not. The court considered whether the relevant segment was navigable at the time of North Carolina’s statehood in 1789, as required by *PPL Montana*. It found that the relevant segment — which the parties agreed was a 45-mile segment from river miles 233.1 to 279.7 — was characterized by “steep slopes, narrow valleys, rapids, falls, ledges, and exposed rock.” It also found that pole boats and flats, the primary means of commercial navigation at statehood, “would have had difficulty navigating shallow, steep, swift-moving, rocky rivers.” Finally, it observed that while the historical record from the relevant era was sparse, it nonetheless revealed both a lack of commercial navigation at statehood and repeated efforts after statehood in attempting to make the relevant segment navigable. Applying the standard of *PPL Montana* — that rivers are navigable “when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water,” 132 S. Ct. at 1228 (quoting *The Daniel Ball*, 77 U.S. (10 Wall.) at 563) — the district court concluded that the relevant segment was not navigable at statehood.

North Carolina challenges the manner in which the district court segmented the river and, in any event, contends that its findings of fact were clearly erroneous. We address each argument in turn.

A

On the issue of segmentation, North Carolina's complaint described the entire contested stretch of river as the "Relevant Segment" and alleged that it was navigable in fact. North Carolina now claims that it did not intend its use of the term "Relevant Segment" to serve as a concession that the entire segment should be considered as a whole for purposes of determining navigability. But even as it now challenges whether the district court should have considered the relevant segment as a whole, it does not propose any alternative segmentation that might have been more appropriate.

In response, Alcoa claims that North Carolina waived its argument challenging treatment of the relevant segment as a whole because it failed to raise the issue in the district court. It notes that North Carolina never objected when Alcoa referred to the relevant segment as "a single continuous segment" and explained the question as being whether the segment was navigable in fact at statehood "from one end to the other." Nor did North Carolina disagree at trial when Alcoa stated that the parties had stipulated that the contested area should be considered as one segment.

Consistent with Alcoa's observations, the district court's rulings indicate its understanding that North Carolina was not challenging the consideration of the segment as a whole for purposes of resolving the navigability issue. In any event, on the merits of

whether the district court erred in treating the entire segment as a single unit for purposes of determining navigability, we conclude that it did not.

In *PPL Montana*, the Supreme Court explained that navigability for title is determined “on a segment-by-segment basis to assess whether the segment of the river, under which the riverbed in dispute lies, is navigable or not.” 132 S. Ct. at 1229. In explaining how an appropriate segment may be selected, the Court stated that a segment should be “both discrete, as defined by physical features characteristic of navigability or nonnavigability, and substantial, as a matter of administrability for title purposes.” *Id.* at 1231.

While the district court assumed that there was no dispute about the appropriate segment for consideration, it nonetheless had sufficient evidence before it to support its treatment of the entire segment as a single entity. One of the experts presented by Alcoa, Dr. Michael Harvey, a fluvial geomorphologist, specifically testified that the 45-mile contested area was a proper segment. In his report, he explained that the geology supports a division of the Yadkin-Pee Dee River into four segments, one of which is the contested area. The Upper Yadkin, upstream of the contested area, is underlain by granitic and metaigneous rocks. The contested area, separated by a fall line from the Upper Yadkin, is characterized primarily by metavolcanic rocks, which are harder and more erosion resistant. The Upper Pee Dee River, immediately downstream from the contested area, contains igneous and metasedimentary rocks. The geology of the river is, therefore, a physical feature of navigability that supports the segmentation assumed by the district court.

The evidence also showed that the relevant segment was also appropriately substantial. Indeed, the fact that Alcoa has now spent decades controlling, developing, and administering the entire contested area as its own property and as a unit establishes that the segment is demonstrably administrable for title purposes.

In disagreeing with the district court's conclusion that the 45-mile segment should be considered as a single segment under the standard set forth in *PPL Montana*, the dissenting opinion fails to address *PPL Montana*'s standard for segmentation and the facts in the record that support the district court's finding that the segmentation was appropriate, particularly the testimony on this issue given by Dr. Harvey. Its consideration of these facts would make clear that the district court's segmentation finding was supported by substantial evidence in the record.

In short, we conclude that the district court's treatment of the 45-mile segment as a single segment was not in error, as the record evidence supports that finding.

B

As to the district court's finding that the relevant segment was in fact navigable at statehood, North Carolina argues that the district court's findings of fact were clearly erroneous.

When reviewing for clear error, we reverse only when we possess a "definite and firm conviction that a mistake has been committed." *United States v. Hall*, 664 F.3d 456, 462 (4th Cir. 2012) (quoting *United States v. U.S. Gypsum Co.*, 333 U.S. 364, 395 (1948)). Moreover, we "should be especially reluctant to set aside a finding based on the

trial court's evaluation of conflicting expert testimony," as was the case here. *Id.* (quoting *Hendricks v. Cent. Reserve Life Ins. Co.*, 39 F.3d 507, 513 (4th Cir. 1994)).

When used for title purposes, navigability is determined at the time of statehood based on the natural and ordinary condition of the body of water. *PPL Montana*, 132 S. Ct. at 1228. Thus, courts seeking to determine navigability for title must determine whether, at statehood, the relevant segment of the river could have been used as a highway for commerce, by the "customary modes of trade and travel" available at that time. *Id.* at 1233. The *PPL Montana* Court explained that portages are generally sufficient to defeat a finding of navigability because they require transportation over land rather than over water. *Id.* at 1231.

Alcoa presented three expert witnesses who testified as to the nonnavigability of the relevant segment at the time of North Carolina's statehood in 1789. Dr. Harvey, a fluvial geomorphologist, described the river's geological profile and the challenges this profile would have presented for navigation. He explained that the dominant characteristic of the relevant segment is the Carolina Slate Belt underlying it, which is composed of rocks that are very hard and very difficult to erode. The hard and unerodable nature of the riverbed, he explained, allowed for the river to be steeper than rivers with softer underlying materials. And this steepness, in turn, contributed to a greater flow speed of the river, which reached up to 7 feet per second or nearly 5 miles per hour. Dr. Harvey noted that this speed is considered high velocity for a river and creates white water.

Dr. Harvey also explained that the relevant segment was characterized by shoals (or shallow areas) extending over much of its area. Some of the shoals extended for as long as two miles. And the steep grade of these shoals again increased the velocity of the river, adversely affecting navigation. Moreover, the shoals contained waterfalls, ledges, and boulders, and avoiding these obstacles would have been difficult, especially because of the high speed of the river, which decreased the amount of time that navigators had to react.

In addition to shoals, the relevant segment contained at least five named waterfalls, representing vertical drops of five to seven feet. Dr. Harvey explained that traveling down these waterfalls would have been extremely difficult and traveling upstream would have been essentially impossible. And, in another part of the relevant segment, called the Narrows, Dr. Harvey explained that the river contracted from 1,800 feet in width to 60 feet at its narrowest, where the flow was influenced by sharp rocks and characterized as turbulent, which would have made traversal extremely difficult and perhaps impossible even with portages.

In addition to these structural characteristics, navigation at statehood would also have been made difficult by the unpredictability of weather conditions. Dr. Harvey explained that, because of the nature of precipitation in the relevant area of the Yadkin, flooding could occur at any time without warning, making navigation even more difficult.

Alcoa also presented Dr. Mark Newell as an expert in marine archaeology, who testified that the vessels that would have been used in commerce in 1789 were not suitable for commercial navigation in the relevant segment. He first discussed the dugout

canoes used by Native American communities of the region, which were made by digging out the interior of a tree. He pointed out that these canoes were very unstable and would have capsized if carrying a heavy load. He also discussed the pole boat, which, he explained, was also unsuited to commercial navigation of the relevant segment in 1789. Pole boats ranged from 30 to 70 feet long while only six to seven feet wide and could carry up to 20,000 pounds of cargo. But they were unable to make the turns needed to navigate around large obstacles. Moreover, presenting the length of such a vessel to the current would cause it to capsize. Dr. Newell also explained that, because these boats could not navigate upriver, they were ill-suited for commerce.

Finally, Alcoa presented Professor Dan Morrill as an expert on North Carolina history during the relevant period. Much of his testimony derived from records kept by the Moravians, a religious group that lived in a tightly knit community in the area of the relevant segment. The Moravians kept remarkably complete records as an aspect of their faith, including those of their commercial activity. From those records, Dr. Morrill was able to gain insight into the facts of contemporary navigation of the Yadkin River. He stated that in the hundreds of pages that he reviewed, he saw absolutely no reference to the relevant segment's use in commerce. Rather, he found that the Moravians transported their goods to market using wagons, which, according to the records, would often be taken to the heads of other rivers that the Moravians did use for navigation. The Moravians also noted explicitly that there were no navigable waters in the area of the relevant segment and, more particularly, that the Yadkin was "useless for commerce" because of its "terrible falls and numerous rocks."

North Carolina presented one expert, Dr. Larry Tise, who concluded that the historical evidence showed that the river had in fact been navigated for commerce at statehood. To reach that conclusion, he relied on records referencing attempts shortly after statehood to improve the navigability of the relevant segment, but he acknowledged that, without improvement, the relevant segment was “not passable with safety.” He also relied on individual accounts of travelers moving along the Yadkin, but those accounts explicitly noted that their journeys required the use of portages. For instance, Richmond Pearson, a resident of the area who sought to improve the navigability of the Yadkin, reported that he “portaged around the Narrows.” And a rumor from that time referred to the use of the Yadkin to transport tobacco, involving “only seven miles land carriage round the Narrows of the Yadkin.” Dr. Tise acknowledged that the river at North Carolina’s statehood was “shoally” and that portage was required. Indeed, he described the Yadkin River as a “barrier” to navigation.

Taken in its entirety, the expert testimony about navigability in 1789 amply supports the district court’s finding that the relevant segment was not navigable at statehood under *PPL Montana*.

Again, as to this finding of fact, the dissenting opinion simply announces its view of the evidence, without addressing the evidence of record *that supports* the court’s finding. In particular, the dissenting opinion fails to acknowledge the testimony of any of the three expert witnesses that noted that numerous and various portions of the 45-mile segment were not navigable, where any non-navigable portion would prevent the segment from satisfying the *PPL Montana* test. Were it to acknowledge all of the evidence before

the district court, the dissenting opinion could hardly conclude that the district court clearly erred in its relevant factual findings.

IV

Because the district court did not clearly err in finding that the relevant segment was not navigable at statehood, North Carolina cannot claim title to the relevant segment's riverbed as an aspect of its sovereignty. In determining the actual titleholder, N.C. Gen. Stat. § 146-79 assigns the burden of proving title to the contested segment to Alcoa. Alcoa undertook to meet its burden in two ways — by relying on North Carolina's Real Property Marketable Title Act, *id.* § 47B-2, to claim title to 99% of the contested property and by claiming adverse possession as to the remaining 1%.

North Carolina's Real Property Marketable Title Act ("MTA") provides that any "person . . . who, alone or together with his predecessors in title, shall have been vested with any estate in real property of record for 30 years or more, shall have a marketable record title." N.C. Gen. Stat. § 47B-2(a). The district court found and North Carolina concedes that Alcoa demonstrated satisfaction of its burden of proof under the statutory requirements of the MTA. Nonetheless, North Carolina argues that three exceptions vitiate the proof adduced by Alcoa and vest title in the State, even though none of those exceptions are included in the MTA's long list of exceptions.

First, it argues that the MTA cannot be used with respect to land to which North Carolina obtained title when acquiring sovereignty. While the legal validity of this argument is dubious — because North Carolina could have conveyed any such land and

thereafter become subject to the MTA, as “the force” of navigability for title would be “spent” and the State would be free to convey title, *see Corvallis Sand & Gravel Co.*, 429 U.S. at 371 — it can have no force here. As the district court correctly concluded, North Carolina did not obtain title to the riverbeds of the relevant segment by virtue of sovereignty because the relevant segment was not navigable at statehood. Accordingly, this argument fails.

Second, North Carolina argues that the MTA does not apply to land subject to public trust rights. But North Carolina fails to identify any basis for such an exception. While the text of the MTA does contain a fulsome list of exceptions, none makes mention of public trust rights. *See* N.C. Gen. Stat. § 47B-3. This is telling, especially since the Act provides that it is subject “only to such limitations” as listed in the statute and should be “liberally construed” to ease property owners’ burden in showing good title. *Id.* § 47B-9. Moreover, North Carolina points to no previous case recognizing or applying such an exception. Finding no support for this argument, we conclude that it too fails.

Finally, North Carolina argues that the MTA cannot be used against North Carolina because it is a sovereign. Again, this exception finds no support in the text of the MTA. Nor would such an exception be consistent with the purposes of the Act. If the MTA did not apply against North Carolina, the State could simply make a claim to any real property in the State and rely on § 146-79 to place the burden of showing ownership on the landowner. For most, this would be impossible, especially when records have been destroyed, such as by the fire in a Montgomery County courthouse that consumed some early deeds after statehood. The real property scheme that North

Carolina proposes would thus run directly counter to the purposes of the MTA and to all norms of real property law. It is therefore not surprising that the North Carolina Supreme Court, in applying the MTA in a dispute over a State Commission's ownership of real property, implicitly assumed that the MTA applies to the State. *See Taylor v. Johnston*, 224 S.E.2d 567, 579 (N.C. 1976).

In sum, we affirm the district court's conclusion that Alcoa proved its title to 99% of the relevant segment's riverbed under the MTA.

The remaining 1% consists of land for which Alcoa, when it began acquiring title to the riverbed, could find no owner. The district court found that Alcoa met its burden of proving title to this remaining 1% under adverse possession.

North Carolina's law of adverse possession requires a claimant to show "actual, open, hostile, exclusive, and continuous possession of the land claimed for the prescriptive period [of 30 years] . . . under known and visible lines and boundaries." *Merrick v. Peterson*, 548 S.E.2d 171, 176 (N.C. Ct. App. 2001); *see also* N.C. Gen. Stat. § 1-35(1) ("The State will not sue any person for . . . any real property . . . by reason of the right or title of the State to the same . . . [w]hen the person in possession thereof . . . has been in the adverse possession thereof for thirty years . . ."). Here, there can be little dispute that Alcoa has satisfied these requirements. For more than 50 years, Alcoa has openly acted as the sole owner of the riverbed in every respect, controlling access to it and constructing and maintaining facilities on it.

Nonetheless, North Carolina argues that Alcoa cannot rely on adverse possession here because, under N.C. Gen. Stat. Ann. § 1-45.1, "[t]itle to real property held by the

State and subject to public trust rights may not be acquired by adverse possession.” As the district court recognized, however, this statute is not applicable here because North Carolina cannot show that it held title to the land in question during the time that Alcoa openly asserted ownership to it. This is not a case in which the State owns land subject to public trust rights that a private entity is attempting to obtain by adverse possession. Instead, North Carolina seeks to disrupt a facially valid adverse possession without any basis for asserting that it was in fact the landowner during the relevant period. Indeed, there is nothing in the record to preclude the inference that the land Alcoa obtained by means of adverse possession was privately owned when Alcoa began to occupy it, and North Carolina would, in such a circumstance, be inserting itself into a property dispute between private parties with the hope of obtaining property to which it has no legitimate claim. Such an intervention, unsupported by North Carolina law, would undermine the valuable role adverse possession plays in settling the ownership of property that has no clear chain of title.

* * *

At bottom, we conclude that the district court did not err in concluding that “Alcoa has title to the bed of the Relevant Segment.” The judgment of the district court is accordingly

AFFIRMED.

KING, Circuit Judge, dissenting:

Unlike my friends in the panel majority and on the district court, I am satisfied that the disputed 45-mile segment of the majestic Yadkin River belongs to the people of North Carolina. I therefore write separately in dissent. The district court and the majority — in ruling against the State of North Carolina — have erred in several respects. To start, the federal court system should not be resolving the garden-variety land title issues that are presented here. Put succinctly, this declaratory judgment action should be a state court proceeding and is wanting of a sufficient federal question. Moreover, if federal jurisdiction exists — as the majority today rules — my good colleagues have erred in their resolution of the merits, particularly with respect to North Carolina’s navigability test and its public trust doctrine.

A.

My disagreement with the majority begins with its ruling that the district court possessed federal question jurisdiction. A federal civil action can arise under § 1331 of Title 28 in either of two ways: it can be created under federal law, or it may arise under state law and yet involve a federal ingredient of sufficient import. The State of North Carolina’s lawsuit — a quiet title proceeding — is simply a state law claim that fails to arise under § 1331.

The basis for federal court jurisdiction has been somewhat of a moving target in these proceedings. In its notice of removal, Alcoa Power asserted that North Carolina’s complaint contained a federal constitutional question, i.e., that the State’s title to the

Yadkin River and its beds depends on the sovereign interests North Carolina retained at statehood. Alcoa Power also raised a jurisdictional contention predicated on the *Grable* factors — that is to say, North Carolina’s right to relief necessarily depends upon the resolution of a substantial question of federal law.¹

In all, three theories of federal question jurisdiction have been propounded and litigated here. First, Alcoa Power argued in the district court the proposition that jurisdiction is provided under the Supreme Court’s decision in *Martin v. Waddell’s Lessee*, 41 U.S. 367 (1842). Although the district court mentioned *Waddell’s Lessee* in declining to remand, it did not anchor its jurisdictional ruling on that decision. On appeal, Alcoa Power again maintains that *Waddell’s Lessee* provides a federal jurisdictional hook for this litigation, while North Carolina argues to the contrary. The majority now adopts *Waddell’s Lessee* as the sole basis for federal jurisdiction.

The second jurisdictional theory relied on by Alcoa Power is the equal footing doctrine (the “EFD”). That theory was argued by both sides in the district court and again on appeal — Alcoa Power in favor of jurisdiction under the EFD, and North Carolina opposing it. The district court, by order of November 27, 2013, based its jurisdiction ruling solely on the EFD. See Jurisdiction Order 3-4. The majority, however, has not predicated its jurisdictional ruling on the EFD.

¹ See *Grable & Sons Metal Prods., Inc. v. Darue Eng’g & Mfg.*, 545 U.S. 308, 314 (2005) (enumerating *Grable* factors, i.e., that a federal question (1) has been necessarily raised, (2) is actually disputed, (3) is substantial, and (4) is capable of resolution in federal court without disrupting federal-state balance).

The third jurisdictional theory espoused by the parties relies on the so-called *Grable* factors — briefed and argued by Alcoa Power and contested by North Carolina in the district court proceedings. The *Grable* theory was also fully briefed by the parties on appeal. That theory, however, has not been addressed by either the district court or the panel majority. Because I dissent on the jurisdictional issue, it is necessary to assess each of the jurisdictional theories.

1.

According to the majority, the federal courts possess jurisdiction in this declaratory judgment quiet title action pursuant to the Supreme Court’s 1842 decision in *Waddell’s Lessee*. A state’s ownership of its navigable waters, the majority maintains, is constitutional in nature — and thus governed by the so-called federal navigability test (explained further in Part B *infra*). According to the majority, the *Waddell’s Lessee* decision relied “on the *post-Constitution* sovereignty of a State in treating navigability for title as a federal question,” rendering North Carolina’s pre-Constitution sovereignty irrelevant. *See supra* 12. That contention, however, is incorrect. Writing for the Court in *Waddell’s Lessee*, the Chief Justice observed that the Original States became sovereign “when the revolution took place” — i.e., before ratification of the Constitution — and as sovereigns those States held an “absolute right to all their navigable waters, and the soils under them . . . subject only to the rights *since* [i.e., later or thereafter] surrendered by the constitution to the general government.” *See* 41 U.S. at 410 (emphasis added).

In *Waddell's Lessee*, the Court did not rely on or even mention a federal navigability test. Furthermore, the Court did not apply any federal legal principles to its assessment of the issues. Even more notable is that *Waddell's Lessee* has not been relied upon by any court — at least until today — to support the proposition that, when issues of land title are presented, the navigability of waters within the Original States must be solely assessed under a federal navigability test, creating federal jurisdiction. Nor has that decision been utilized by any tribunal to conclude that the Constitution gave unto the Thirteen Original States any land titles. That proposition is entirely contrary to those States having gained land titles as a matter of sovereignty upon cession from the Crown.

As explained further below, the Constitution has nothing to do with the land holdings of the Original States. And the only right the Original States surrendered with respect to navigable waters under the Constitution was a limited navigational servitude. The Supreme Court has explained that servitude, which is predicated on the Commerce Clause, in the following terms:

All navigable waters are under the control of the United States for the purpose of regulating and improving navigation, and although the title to the shore and submerged soil is in the various states, and individual owners under them, it is always subject to the servitude in respect of navigation created in favor of the federal government by the constitution.

See Gibson v. United States, 166 U.S. 269, 271-72 (1897); *see also* U.S. Const. art. I § 8 cl. 3 (empowering Congress “[t]o regulate Commerce . . . among the several States”).²

² Pursuant to the limited navigational servitude acquired by the federal government from North Carolina by way of the Constitution, the Federal Power (Continued)

North Carolina's fee simple title to its lands — and thus to the waters and riverbeds of the Yadkin River — did not come from the Constitution or the federal government. North Carolina has owned the Yadkin River free and clear since 1776 — before the Revolution — when North Carolina declared its independence from the British Crown. As a matter of sovereignty, the people of North Carolina acquired title in 1776 to “all the territories, seas, waters, and harbours, with their appurtenances,” upon declaring independence from the Crown. *See* N.C. Const. of 1776, Declaration of Rights para. 25. And the courts of North Carolina have consistently recognized this proposition as settled, in fact and in law. The North Carolina Court of Appeals explained the controlling point in 1983, specifying that, “[u]pon the Declaration of Independence, the people of the original thirteen states succeeded to all rights of the Crown and became the owners of all lands within the limits of the state which had not been granted to others.” *See State v. Taylor*, 304 S.E.2d 767, 770 (N.C. Ct. App. 1983) (quoting 72 Am. Jur. 2d, *States, Territories, and Dependencies* § 66 (1974)).

The majority, however, has today announced that the fifty States could only have acquired their titles to navigable waters and the beds beneath those waters by way of the Constitution. *See supra* 10-12. With respect to the Thirteen Original States, this

Commission — the predecessor of the Federal Energy Regulatory Commission — authorized the construction of seven dams on the Yadkin River. From north to south, those are the W. Kerr Scott Dam, operated by the Army's Corps of Engineers; the High Rock Dam, the Tuckertown Dam, the Narrows Dam, and the Falls Dam, operated by Alcoa Power and located within the disputed 45-mile segment; and finally, the Tillery Dam and the Blewett Falls Dam, licensed to a Duke Energy company.

pronouncement is erroneous. The Thirteen Original States — including North Carolina — gained fee simple titles to their lands and waters by usurping the Crown, years before forming the Union and ratifying the Constitution. And the Constitution itself is silent with respect to — and had no adverse impact on — the land titles of the Thirteen Original States.

Importantly, our own precedent provides additional support for North Carolina’s ownership of the Yadkin River and its riverbeds. In 1954, we affirmed a decision of the Eastern District of North Carolina that had recognized North Carolina’s ownership of its waters and their beds. As the district court related therein:

Originally the State of North Carolina was the owner of soil covered by water within its boundaries, whether that water be navigable or non-navigable.

See Swan Island Club, Inc. v. White, 114 F. Supp. 95, 99 (E.D.N.C. 1953), *aff’d sub nom. Swan Island Club, Inc. v. Yarbrough*, 209 F.2d 698 (4th Cir. 1954). The astute district judge explained in his *Swan Island* decision that “lands held by the State in trust for all its citizens . . . could in no way be obtained by an individual, by grant, deed, judgment, or otherwise.” *Id.* And Chief Judge Parker’s affirmance, in our *Swan Island* decision, supports the land ownership proposition enunciated in North Carolina’s Declaration of 1776 — North Carolina is the owner of its waters and the lands beneath them. On this record, North Carolina has never surrendered or conveyed its ownership of the disputed 45-mile segment of the Yadkin River and the riverbeds beneath it to anyone — including Alcoa Power and its predecessors — and the State yet holds those ownership rights.

2.

a.

Surprisingly, the majority today has entirely abandoned the district court’s reliance on the EFD as *the* jurisdictional hook in this litigation. In its Jurisdiction Order, the district court concluded as follows with respect to the EFD:

Because the later-admitted states are in fact co-equal sovereigns under the Constitution to the original thirteen . . . there is no basis upon which to suppose that the [EFD] requires any difference in treatment as between the states when deciding questions of navigability for determining riverbed title.

See Jurisdiction Order 3-4. Additionally, the federal navigability test is inextricably intertwined with the EFD for the purpose of land title determinations. See *PPL Mont., LLC v. Montana*, 565 U.S. 576, 592 (2012) (“[The federal navigability test] has been used as well to determine questions of title to water beds under the [EFD].”). Importantly, Alcoa Power has consistently relied on the EFD to support the applicability of the federal navigability test in this litigation, arguing that “the [EFD] could not operate coherently if . . . the 13 original states were each free to develop their own rules as to what rivers were navigable for title purposes at statehood.” See Resp. Br. of Alcoa Power 28. In these circumstances, a more comprehensive discussion of the EFD and its inapplicability as a jurisdictional hook is mandated.

The EFD arises from the New States Clause of Article IV of the Constitution.³ It was initially discussed in the Supreme Court in 1831 in a concurring opinion in *Cherokee Nation v. Georgia*, 30 U.S. 1, 31 (1831) (Baldwin, J., concurring). Four years later, the EFD was first addressed there in a majority opinion. See *Mayor, Aldermen, and Inhabitants of City of New Orleans v. De Armas*, 34 U.S. 224, 235 (1835). Pursuant to the EFD, a newly admitted state comes “into the union on an equal footing with the rest.” See *Pollard v. Hagan*, 44 U.S. 212, 216 (1845).⁴ The EFD thus imbues the newly admitted states with the same “political rights and sovereignty” enjoyed by the other States, ensuring that the States remain “alike in power, dignity, and authority.” See 81A C.J.S. *States* § 8, Westlaw (database updated Dec. 2016). But the EFD did not — and could not — divest North Carolina of its land titles. That is because North Carolina is not a newly admitted state, it is an Original State. And that distinction is of great significance with respect to our jurisdictional inquiry.

When a new state comes into the Union, the title to the navigable waters therein, and the lands beneath those waters, pass from the United States to the newly admitted state. See *PPL Mont.*, 565 U.S. at 591 (“Upon Statehood, the State gains title within its

³ The New States Clause provides that “[n]ew States may be admitted by the Congress into this Union.” See U.S. Const. art. IV, § 3, cl. 1.

⁴ It appears that the phrase “equal footing” — which is not found in the Constitution — may have had its genesis in the Northwest Ordinance of 1787. Pursuant thereto, new states formed out of the Northwest Territory and admitted to the Union would be entitled to “share in the federal councils on an equal footing with the original States.” See 1 Stat. 50, ch. 8 n.(a) (1789).

borders to the beds of waters then navigable . . .”). For example, when one sovereign (a new state) replaces another (the United States), the new sovereign (the new state) gains title only to those lands therein that the former sovereign (the United States) held in that capacity. As a result, the federal navigability test has been used to determine whether title to waters — and the lands beneath those waters — remains with the United States or passes to the newly admitted state. Accordingly, if the federal navigability test applies here, a federal question may exist. As the Supreme Court explained in 1935,

Since the effect upon the title to such lands is the result of federal action in admitting a state to the Union, the question, whether the waters within the state under which the lands lie are navigable or nonnavigable, is a federal, not a local, one.

See United States v. Oregon, 295 U.S. 1, 14 (1935). As explained below, however, the federal navigability test is inapplicable here.

b.

Pursuant to the foregoing, the applicability of the EFD to North Carolina is undermined by one controlling fact — North Carolina is an Original State. The EFD — a creature of the federal judiciary — did not exist until nearly sixty years after the State of North Carolina obtained its title to the Yadkin River. And the EFD was not even identified by the judiciary until forty-two years after North Carolina joined the federal Union. In those circumstances, the EFD does not apply to North Carolina’s ownership rights in its waters and riverbeds.

To further emphasize the proposition that the EFD does not give rise to a federal question, it is uncontroverted that the State of North Carolina replaced the English Crown

in 1776 as the sovereign within its borders. And the United States did not exist until 1789. Apart from the navigational servitude, the United States has never held any rights to the waters or riverbeds in dispute. Resultantly, the commentators have consistently endorsed the proposition that the EFD “has no application in the thirteen original states.” See Peter N. Davis, *State Ownership of Beds of Inland Waters — A Summary and Reexamination*, 57 Neb. L. Rev. 665, 667 n.10 (1978); see also, e.g., David C. Slade et al., *Putting the Public Trust Doctrine to Work* 18 (2d ed. 1997) (“Because the Federal government never had original jurisdiction over the trust lands and waters of the Thirteen Original States, it never conveyed these lands to any of [those States]. Thus, no Federal question arises as to what lands were held in trust by any of the original States when they formed the Union.”).⁵ In fact, one of the commentators sponsoring that conclusion was relied upon by Justice Kennedy in his *PPL Montana* opinion. See 565 U.S. at 603 (citing Slade, *supra*, at 3-8, 15-24).

Nevertheless, the Jurisdiction Order of the district court ploughed an entirely new furrow by concluding that the EFD applies to the waters and riverbeds of North Carolina.

⁵ Commentator Peter N. Davis has explained further that, in addition to being inapplicable to the Original Thirteen States, the EFD would not apply “in their derivatives (Maine and West Virginia), in states which formerly were independent nations (Hawaii and Texas), or in present federal territories (District of Columbia).” See Davis, *supra* at 667 n.10. As the Supreme Court has recognized, however, the EFD nevertheless applies to Texas because the Lone Star State consented to its admission to the Union “on an equal footing with the original States in all respects.” See *United States v. Texas*, 339 U.S. 707, 713 (1950) (internal quotation marks omitted).

See Jurisdiction Order 3-4. I readily reject that proposition, and I am pleased that my good colleagues in the majority have also declined to support it.

c.

In response to my discussion of the EFD, the majority opines that I am sponsoring a “bizarre state of affairs” where the Thirteen Original States assess navigability for title purposes under their own laws, while the later admitted states must apply the federal navigability test. *See supra* 14. The majority deems it unacceptable that the Original States are entitled to resort to state law and state courts to answer questions of navigability for title, but that the later admitted states answer the same questions by applying federal law, which may result in the exercise of federal jurisdiction. In the majority’s view, this distinction creates an impermissible jurisdictional inequality.

That outcome, however, simply flows from how the Original States and the newly admitted states came into the Union. Acknowledging the different paths of the several states into the Union, the Supreme Court has recognized that “[s]ome States when they entered the Union had within their boundaries tracts of land belonging to the Federal Government; others were sovereigns of their soil.” *See United States v. Texas*, 339 U.S. 707, 716 (1950). As a result — and as explained above — the transfer of land titles from the federal government to newly admitted states is governed by the federal navigability test as it relates to the EFD. *See Oregon ex rel. State Land Br. v. Corvallis Sand & Gravel Co.*, 429 U.S. 363, 371 (1977). That principle does not apply to the Original Thirteen States, however, because those States did not receive land titles from the federal

government — they “were sovereigns of their soil” from the very beginning. *Texas*, 339 U.S. at 716. By ruling otherwise, however, the majority has today divested North Carolina of land titles it has owned since 1776.

After land titles pass from the federal government to a newly admitted state, questions relating to those titles turn on the application of state law — a proposition the Supreme Court recognized in its *Corvallis* decision. The Court therein explained that the EFD does not “provide a basis for federal law to supersede the State’s application of its own law in deciding title to the [contested] land” because it does “not operate after [the date of entry into the Union] to determine what effect on titles the movement of [a] river might have.” *See Corvallis*, 429 U.S. at 371. Any inequality is thus dispelled, as the newly admitted states are afforded the same “political standing and sovereignty” afforded the Original Thirteen States. *See Texas*, 339 U.S. at 716.

Nevertheless, according to the majority, the foregoing principles result in a “legal paradigm in which the courts of Georgia [an Original State] can hear questions of a sort *forbidden* to the courts of Florida [a newly admitted state].” *See supra* 15 (emphasis added). That is simply not the case. The only “inequality” resulting from the application of these principles is that an Original State may possess a land title that a newly admitted state could never inherit from the United States. Such an outcome, however, does not offend the EFD. The Supreme Court has concluded that “[t]here has never been equality among the States” with respect to economic standing or stature. *See Texas*, 339 U.S. at 716. In fact, “the United States has the power to divest a future State of its equal footing

title to submerged lands.” See *United States v. Alaska*, 521 U.S. 1, 5 (1997).⁶ Simply put, the Supreme Court has determined that the EFD does not mandate equality of the several States in the manner posited by the majority.

d.

Also of concern today are other issues that lurk in the background of the majority’s ruling. Without question, the Thirteen Original States usurped the British Crown and gained title to those lands that George III then held in sovereignty. But the majority today rules that the federal navigability test applies retroactively — in an ex post facto fashion (from at least 1842 back to 1789) — and divests North Carolina of the fee simple titles to the Yadkin River and its riverbeds that the State acquired in 1776. The Supreme Court has never ruled that the federal navigability test applies in such a context, and I am convinced that it would never do so.

Today’s panel majority — and Alcoa Power as well — would have the federal navigability test determine title to all navigable waters and their riverbeds. Yet several judicial decisions from the Original States show that some of those States have created and applied their own tests for navigability, undermining the notion that the federal

⁶ Similarly, in its 1926 decision in *United States v. Holt State Bank*, the Supreme Court recognized that, “under the constitutional principle of equality among the several states the title to the bed of Mud Lake [in Minnesota] then passed to the state, if the lake was navigable, *and if the bed had not already been disposed of by the United States.*” See 270 U.S. 49, 55 (1926) (emphasis added). Methods of such disposal include, for example, “reserving lands for a particular national purpose such as a wildlife refuge or . . . an Indian reservation.” See *Idaho v. United States*, 533 U.S. 262, 273 (2001).

navigability test must always govern the inquiry. On one hand, New York and Pennsylvania have actually elected to use the federal navigability test. *See, e.g., Fairchild v. Kraemer*, 11 A.D.2d 232, 235 (N.Y. App. Div. 1960); *Cleveland & Pittsburgh R.R. Co. v. Pittsburgh Coal Co.*, 176 A. 7, 9 (Pa. 1935). But even then, New York diverges somewhat from the federal test, adopting the position that, “[i]n order to be navigable, it is not necessary that [a river] should be deep enough to admit the passage of boats at all portions of the stream.” *See Danes v. State*, 113 N.E. 786, 787 (N.Y. 1916). On the other hand, Maryland, Massachusetts, and New Jersey continue to use the colonial era ebb-and-flow test, which finds its genesis in English common law. *See, e.g., Wagner v. City of Balt.*, 124 A.2d 815, 820 (Md. 1956); *Brosnan v. Gage*, 133 N.E. 622, 624 (Mass. 1921); *Cobb v. Davenport*, 32 N.J.L. 369, 378 (N.J. 1867).

I am also concerned that the majority’s ruling will result in a sea change with respect to judicial decisions that have already recognized North Carolina’s ownership of its waters and the lands thereunder. From my viewpoint, the majority’s ruling could cloud land titles in North Carolina. And, of course, such land title concerns should be addressed in the state courts of North Carolina. A similar result was avoided in 1988 by the Supreme Court’s decision in *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988). Writing for the majority, Justice White declined to strictly apply the federal navigability test, deciding instead that title to non-navigable tidewaters passed to Mississippi — a newly admitted state — when it entered the Union. Explaining the Court’s receptiveness of reasoned flexibility, Justice White acknowledged that titles

“have been adjudicated based on the ebb-and-flow rule for tidelands.” *Id.* at 483. But his opinion then recognized the settled expectations of the State, commenting that

[W]e cannot know how many titles would have to be adjusted if the scope of the public trust [is] now found to be limited to lands beneath navigable tidal waters only. If States do not own lands under nonnavigable tidal waters, many state land grants based on our earlier decisions might now be invalid.

Id.

Simply put, the majority has approved an approach that is contrary to the *Phillips Petroleum* decision. By so doing, the majority may well upset the reasonable expectations of the people of North Carolina, who have been heretofore entitled to rely on their State’s legal principles and on our precedent in *Swan Island*.

3.

Assuming, however, that *Waddell’s Lessee* or the EFD provides a federal ingredient for jurisdiction in the district court, this civil action would still have to fall within that small category of “arising under” cases contemplated by the *Grable* decision and its progeny. That is, the federal ingredient can provide a basis for jurisdiction if that ingredient satisfies four requirements: (1) it has been necessarily raised, (2) it is actually disputed, (3) it is substantial, and (4) it is capable of resolution in federal court without disrupting the federal-state balance approved by Congress. *See Gunn v. Minton*, 133 S. Ct. 1059, 1065 (2013). Again, each of the *Grable* factors must be satisfied in order for a federal court to possess jurisdiction over what is otherwise a state law claim. *See, e.g., Flying Pigs, LLC v. RRAJ Franchising, LLC*, 757 F.3d 177, 182-83 (4th Cir. 2014).

Neither the district court nor the majority have grappled with the *Grable* decision and its jurisdictional principles. Alcoa Power and the State of North Carolina — along with the amici Yadkin Riverkeeper, Inc., and American Whitewater — have nevertheless briefed those principles. Having carefully assessed the *Grable* factors, I am satisfied that an exercise of federal court jurisdiction would yet be inappropriate.⁷

4.

In these circumstances, there is a lack of federal question jurisdiction in this litigation under either *Waddell's Lessee* or the EFD. And federal question jurisdiction plainly does not flow — in my view — from the *Grable* factors. The federal court in eastern North Carolina therefore lacked jurisdiction to resolve this quiet title dispute. This lawsuit should thus be returned to the state courts of North Carolina, to be decided on the basis of the applicable law of the Old North State.

B.

Before turning to the merits of this appeal, it is appropriate to briefly discuss the background of the federal navigability test for waterways, as well as North Carolina's comparable navigability test. As the majority would have it, the federal navigability test

⁷ If either the district court or the majority had assessed the *Grable* factors, they would also have found federal court jurisdiction wanting. Briefly put, none of the *Grable* factors are satisfied by this litigation: (1) the federal issue is not necessarily raised here because several other legal theories support the State of North Carolina's quiet title action; (2) the federal question is not actually disputed in this litigation because the parties do not contest the validity, construction, or effect of any federal law; (3) there is no substantial federal interest implicated by this matter; and (4) the exercise of federal court jurisdiction would seriously disrupt the federal-state balance.

with respect to riverbed title in the newly admitted states, as explained in *PPL Montana*, is also applicable to the Thirteen Original States. The federal navigability test, as spelled out by the Supreme Court in 1870 in *The Daniel Ball*, is as follows:

Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.

See 77 U.S. 557, 563 (1870). Generally, the federal navigability test has been used to determine whether a river is within the scope of congressional regulatory authority under the Commerce Clause. *See, e.g., Gibson*, 166 U.S. at 271-72 (“All navigable waters are under the control of the United States for the purpose of regulating and improving navigation . . .”). That test also applies, however, to an assessment of riverbed title under the EFD, as the Court explained in *PPL Montana*. In utilizing the federal navigability test for such a title assessment, *PPL Montana* requires consideration of a river and its riverbeds “on a segment-by-segment basis to assess whether the segment . . . under which the riverbed in dispute lies, is navigable or not.” *See* 565 U.S. at 593.

But *PPL Montana* has specifically reserved to the States, in the words of Justice Kennedy, the “residual power to determine the scope of the public trust over waters within their borders.” *See* 565 U.S. at 604. The Court thereby explicitly authorized the States to develop their own navigability tests for purposes of the public trust doctrine. North Carolina has long since developed its own navigability test for public trust

purposes, and the distinctions between the North Carolina’s test and the federal test are important here.

Under North Carolina law, as the Supreme Court of North Carolina has explained, a river’s navigability has been assessed — since at least 1886 — “by a more practical test of [its] capacity to float boats used as instruments of commerce, in the interchange of commodities, and large enough for the purpose.” *See Broadnax v. Baker*, 55 Am. Rep. 633, 681 (N.C. 1886). More than a century later, in 1995, the high court of North Carolina further explained the State’s navigability test:

[I]f a body of water in its natural condition can be navigated by watercraft, it is navigable in fact and, therefore, navigable in law, even if it has not been used for such purpose.

See Gwathmey v. State ex rel. Dep’t of Env’tl., Health, & Nat. Res., 464 S.E.2d 674, 682 (N.C. 1995).

On its face, North Carolina’s navigability test is somewhat similar to the federal navigability test, in that both tests weigh the question of whether waters have been or can be used by watercraft. Two important distinctions exist, however, between those tests. First, although the federal navigability test requires navigation for commercial purposes, the North Carolina test only requires some use by watercraft, which may include “pleasure boating.” *See Gwathmey*, 464 S.E.2d at 682 (quoting *State v. Twiford*, 48 S.E. 586, 588 (N.C. 1904)). Second, the federal test assesses the navigability of discrete segments of a waterway, thus permitting minor interruptions in a river’s navigability to render a specific segment non-navigable. Under the North Carolina test, however,

navigable waters, according to the State’s high court in 1886, “lose not their navigability, because intercepted by falls, when above and below them, the waters can be thus used for the purpose of commerce for long distances.” *See Broadnax*, 55 Am. Rep. at 681.

The federal navigability test — the only test utilized by the district court and the majority — favored Alcoa Power’s position in this litigation because minor interruptions in navigability were deemed to render non-navigable the entirety of the disputed 45-mile segment. Further, in assessing the navigability of the Yadkin River, the lower court only evaluated the commercial uses of that splendid River. On the other hand, North Carolina’s navigability test strongly favors the State’s position in these proceedings because, under that test, minor interruptions in navigability will not undermine the proposition that the entirety of a river is navigable. And if the district court had utilized North Carolina’s navigability test, it would have considered the non-commercial uses of the River instead of confining its analysis to commercial uses only.

The district court thus fatally erred in resorting solely to the federal navigability test to assess North Carolina’s title to the Yadkin River and its riverbeds. In the context of this quiet title action, the federal navigability test is not applicable to the rivers of North Carolina. Rather, the federal test, as explained further below, applies only in the newly admitted states. North Carolina’s own navigability test and the related state law principles apply here.

C.

Because the panel majority has resolved the jurisdictional issue in favor of Alcoa Power, I turn to the majority's resolution of the merits. Put succinctly, its assessments thereof are erroneous in multiple respects. Those errors find their genesis in the two primary orders of the district court that underlie the merits of this appeal: (1) the court's Navigability Order of May 6, 2015; and (2) the court's Summary Judgment Order of September 28, 2015. I will assess those orders in some depth, beginning with the Navigability Order.

1.

After concluding that it possessed jurisdiction, the district court conducted a two-day hearing — on April 21 and 22, 2015 — on the question of whether the Yadkin River was navigable at statehood. During that hearing, the parties presented evidence with respect to the navigability of the disputed 45-mile segment of the River. At the conclusion of the hearing, the court ruled from the bench that, under the federal navigability test, the entirety of the disputed segment was not navigable at statehood.⁸

⁸ By way of geographical and historical background, I recite the following:

The Yadkin River rises in western North Carolina on the eastern slope of the Blue Ridge Mountains near Blowing Rock, at approximately river mile 433 (with the mouth of the Pee Dee River — located at the Atlantic Ocean near Georgetown, South Carolina — being river mile 0). The Yadkin is part of the Yadkin Pee Dee River Basin, the second largest river basin in North Carolina. That River Basin contains approximately 5800 miles of streams and 23,000 acres of lakes, spans 21 counties and 93 municipalities, and covers more than 7000 square miles of the Tar Heel State. The disputed 45-mile segment begins near river mile 280, about 10 miles north of where the Yadkin River meets the (Continued)

Two weeks later, on May 6, 2015, the district court issued its Navigability Order, wherein the court explained the bases for its navigability ruling against North Carolina.

The Navigability Order is fatally flawed for three primary reasons, that is:

- The district court should have applied North Carolina’s navigability test to assess whether the Yadkin River and its riverbeds in the disputed 45-mile segment were within the scope of the public trust doctrine;
- The court failed to conduct a segment-by-segment analysis of the disputed segment, consistent with the Supreme Court’s *PPL Montana* decision; and
- The court erred in its assessment of the navigability of the disputed segment.

We review a district court’s factual findings for clear error, and we assess its legal conclusions de novo. *See United States v. Hall*, 664 F.3d 456, 462 (4th Cir. 2012).

a.

The Navigability Order and our panel majority have focused solely on whether the Yadkin River is navigable under the federal navigability test. By utilizing the federal test

South Yadkin River, and ends at river mile 233, shortly before the Yadkin joins the Pee Dee. Within the disputed segment are four dams and related reservoirs that were, for the most part, constructed in the first half of the twentieth century to power aluminum smelters and electric utilities. At river mile 253 is High Rock Lake — the largest of the reservoirs and the site of the High Rock Dam, which was completed in 1927. Nine miles downstream, at river mile 244, is the Tuckertown Reservoir, the site of the Tuckertown Dam and the newest of the reservoirs, having been completed in 1962. Next, at river mile 235, lies Badin Lake, contained by the Narrows Dam and opened in 1917, making it the oldest of these reservoirs. At river mile 233 is the smallest of the four reservoirs — the Falls Reservoir — and the home of the Falls Dam, which was completed in 1919. In claiming the disputed segment, Alcoa Power purports to own those four dams and reservoirs and the riverbeds and lands thereunder.

only, the majority and the lower court have been able to ignore North Carolina's public trust doctrine, which turns on an application of the State's navigability test. In failing to recognize and apply the public trust doctrine — and thereby subjecting the Yadkin River and its riverbeds to private ownership — the majority and the lower court have necessarily concluded that the Yadkin is not subject to the public trust.

The public trust doctrine places upon the fifty States a duty to safeguard the rights of their citizens, both current and future, to certain resources contained therein — including their navigable waters and the lands thereunder. In 1894, the Supreme Court explained the public trust doctrine in these terms:

[T]he navigable waters and the soils under them . . . shall not be disposed of piecemeal to individuals, as private property, but shall be held for the purpose of being ultimately administered and dealt with for the public benefit by the state.

See Shively v. Bowlby, 152 U.S. 1, 49-50 (1894).

Of great importance, the Supreme Court of North Carolina has adopted and consistently applied the public trust doctrine. In 1995, that court recognized that

the public trust doctrine operates as a rule of construction creating a presumption that the General Assembly did not intend to convey lands in a manner that would impair public trust rights.

See Gwathmey, 464 S.E.2d at 684. Because of the public trust doctrine, Alcoa Power could not have acquired title to the Yadkin River and its riverbeds except by an express conveyance made by the General Assembly. *Id.* And it is elementary that a State cannot shirk its responsibility under the public trust doctrine to protect trust properties such as the Yadkin and its riverbeds. *See Ill. Cent. R. Co. v. Illinois*, 146 U.S. 387, 453 (1892);

see also, e.g., *United States v. 1.58 Acres of Land*, 523 F. Supp. 120, 124 (D. Mass. 1981) (“The trust is of such a nature that it can be held only by the sovereign, and can only be destroyed by the destruction of the sovereign.”).

The Supreme Court has long recognized that the States “have the authority to define the limits of the lands held in public trust and to recognize private rights in such lands as they see fit.” See *Phillips Petroleum*, 484 U.S. at 475. As a result, for purposes of the public trust doctrine, a river’s navigability should be assessed under the state’s own navigability test:

Application of the federal title test does not completely determine which natural resources are subject to the public trust doctrine. . . . [T]o determine whether the public trust doctrine applies to a waterway, states may use their own navigability tests.

See 1 State Envtl. L. § 4:11, Westlaw (database updated Jan. 2016). As explained heretofore, North Carolina’s navigability test strongly favors the State’s position in this litigation.

Importantly, the General Assembly explicitly declared in 1885 that the Yadkin River is a public highway of the State under the public trust doctrine:

That the Yadkin river from the northern boundary line of the county of Davidson to its junction with the Great Pee Dee river, and the Great Pee Dee from said junction to the boundary line of the State of South Carolina, be and the same are hereby declared public highways for the free passage of boats, flats, rafts and other means of transportation.

See 1885 N.C. Sess. Laws ch. 212 § 1, *reproduced at* J.A. 140-41. That statutory declaration confirms beyond peradventure that the Yadkin River — and thus the disputed 45-mile segment thereof — is yet a public highway protected by North Carolina’s public

trust doctrine. As a result, the Yadkin and its riverbeds could only have been acquired by Alcoa Power through “a special grant from the General Assembly expressly conveying lands underlying navigable waters in fee simple and without reservation of any public trust rights.” *See Gwathmey*, 464 S.E.2d at 684 (emphasis omitted). The General Assembly has never made such a special grant with respect to the disputed segment — and that fact is controlling here.

By ignoring the public trust doctrine, the lower court and the majority have allowed private interests to usurp the public trust rights of the people of North Carolina. In the amicus submission of the interested law professors, we have been implored to uphold the rights of the public:

This Court should not permit private interests in vital public resources to trump the rights of public beneficiaries in this sovereign trust There is much more at stake in this case than title to one stretch of river.

See Amicus Curiae Br. of Law Professors 19. To ensure the protection of North Carolina’s public trust rights with respect to the Yadkin River, the district court was obliged to apply North Carolina’s navigability test and to assess the applicability of the public trust doctrine to the disputed 45-mile segment thereof. By failing to make that assessment, the Navigability Order — as a matter of law — is fatally flawed.⁹

⁹ To the extent Alcoa Power contends on appeal that North Carolina has somehow conceded in certain court and administrative proceedings that Alcoa Power owns lands protected by the public trust, we should readily reject that contention as well. Again, public trust lands can only be conveyed by a special grant of the General Assembly. As a result, any purported concessions by representatives of the State — before any tribunal or administrative agency — cannot and do not constitute the special grant mandated by (Continued)

b.

Assuming the Supreme Court’s *PPL Montana* decision applies here, the Navigability Order erred in failing to conduct a segment-by-segment analysis of the disputed 45-mile segment of the Yadkin River. This error also fatally undermines — as a matter of law — the Navigability Order. In *PPL Montana*, the Supreme Court explained that a court should analyze “the river on a segment-by-segment basis.” *See* 132 S. Ct. at 1229. Accordingly, a court conducting a navigability analysis must determine “the exact point at which navigability may be deemed to end.” *Id.* (quoting *United States v. Utah*, 283 U.S. 64, 90 (1931)). As Justice Kennedy recognized in *PPL Montana*, “[t]he segment-by-segment approach to navigability for title is well settled, and it should not be disregarded.” *Id.*

Pursuant to *PPL Montana*, the disputed 45-mile segment was erroneously assessed by the district court in its entirety — as one single segment. That is, the Navigability Order incorrectly evaluated the disputed segment as a whole. This single-segment method was plainly erroneous — as a matter of law — and a proper segment-by-segment approach would have found the discrete points where navigability ended and then again began.

North Carolina law. Put another way, Alcoa Power cannot predicate its ownership of public trust lands on alleged concessions by North Carolina’s counsel or other representatives. That contention should be summarily rejected as frivolous and immaterial.

The Navigability Order was also erroneously based on the proposition that the parties had stipulated that the navigability of the disputed 45-mile segment was an all-or-nothing proposition. *See* Navigability Order 2 (“The parties stipulated that the relevant segment for purposes of navigability is the 45-river-mile segment of the historic riverbed lying between River Miles (RM) 233.1 and 279.7, with the mouth of the Pee Dee being RM 0.”). No such stipulation exists in the record, however, further undermining the court’s navigability ruling. Although the parties sometimes referred to the disputed segment of the Yadkin River as the “Relevant Segment,” that reference was clearly a term of convenience for the parties and the court. That fact is evidenced by the district court’s Final Pretrial Order of February 2, 2015, which identified the “Relevant Segment” as follows:

The Relevant Segment of the Yadkin River is the approximately 45-river-mile segment (37 miles as the crow flies) of the historic riverbed now within the Yadkin Hydroelectric Project

See Final Pretrial Order ¶ 4. That provision of the Final Pretrial Order was obviously definitional. It was not a stipulation of the parties that would in any way relieve the court of its obligation to adhere to applicable legal principles and conduct the segment-by-segment analysis mandated by the Supreme Court.

By using the all-or-nothing approach, however, the Navigability Order erroneously concluded that the disputed 45-mile segment was not navigable in any respect because minor portions thereof — specifically the 3.2 mile portion historically known as the Narrows and the Falls — were considered as subject to short interruptions

in navigability. I agree with the proposition emphasized by the amicus American Whitewater, however, that,

[i]n so concluding, the district court contravened the primary holding of *PPL Montana* that analysis of a river's navigability for purposes of riverbed title must examine each topographically-distinct reach *separately*, in order to determine "the exact point at which navigability may be deemed to end."

See Amicus Curiae Br. of Am. Whitewater 17-18 (quoting *PPL Montana*, 132 S. Ct. at 1229). The Navigability Order thus fatally erred — again as a matter of law — in its failure to apply *PPL Montana*'s segment-by-segment analysis.¹⁰

c.

Third, even if the federal navigability test applies here, the Navigability Order failed to properly apply that test. In assessing the navigability of the Yadkin River, that Order failed to accept compelling evidence showing that the Yadkin was navigable at statehood, regardless of which navigability test is applied.

¹⁰ According to the majority, the Navigability Order found that the disputed 45-mile segment should be considered as a single segment of the Yadkin River, a proposition supported by Dr. Michael Harvey — one of Alcoa Power's experts. The Navigability Order does not feature any findings on the segmentation issue, however. It wholly relies on the so-called stipulation — rejected by North Carolina — that the disputed segment must be considered as a whole. Nor would Harvey's evidence support a finding that the disputed segment should be assessed as a single segment of the Yadkin under *PPL Montana*. Harvey merely opined that Alcoa Power's segmentation contention was proper because "[t]he state defined it as such, but there is [a] geologic basis for it." J.A. 361. Harvey's statement in that regard, however, does not comport with the mandate of *PPL Montana*, because he fails to identify the discrete points where navigability begins and ends.

Waters that are legally navigable are also factually navigable, “[a]nd they are navigable in fact when they are used, or are susceptible to being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.” *Utah*, 283 U.S. at 76. In its *Utah* decision in 1931, the Supreme Court explained that the federal navigability test is not concerned with the extent to which the waters are used for commerce. Instead, that test is concerned with evidence that shows actual use, which the Court characterized as the “most persuasive” evidence of navigability. *Id.* at 82. Even infrequent or limited use of waterways may be sufficient evidence of navigability.¹¹

North Carolina presented evidence at the April 2015 hearing of the actual historic use of the Yadkin River, the type of evidence that the *Utah* decision identified as being “most persuasive.” *See* 283 U.S. at 82. First, the State’s evidence was that, in the 1790s, Richmond Pearson — a hero of the American Revolution and a merchant — navigated the entirety of the Yadkin River beginning at Wilkesboro (downriver from the Yadkin’s origins near Blowing Rock). *See, e.g.*, J.A. 555. Wilkesboro is more than 100 miles

¹¹ In its *Utah* decision, the Supreme Court explained that “[t]he extent of existing commerce is not the test” to be applied when assessing a waterway’s navigability. *See Utah*, 283 U.S. at 82. Instead, the Court explained the applicable inquiry as follows:

The evidence of the actual use of streams, and especially of extensive and continued use for commercial purposes may be most persuasive, but, where conditions of exploration and settlement explain the infrequency or limited nature of such use, the susceptibility to use as a highway of commerce may still be satisfactorily proved.

Id.

upstream from the disputed segment. Pearson was able to navigate well into South Carolina, several miles downstream from the disputed segment, with minimal need for portage. *See, e.g., id.* at 288-90.

The State's evidence also proved that Henry Deberry — a member of the General Assembly — reported to the Assembly in 1796 that the Yadkin River “[h]as been Navigated by Boats.” *See* J.A. 757. Additionally, the State's evidence proved that part of the disputed 45-mile segment was used to transport tobacco in the 1790s, as observed by Spruce Macay — a North Carolina judge who had tutored Andrew Jackson. *Id.* at 761-62.

Most importantly, however, Alcoa Power's own expert provided compelling evidence that the Yadkin River was navigated and used for commercial purposes prior to statehood. Alcoa's expert Mark Newell admitted that Native Americans and early settlers had regularly used the Yadkin to travel and transport hides and other goods for barter. Newell, however, opined that such uses of the Yadkin were non-commercial. *See* J.A. 408. In his view, the Native Americans had not engaged in commerce, but were only involved in bartering. *Id.* That proposition is ridiculous, however, because bartering is commerce. “Barter” is defined as the “exchange (goods or services) for other goods or services without using money.” *See Barter*, New Oxford American Dictionary (3d ed. 2010). In fact, our own government recognizes that bartering is “the oldest form of commerce.” *See Four Facts About Bartering (IRS Tax Tip 2011-33)*, IRS (Feb. 16, 2011). Those multiple instances of actual navigation and use of the Yadkin River —

shown by the evidence of record — are more than sufficient to prove its navigability under the federal test. *See Utah*, 283 U.S. at 82.¹²

The Navigability Order rested its outcome in large part on marginal evidence provided by another expert for Alcoa Power, a Dr. Morrill. For example, the Order deemed it relevant that records of the Moravians — a religious community that settled in the Piedmont area of North Carolina — failed to discuss or show navigability of the Yadkin, despite the Moravian settlements' purported proximity to the disputed 45-mile segment. But Morrill's testimony does not at all prove the Yadkin River was never used for commerce, rendering his Moravian references hardly pertinent to the navigability inquiry. In any event, the closest Moravian settlements, near present-day Winston-Salem, were well east of the Yadkin and nearly twenty miles north of where the disputed segment begins.¹³

¹² Despite the foregoing evidence of actual use of the disputed 45-mile segment, the Navigability Order rejected and ignored that evidence in favor of Alcoa Power's experts. The Navigability Order also ignored Newell's concession that the Yadkin had been used by Native Americans and settlers for commerce. And the Order relied on Harvey's opinions about the geology of the Yadkin in the eighteenth century, even though those opinions were undermined by the evidence of actual use of the disputed segment.

¹³ Additionally, the Navigability Order misapprehended evidence concerning General Nathanael Greene's directive that his troops affix wheels to boats as the Continental Army travelled overland prior to the Battle of Guilford Courthouse (in the Cape Fear River Basin). Although interesting, General Greene's innovative use of his wagons and boats against Charles Cornwallis and the British had nothing to do with whether the Yadkin River was navigable. In fact, General Greene was primarily interested in reaching and crossing the Dan River (in the Roanoke River Basin) — not navigating or fording the Yadkin.

In these circumstances, I am firmly convinced that the district court erred in its Navigability Order. The court not only legally erred with respect to the applicable navigability test and the segment-by-segment analysis, it misapplied and ignored compelling proof that the Yadkin River was historically used by Native Americans and settlers for commerce. Its ruling that the Yadkin was non-navigable at statehood is, in my view, clearly erroneous. Upon assessing the entire record, I hold a definite and firm conviction that a mistake was committed by the district court with respect to its navigability conclusion. *See Hall*, 664 F.3d at 462 (explaining that clear error occurs when “the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed” (quoting *United States v. U.S. Gypsum Co.*, 333 U.S. 364, 395 (1948))).

2.

After the district court entered its Navigability Order, it authorized the parties to seek summary judgment in light of those rulings. Alcoa Power thus moved for summary judgment, arguing that it owned the disputed 45-mile segment, pursuant to North Carolina’s Marketable Title Act (the “MTA”) and the doctrine of adverse possession.

On September 28, 2015, the Summary Judgment Order ruled in favor of Alcoa Power based on the MTA and the doctrine of adverse possession. The Summary Judgment Order posited, *inter alia*, that “any evidence of valid title would outweigh the presumption [of title] in favor of the State.” *See* Summ. J. Order 7. The court thus concluded that, as a matter of law, a fee simple title to the disputed 45-mile segment was

vested in Alcoa Power because the evidence proved that the MTA gave Alcoa a valid title. That Order also rejected the State’s contention that the disputed 45-mile segment was not subject to acquisition by way of adverse possession, because the Yadkin River was within the scope of the public trust doctrine. In so ruling, the district court observed that “the State has not demonstrated that it has title to the Relevant Segment,” and concluded that Alcoa Power had satisfied the claim of adverse possession as a matter of law. *See* Summ. J. Order 8.

Put succinctly, the Summary Judgment Order erroneously awarded title to the disputed 45-mile segment to Alcoa Power. Three aspects of that Order warrant further emphasis:

- The court should not have awarded summary judgment to Alcoa Power on the basis of the MTA;
- The court erroneously shifted the burden of proof with respect to the MTA to the State of North Carolina; and
- The court erroneously predicated the summary judgment award on the doctrine of adverse possession.

We review an award of summary judgment *de novo*. *See Libertarian Party of Va. v. Judd*, 718 F.3d 308, 312 (4th Cir. 2013). Applying this standard, “we are required to view the facts and all justifiable inferences arising therefrom in the light most favorable to the nonmoving party [i.e., North Carolina].” *Id.*

a.

The MTA cannot, as a matter of law, be used to undermine the public trust doctrine. The MTA concerns itself only with title rights that are dependent on an “act,

title transaction, event or omission.” See N.C. Gen. Stat. § 47B-2(c). North Carolina’s obligation to hold the Yadkin River and its riverbeds in trust for the people of the Old North State — pursuant to the public trust doctrine — is an aspect of the State’s sovereignty as one of the Thirteen Original States. That public trust right is not in any way dependent on an “act, title transaction, event or omission.” *Id.* Resultantly, the MTA cannot be utilized or relied upon to divest North Carolina of its sovereign rights with respect to the Yadkin River.

Contrary to the majority’s view, the absence of an explicit public trust exception in the MTA does not render the public trust doctrine inapplicable here. The General Assembly had no reason to include such an exception in the MTA, because the public trust doctrine has always been part-and-parcel of North Carolina law with respect to its waters. See *State ex rel. Rohrer v. Credle*, 369 S.E.2d 825, 828 (N.C. 1988) (“The policy of the State from 1777 . . . was . . . to preserve its title to the navigable waters, as the same had been held by the King of England, in trust for the free use of all its citizens.” (quoting *Land Co. v. Hotel*, 44 S.E. 39, 44 (N.C. 1903))). In fact, the North Carolina Court of Appeals recognized in 2007 that there is “nothing in the [MTA] that would allow the rights of the public to a dedicated right-of-way to be abolished.” See *Kraft v. Town of Mt. Olive*, 645 S.E.2d 132, 138 (N.C. Ct. App. 2007). As explained in the amicus submission of the interested law professors, the MTA is simply “antithetical to the public trust doctrine.” See Amicus Curiae Br. of Law Professors 14.

Pursuant to the public trust doctrine, the Yadkin River and its riverbeds have not, on this record, ever been conveyed to a private owner. Any such conveyance could only be made by a “special grant” of the General Assembly, which unmistakably “convey[ed] the lands in question free of all public trust rights . . . in the clearest and most express terms.” See *Gwathmey*, 464 S.E.2d at 684. Again, the Yadkin and its riverbeds have never been so conveyed — and the MTA itself does not constitute such a “special grant” by the General Assembly. Put simply, the MTA can neither abolish nor supersede the public trust doctrine. Accordingly, the district court erred in relying on the MTA to award summary judgment to Alcoa Power.

b.

The Summary Judgment Order also erred by failing to impose the burden of proof on Alcoa Power with respect to its MTA claim. Under North Carolina law, Alcoa Power was obliged to shoulder that burden, and the company therefore had to overcome the statutory presumption that title to the disputed 45-mile segment has been vested in the State since 1776. See N.C. Gen. Stat. § 146-79. The MTA does nothing to defeat that presumption in favor of North Carolina. See *Taylor v. Johnston*, 224 S.E.2d 567, 580 (N.C. 1976).

In a quiet title action such as this, “the party with the burden of proof . . . must make at least a *prima facie* showing of title, one method of which is by the offer of a connected chain of title from the State to [itself].” See *State v. Taylor*, 304 S.E.2d 767, 770 (N.C. Ct. App. 1983). In its handling of this litigation, the district court initially —

and correctly — believed that a full trial would be necessary to resolve the land title issues. As the court first observed, “the connected chain of title inquiry is an extraordinarily fact-intensive one, involving thousands of documents, hundreds of properties, and decades of history.” See J.A. 228. The court thereafter altered its approach by 180 degrees, advising the parties that it would not be conducting the fact-intensive chain of title inquiry:

If you think I’m going to be sitting here for two years going through title instruments, I would rather be off this earth than do that. That’s not going to happen.

Id. at 514. The court thereby relieved Alcoa Power of its very substantial — and likely impossible — burden of proof. This legal error mandates a summary vacatur of the Summary Judgment Order.¹⁴

c.

Finally, the Summary Judgment Order erroneously awarded judgment to Alcoa Power on the basis of the doctrine of adverse possession. The district court erred because, as explained above, the Yadkin River and its riverbeds are held in trust — under

¹⁴ Additionally, the Summary Judgment Order erroneously concluded that the open possession exception of the MTA was inapplicable. See N.C. Gen. Stat. § 47B-3(3) (protecting “[r]ights, estates, interests, claims or charges of any person who is in present, actual and open possession of the real property so long as such person is in such possession”). Viewing the evidence in the light most favorable to North Carolina, the district court erred for two reasons. First, the State never conceded that its interests in the disputed 45-mile segment was non-possessionary. Second, the regulatory authority continuously exercised by the State over the disputed segment indicates that the State has been in continuous possession thereof.

the public trust doctrine — for the people of North Carolina. And public trust land in North Carolina simply cannot — under state law — be acquired by way of adverse possession. *See* N.C. Gen. Stat. § 1-45.1 (“Title to real property held by the State and subject to public trust rights may not be acquired by adverse possession.”). Like the MTA, adverse possession is “antithetical to the public trust doctrine.” *See* Amicus Curiae Br. of Law Professors 14. Put simply, the public trust doctrine and the foregoing statutory mandate readily settle the adverse possession issue. As a matter of law, the adverse possession ruling also undermines the Summary Judgment Order, which should be vacated.¹⁵

D.

In sum, the federal courts lack jurisdiction in this litigation and it should be remanded to the state courts of North Carolina. If we possess jurisdiction, however (as the majority today rules), both the majority and the district court have erred on the merits.

¹⁵ Even if the public trust doctrine did not apply, the adverse possession ruling of the Summary Judgment Order was erroneous for two additional reasons. First, the district court again upended the burden of proof, transferring that burden to the State. Despite the State being entitled to a statutory presumption of title, the Summary Judgment Order concluded that “the State has not demonstrated that it has title to the Relevant Segment.” *See* Summ. J. Order 8. Second, Alcoa Power was not entitled to judgment on its adverse possession claim because there is a readily apparent dispute concerning whether it has satisfied the adverse possession elements. Viewing the evidence in the proper light, Alcoa Power’s use of the disputed 45-mile segment was never more than a permissive use. Furthermore, Alcoa Power never placed the State on notice of a hostile use of the disputed segment and Alcoa Power’s use of the segment was never an exclusive use.

In the latter circumstance, we should vacate the judgment and remand for such other and further proceedings as may be appropriate.

I most respectfully dissent.