

*PPL MONTANA: THE SUPREME COURT'S
MODERN DAY CITY SLICKER APPROACH FOR DETERMINING
THE NAVIGABILITY FOR TITLE TEST*

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*The river thunders in perpetual roar, swelling in floods of music
when the storm gods play upon the rocks and fading away in soft and
low murmurs when the infinite blue of heaven is unveiled. With the
melody of the great tide rising and falling, swelling and vanishing
forever, other melodies are heard in the gorges of the lateral canyons,
while the waters plunge in the rapids among the rocks or leap in great
cataracts.¹*

I. INTRODUCTION

In a case “for history buffs,”² the United States Supreme Court, a court “dominated by Easterners,” recently “tried to make sense . . . of a Western water dispute.”³ The case provided the Court with the opportunity to clarify the navigability for title test, a matter on which it had not spoken for many years.⁴ Specifically, the Court was asked to decide whether the need to portage around certain segments of a waterway defeated a finding of navigability.⁵

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¹ JOHN WESLEY POWELL, CANYONS OF THE COLORADO 394 (Argosy-Antiquarian Ltd. 1964) (1895).

² Thomas Merrill, *Argument Preview: In the Footsteps of Lewis and Clark*, SCOTUSBLOG (Dec. 1, 2011, 2:32 PM), <http://www.scotusblog.com/?p=133139> [hereinafter Merrill, *Argument Preview*]. In a possible attempt to satisfy history buffs, Justice Kennedy’s opinion for the Court “reads like a travelogue” and cites “multiple editions of the journals of Lewis and Clark, their letters, other travel diaries, nineteenth-century newspaper articles, encyclopedias, obscure government reports, and secondary sources detailing Montana history.” Thomas Merrill, *Opinion Analysis: Montana Dunked on Riverbeds*, SCOTUSBLOG (Feb. 23, 2012, 11:03 AM), <http://www.scotusblog.com/2012/02/opinion-analysis-montana-dunked-on-riverbeds/> [hereinafter Merrill, *Opinion Analysis*].

³ Mark Sherman & Matt Volz, *Montana Riverbed Dispute Takes Historical Turn Before U.S. Supreme Court*, RED LODGE CLEARINGHOUSE (Dec. 11, 2011), <http://www.rlch.org/news/montana-riverbed-dispute-takes-historical-turn-us-supreme-court>.

⁴ Merrill, *Argument Preview*, *supra* note 2.

⁵ See Merrill, *Opinion Analysis*, *supra* note 2 (“The principal question before the Court concerned discrete segments of otherwise-navigable rivers which were sufficiently obstructed that commercial travelers had to portage around them.”).

The State of Montana argued for a “river as a whole” approach, in which a river could be deemed navigable in fact when looked at as a whole, ignoring certain nonnavigable segments.⁶ On the other hand, PPL Montana, a hydroelectric company that operates several hydroelectric dams on certain sections of the three disputed rivers—the Missouri, Madison, and Clark Fork—argued for a segment-by-segment approach in which courts focus their attention on individual segments of the river and decide whether those particular sections were navigable in fact at the time of statehood.⁷ The Supreme Court was also asked to decide the extent and nature of present-day evidence of navigation that could be used in making this determination.⁸

The Court unanimously held that the segment-by-segment approach is the appropriate standard, and present-day evidence of navigation can be used only if the watercrafts are similar to those used at statehood and the river is in the same physical condition as it was at the time of statehood.⁹ To justify its holding, the Court noted “a contrary rule would allow private riverbed owners to erect improvements on the riverbeds that could interfere with the public’s right to use the waters as a highway for commerce.”¹⁰ Because commerce did not occur on the obstructed segments, “there is no reason that these segments also should be deemed owned by the State under the equal-footing doctrine.”¹¹ According to the Supreme Court, the primary flaw in the lower court’s decision was its negative treatment of the segment-by-segment approach.¹²

Part II of this Note examines the legal history of the navigability for title test prior to the Supreme Court’s recent decision. Part III looks at the Court’s holding that the segment-by-segment approach is well-established law. Part IV examines the Court’s interpretation of whether present-day, recreational use should be considered in the navigability for title test. Part V explains the connection between the navigability for title test and the Public Trust Doctrine. Part VI argues that the Court’s decision was incorrectly decided and based on misinterpretation of previous opinions and legal precedent. It also argues that the Court’s decision upset established legal precedent by discrediting the “river as a whole” standard in the navigability for title test. Part VI contends the Court’s decision unbalanced the navigability for title two-part test by making it more difficult for States to prove the second prong of the test—whether a waterway was susceptible of being used as a highway for commerce at the time of statehood. Finally, Part VII discusses why the Court’s decision will have serious negative impacts on ecosystem management, protection, and conservation, and

⁶ See *PPL Mont., LLC v. Montana (PPL I)*, 132 S. Ct. 1215, 1226 (2012).

⁷ Brief of Petitioner at 3, 34, *PPL II*, 132 S. Ct. 1215 (No. 10-218), 2012 WL 3894396, at *3.

⁸ Order Granting Petition for Writ of Certiorari, *PPL II*, 131 S. Ct. 3019 (2011) (No. 10-218) (mem.).

⁹ *PPL II*, 132 S. Ct. at 1229, 1233.

¹⁰ *Id.* at 1230.

¹¹ *Id.*

¹² *Id.* at 1229.

will allow fewer waterways to come under state control subject to the environmentally protective shield of the Public Trust Doctrine.

II. A BRIEF HISTORY OF “NAVIGABILITY” IN AMERICAN JURISPRUDENCE

*The Daniel Ball*¹³ is the seminal case in articulating the traditional navigability for title test:

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.¹⁴

The test applies to all inland waterways, not just rivers, and contains two main elements.¹⁵ First, it must be determined whether a waterway was “used” as a highway for commerce at the time a particular state was admitted to the Union. Second, in the alternative, it must be determined whether a waterway was “susceptible of being used” as a highway for commerce at the time a particular state was admitted to the Union.¹⁶ For both elements, an examining court must also determine both the “customary modes of trade and travel” and “ordinary condition” of the waterway at the time of statehood.

States obtain legal title to the beds and banks of all waterways within their borders that are determined to be “navigable in fact.”¹⁷ The transfer of title occurs as a result of the “equal-footing doctrine,” which grants “newly admitted State[s] the same property interests in submerged lands as was enjoyed by the Thirteen Original States as successors to the British Crown.”¹⁸ The federal

¹³ 77 U.S. 557 (1870).

¹⁴ *Id.* at 563.

¹⁵ See *United States v. Oregon*, 295 U.S. 1, 17 (1935).

¹⁶ In *The Daniel Ball*, the Court differentiated between navigable waters for title purposes and “navigable waters of the U.S.” for Commerce Clause and other purposes. *The Daniel Ball*, 77 U.S. at 563. For title, you need not show use in interstate commerce, just commerce. As discussed *infra* Part IV, the Court in *PPL Montana* made the same distinction between that case and the Court’s decision in *The Montello*, 87 U.S. 430 (1874).

¹⁷ *Oregon*, 295 U.S. at 14 (“[T]he title of the United States to lands underlying navigable waters within the [S]tate passes to [the State], as incident to the transfer to the [S]tate of local sovereignty . . .”). But, “if they were not then navigable, the title to the [beds and banks of the waterways] remained in the United States.” *United States v. Utah*, 283 U.S. 64, 75 (1931); see also *Oklahoma v. Texas*, 258 U.S. 574, 583, 591 (1922) (Oklahoma did not take ownership of segments of the Red river because those segments were not navigable at statehood).

¹⁸ *Utah v. United States*, 403 U.S. 9, 10 (1971) (citing *Pollard’s Lessee v. Hagan*, 3 How. 212, 222–23, 228–30, 44 U.S. 212 (1845)).

government retains the power “to control such waters for purposes of navigation in interstate and foreign commerce,” even after title is vested in the State.¹⁹ However, the State enjoys sovereignty over the acquired waterways in all other situations²⁰ and title cannot be divested back to the federal government without the State’s consent.²¹

There are four different types of tests for navigability.²² The *Daniel Ball* two-part test applies in all four situations.²³ However, the test for navigability “is not applied in the same way in these distinct types of cases,” and “each application of the *Daniel Ball* test is apt to uncover variations and refinements which require further elaboration.”²⁴

The *Daniel Ball* two-part test does not require waterways to be navigable by a particular size or type of watercraft.²⁵ The Court has held that any watercraft “that can float upon the water, whether propelled by animal power, by the wind, or by the agency of steam, are, or may become, the mode by which a vast commerce can be conducted,” and that this is evidence of possible navigability.²⁶

The two-part test supports a finding of navigability even though particular segments of a waterway are difficult or even impossible to navigate by

¹⁹ *Oregon*, 295 U.S. at 14.

²⁰ *Id.*

²¹ *Utah*, 283 U.S. at 88–89.

²² The Supreme Court in *PPL Montana* discussed each of the four tests. The first test is the navigability for title under the equal footing doctrine. Navigability is determined at the time of statehood and based on the “natural and ordinary condition” of the water. *PPL II*, 132 S. Ct. 1215, 1228 (2012) (quoting *Oklahoma v. Texas*, 258 U.S. 574, 591 (1922)). Second, the admiralty jurisdiction test “extends to water routes made navigable even if not formerly so.” *Id.*; see also *In re Boyer*, 109 U.S. 629, 631–32 (1884) (addressing an artificial canal). Third, the federal regulatory authority test encompasses “waters that only recently have become navigable, were once navigable but are no longer, or are not navigable and never have been but may become so by reasonable improvements.” *PPL II*, 132 S. Ct. at 1228 (citing *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 407–08 (1940); *Econ. Light & Power Co. v. United States*, 256 U.S. 113, 123–24 (1921); *Philadelphia Co. v. Stimson*, 223 U.S. 605, 634–35 (1912)). Finally, the federal commerce power test is one in which “navigation historically focused on interstate commerce,” and such power “extends beyond navigation.” *Id.* at 1228–29.

²³ *PPL II*, 132 S. Ct. at 1228.

²⁴ *Id.* at 1228–29 (internal quotation marks omitted) (citation omitted).

²⁵ See Robin Kundis Craig, *A Comparative Guide to the Western States’ Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust*, 37 *ECOLOGY L.Q.* 53, 64 (2010) (noting that the *Daniel Ball* two-part test “closely aligns navigability with usefulness in interstate commerce, suggesting that waterways must be navigable by fairly large boats and ships”). However, Professor Craig recognized that “[i]t would be a narrow rule to hold that in this country, unless a river was capable of being navigated by steam or sail vessels, it could not be treated as a public highway.” *Id.* at 65 (quoting *The Montello*, 87 U.S. 430, 441–42 (1874)).

²⁶ *The Montello*, 87 U.S. at 442.

watercraft.²⁷ In *The Montello*,²⁸ the Court noted “there are but few of our fresh-water rivers which did not originally present serious obstructions to an uninterrupted navigation,” but that did not destroy a finding of navigability.²⁹ The Court explained, “[T]he true test of the navigability of a stream does not depend on the mode by which commerce is, or may be, conducted, nor the difficulties attending navigation.”³⁰

The Court has held that waterways are not navigable in fact when trade and travel were conducted only in exceptional circumstances at the time of statehood.³¹ In *United States v. Rio Grande Dam & Irrigation Co.*,³² the Court held the Rio Grande River was not navigable in fact because it had been used for transportation purposes only in “exceptional” circumstances and only during “times of temporary high water.”³³

The same approach was taken in *Oklahoma v. Texas*,³⁴ where the Court held the Red River was not navigable in fact.³⁵ According to the Court, the Red River was used for trade and travel “[o]nly for short intervals, when the rainfall [was] running off.”³⁶ It was only during these rainstorms that the volume and depth of the water was such that “very small boats could be operated therein.”³⁷

In a separate case, the Arkansas River was held to be nonnavigable above the mouth of the Grand River in Oklahoma because the use of that “portion of the river for transportation boats has been exceptional and necessarily on high water, was found impractical, and was abandoned. The rafting of logs or freight has been attended with difficulties precluding utility. There was no practical susceptibility to use as a highway of trade or travel.”³⁸

²⁷ *United States v. Utah*, 283 U.S. 64, 86 (1931) (holding that “the mere fact of the presence of such [obstructions] causing impediments to navigation does not make a river nonnavigable”).

²⁸ 87 U.S. 430 (1874).

²⁹ *Id.* at 443.

³⁰ *Id.* at 441; *see also* *United States v. Holt State Bank*, 270 U.S. 49, 56 (1926) (affirming *The Montello*, 87 U.S. 430, by holding that navigability “does not depend on the particular mode in which such use is or may be had . . . nor on an absence of occasional difficulties in navigation, but on the fact . . . that the stream in its natural and ordinary condition affords a channel for useful commerce”); *Utah*, 283 U.S. at 76 (holding that “the true test of the navigability of a stream does not depend on the mode by which commerce is, or may be, conducted, nor the difficulties attending navigation”).

³¹ *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 699 (1899).

³² 174 U.S. 690.

³³ *Id.*

³⁴ 258 U.S. 574 (1922).

³⁵ *Id.*

³⁶ *Id.* at 587.

³⁷ *Id.*

³⁸ *United States v. Brewer-Elliott Oil & Gas Co.*, 249 F. 609, 623 (W.D. Okla. 1918), *aff'd*, 270 F. 100 (8th Cir. 1920), *aff'd*, 260 U.S. 77, 86 (1922).

In contrast, in *United States v. Utah*,³⁹ the Court found that evidence supported a finding of navigability on certain sections of the Colorado River and its tributaries.⁴⁰ In particular, the evidence showed that commercial activity “was not confined to exceptional conditions or short periods of temporary high water.”⁴¹ Rather, the waterway was capable of serving as a highway of commerce for at least nine months of each year.⁴²

The Court has also held that both parts of the *Daniel Ball* two-part test should be given equal evidentiary value, even in situations where commercial activity was scarce or non-existent at the time of statehood.⁴³ In *United States v. Utah*, the rivers at issue passed through regions of southern Utah that had been sparsely inhabited at the time of statehood.⁴⁴ As a result, very little trade or travel had been conducted on these river segments.⁴⁵ Despite these facts, the Court held the State of Utah was “not to be denied title to the beds of such of its rivers,” even though at the time of statehood “commercial utilization on a large scale await[ed] future demands.”⁴⁶ In other words,

[t]he extent of existing commerce is not the test. 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.⁴⁷

Similarly, in *Utah v. United States*,⁴⁸ the Court held that occasional use of the Great Salt Lake to transport cattle and sheep to an island on the lake was enough evidence of navigability, despite the arguments that this was not a “navigable highway in the customary sense of the word” and it served “only the few people who performed ranching operations along the shores of the lake.”⁴⁹ According to the Court, “[O]ne sheep boat for hire is in keeping with the theme of actual navigability of the waters of the lake in earlier years.”⁵⁰

³⁹ 283 U.S. 64 (1931).

⁴⁰ *Id.* at 64.

⁴¹ *Id.* at 87.

⁴² *Id.*

⁴³ *Id.* at 83.

⁴⁴ *Id.*

⁴⁵ In particular, the Court noted that “the location of the rivers and the circumstances of the exploration and settlement of the country through which they flowed had made recourse to navigation a late adventure . . .” *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.* at 82.

⁴⁸ 403 U.S. 9 (1971).

⁴⁹ *Id.* at 11.

⁵⁰ *Id.* (emphasis added).

Therefore, the “crucial question” is not the extent of commercial activity, but rather, whether commercial activity could have been conducted over the particular waterway.⁵¹ Under this approach, the Supreme Court has traditionally given both parts of the *Daniel Ball* two-part test equal evidentiary value. Any other approach would be a “mischievous rule.”⁵² However, as will be discussed below, the Supreme Court’s decision in *PPL Montana, LLC v. Montana*⁵³ appears to have unbalanced the two-part test by making it much more difficult to prove whether a waterway was susceptible of being used as a highway for commerce.⁵⁴

III. THE SEGMENT-BY-SEGMENT APPROACH IS ESTABLISHED LAW

The Montana Supreme Court downplayed the significance of the segment-by-segment approach, holding that such an approach was “a piecemeal classification of navigability—with some stretches declared navigable, and others declared non-navigable.”⁵⁵ To support its position, the court relied largely on *The Montello*, a U.S. Supreme Court decision from 1874.⁵⁶ *The Montello* held that “carrying-places” (i.e., portages) did not detract from a finding that a river was navigable in fact.⁵⁷ According to the Court, a contrary rule “would exclude many of the great rivers of the country which were so interrupted by rapids as to require artificial means to enable them to be navigated without break.”⁵⁸

[T]he vital and essential point is whether the natural navigation of the river is such that it affords a channel for useful commerce. If this be so the river is navigable in fact, although its navigation may be encompassed with difficulties by reason of natural barriers, such as rapids and sand-bars.⁵⁹

In *PPL Montana*, the Supreme Court found the lower court incorrectly discredited the segment-by-segment approach, holding “[t]he segment-by-segment approach to navigability for title is well settled, and it should not be

⁵¹ *Utah*, 283 U.S. at 82–83 (citing *Econ. Light & Power Co. v. United States*, 256 U.S. 113, 122 (1921)); *see also* *The Montello*, 87 U.S. 430, 441 (1874) (holding that “the capability of use by the public for purposes of transportation and commerce affords the true criterion of the navigability of a river, rather than the extent and manner of that use” (emphasis added)).

⁵² *The Montello*, 87 U.S. at 442.

⁵³ 132 S. Ct. 1215 (2012).

⁵⁴ *See infra* Part VI.B and accompanying text.

⁵⁵ *PPL Mont., LLC v. State (PPL I)*, 229 P.3d 421, 448 (Mont. 2010), *cert. granted in part*, 131 S. Ct. 3019 (2011), *rev’d and remanded*, 132 S. Ct. 1215 (2012).

⁵⁶ *Id.* at 446–47 (citing *The Montello*, 87 U.S. at 443).

⁵⁷ *The Montello*, 87 U.S. at 442.

⁵⁸ *Id.* at 442–43.

⁵⁹ *Id.* at 443.

disregarded.”⁶⁰ In other words, “[t]o determine title to a riverbed under the equal-footing doctrine, this Court considers the river 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.”⁶¹

The Court found that practical considerations support the segment-by-segment approach. Namely, “[p]hysical conditions that affect navigability often vary significantly over the length of a river,” particularly when the river is long and traverses different landscapes.⁶²

The Supreme Court noted,

Even if the law might find some nonnavigable segments so minimal that they merit treatment as part of a longer, navigable reach for purposes of title under the equal-footing doctrine, it is doubtful that any of the segments in this case would meet that standard, and one—the Great Falls reach—certainly would not.⁶³

At all times, the segment-by-segment approach must be sensibly applied. For example, “[a] comparison of the nonnavigable segment’s length to the overall length of the stream . . . would be simply irrelevant to the issue at hand.”⁶⁴ Under this rationale, the Court rejected the lower court’s conclusion that a multiple-week, eighteen-mile portage by the Lewis and Clark expedition around the Great Falls reach did not make that section nonnavigable.⁶⁵ In particular, Justice Kennedy noted, “Even if portage were to take travelers only one day, its significance is the same: it demonstrates the need to bypass the river segment, all because that part of the river is non-navigable.”⁶⁶ Stated differently, portages are, in most instances, sufficient to defeat a finding of navigability for the mere fact that “they require transportation over land rather than over the water.”⁶⁷

⁶⁰ *PPL II*, 132 S. Ct. 1215, 1229 (2012).

⁶¹ *Id.*

⁶² *Id.* at 1230.

⁶³ *Id.*

⁶⁴ *Id.* at 1231.

⁶⁵ *See id.*

⁶⁶ *Id.*; *see also id.* at 1232 (noting that the Montana Supreme Court referred to certain segments of the rivers at dispute as “interruptions in the navigation,” which acknowledged that these sections were “nonnavigable” (internal quotation marks omitted)).

⁶⁷ *Id.* at 1231. In support of its position, the State of Montana relied on a journal entry in which Meriwether Lewis described the Missouri River, and the waterfalls at issue, as “he didn’t think the world could furnish a finer example of a navigable river through a mountainous country than the Missouri,” to which Justice Kennedy humorously quipped, “Did he write that during his 30-day, 32-day portage?” The State of Montana quickly responded, “What’s significant is he wrote it after that portage.” Transcript of Oral Argument at 54–55, *PPL II*, 132 S. Ct. 1215 (2011) (No. 10-218).

The Court also questioned the applicability of *The Montello*. According to the Court, “the consideration of the portage in *The Montello* was for a different purpose.”⁶⁸ Specifically, the Court in *The Montello* “did not seek to determine whether the river in question was navigable for title purposes but instead whether it was navigable for purposes of determining whether boats upon it could be regulated by the Federal Government.”⁶⁹ In other words, “[t]he primary focus in *The Montello* was not upon navigability in fact but upon whether the river was a ‘navigable water of the United States.’”⁷⁰ The legal inquiry is whether “the river ‘forms by itself, or by its connection with other waters, a *continued* highway over which commerce is, or may be, carried with other States or foreign countries in the customary modes in which such commerce is conducted by water.’”⁷¹ Portages or short interruptions in navigation, under this definition, do not make a river nonnavigable because they do not “prevent the river from being part of a channel of interstate commerce,” because “goods could be successfully transported interstate, in part upon the waters in question.”⁷²

According to the Court, no showing of “continued highway” is necessary for the navigability for title test.⁷³ Rather, the legal inquiry is whether a body of water was “navigable in fact,” meaning it was “used, or [was] susceptible of being used, in [its] ordinary condition, as [a] highway[] for commerce.”⁷⁴ Therefore, while the word “highway” appears in both definitions, the word “continued” does not, and such distinction was key to the Court’s reasoning.⁷⁵

IV. USE OF PRESENT-DAY, PRIMARILY RECREATIONAL EVIDENCE IS PERMISSIBLE UNDER CERTAIN CIRCUMSTANCES

The Supreme Court held that present-day, primarily recreational use may be used as evidence of whether a particular segment of a river was navigable in fact at the time of statehood, “but the evidence must be confined to that which shows the river could sustain the kinds of commercial use that, as a realistic matter, might have occurred at the time of statehood.”⁷⁶ For this type of evidence to be considered, two factors must be met. First, the watercraft used in the present day

⁶⁸ *PPL II*, 132 S. Ct. at 1231.

⁶⁹ *Id.*

⁷⁰ *Id.* (quoting *The Montello*, 87 U.S. 430, 439, 443 (1874)). Remember, there are four different tests for navigability. See *supra* note 22 and accompanying text (discussing the four different tests for navigability).

⁷¹ *PPL II*, 132 S. Ct at 1231–32 (emphasis added) (quoting *The Montello*, 87 U.S. at 439).

⁷² *Id.* at 1232.

⁷³ *Id.* at 1231–32.

⁷⁴ *The Daniel Ball*, 77 U.S. 557, 563 (1870).

⁷⁵ Specifically, the Court noted, “It is language similar to ‘continued highway’ that Montana urges the Court to import into the title context in lieu of the Court’s established segmentation approach.” *PPL II*, 132 S. Ct. at 1232.

⁷⁶ *Id.* at 1233.

must be similar to those used at the time of statehood.⁷⁷ Second, the physical condition of the river cannot be “materially different from its physical condition at statehood.”⁷⁸

The Court stressed that for present-day evidence, “[n]avigability must be assessed as of the time of statehood, and it concerns the river’s usefulness for ‘trade and travel,’ rather than for other purposes.”⁷⁹ In other words, present-day evidence “may be considered to the extent it informs the historical determination whether the river segment was susceptible of use for commercial navigation at the time of statehood.”⁸⁰ To make this determination, “it must be determined whether trade and travel could have been conducted in the customary modes of trade and travel on water, over the relevant river segment in its natural and ordinary condition.”⁸¹

The Court offered some guidance to determine whether present-day evidence is admissible: “If modern watercrafts permit navigability where the historical watercraft would not, or if the river has changed in ways that substantially improve its navigability, then the evidence of present-day use has little or no bearing on navigability at statehood.”⁸² As an illustration, the Court referred to modern recreational fishing boats, including inflatable rafts and lightweight canoes or kayaks and noted that these vessels “may be able to navigate waters much more shallow or with rockier beds than the boats customarily used for trade and travel at statehood.”⁸³ Under these circumstances, such present-day use would not be admissible or relevant.

Therefore, in order for States to gain control of the beds and banks of waterways within their borders, they must prove that the watercrafts used today are similar to those used at statehood and that the waterway has not undergone any material change to its physical condition since statehood.

V. THE PUBLIC TRUST DOCTRINE AND NAVIGABILITY

The Public Trust Doctrine is directly intertwined with the navigability for title test, because “[d]etermining whether land is held in trust for the public by the [S]tate begins by reference to whether the land was submerged beneath navigable water when [the State] joined the United States”⁸⁴ If a particular body of water satisfies the *Daniel Ball* two-part test, control of its beds and banks

⁷⁷ The Court noted, “Personal or private use by boats demonstrates the availability of the stream for the simpler types of commercial navigation.” *Id.* at 1233 (quoting *Appalachian Elec. Power Co.*, 311 U.S. 377, 416 (1940)).

⁷⁸ *Id.*

⁷⁹ *Id.* (quoting *United States v. Utah*, 283 U.S. 64, 75–76 (1931)).

⁸⁰ *Id.*

⁸¹ *Id.* (quoting *Utah*, 283 U.S. at 76 (internal quotation marks and alterations omitted)).

⁸² *Id.* at 1233–34.

⁸³ *Id.* at 1234.

⁸⁴ *Lawrence v. Clark Cnty.*, 254 P.3d 606, 614 (Nev. 2011).

passes to the State; State control is subject to key limitations imposed by the Public Trust Doctrine.⁸⁵

The Public Trust Doctrine appears to have its origins in English common law. Under English law, “title in the soil of the sea, or of arms of the sea, below the ordinary high-water mark, [was] in the King” and was “held subject to the public right.”⁸⁶ In the United States, the Public Trust Doctrine is founded on the idea of preserving public use of navigable waters from private interruption or encroachment.⁸⁷ The preservation of public access to waterways large enough to support commercial activity and travel was an important step in the development and expansion into the western United States.⁸⁸

The Public Trust Doctrine places restraints on State management of navigable waterways. For example, States are limited in their ability to transfer control or ownership over such waterways.⁸⁹ States must also protect the public right of navigation, commerce, and fishing on navigable waterways.⁹⁰ At all times, a State’s control of the trust “can never be lost, except as to such parcels as are used in promoting the interests of the public therein, or can be disposed of without any substantial impairment of the public interest in the lands and waters remaining.”⁹¹

States have broadened the scope of the Public Trust Doctrine to encompass a variety of recognized public uses.⁹² This broadened scope has “evolved in

⁸⁵ See *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 453 (1892); see also *Martin v. Waddell*, 41 U.S. 367, 410 (1842) (holding that the people of each state have an “absolute right to all their navigable waters, and the soils under them, for their own common use”).

⁸⁶ *Shively v. Bowlby*, 152 U.S. 1, 13 (1984).

⁸⁷ *Ill. Cent.*, 146 U.S. at 436.

⁸⁸ In *Illinois Central*, the Supreme Court held that preserving the public use of navigable waters was “the most obvious principle[] of public policy.” *Id.* at 458; see also *Idaho v. Coeur d’Alene Tribe of Idaho*, 521 U.S. 261, 284 (1997) (holding that “navigable waters uniquely implicate sovereign interests”).

⁸⁹ *Lawrence*, 254 P.3d at 607 (holding that the State of Nevada held “the banks and beds of navigable waterways in trust for the public and subject to restraints on alienability”); see also *Ill. Cent.*, 146 U.S. at 453 (“The State can no more abdicate its trust . . . than it can abdicate its police powers in the administration of government and the preservation of the peace.”).

⁹⁰ *Ill. Cent.*, 146 U.S. at 452 (holding that navigable waters are held in trust so that the citizens of the State can “enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein freed from the obstructions or interference of private parties”).

⁹¹ *Id.* at 453.

⁹² See *Craig*, *supra* note 25, at 53 (noting that public trust principles are a matter of state law and “vary considerably from state to state”). For example, UTAH CODE ANN. § 65A-10-8(1) (West 2011) instructs the Utah Division of Forestry, Fire and State Lands (the state agency charged with protecting sovereign lands, subject to the public trust doctrine) to consider in their public trust analysis not only “strategies to deal with a fluctuating lake level [for the Great Salt Lake], . . . development of the [Great Salt Lake] in a manner which will preserve the lake, . . . availability of brines to lake extraction

tandem with the changing public perception of the values and uses of waterways.”⁹³ Most States have expanded the protected public rights in water to include a wide range of values, including aesthetics.⁹⁴ However, even with the expansion of public rights in navigable waterways, the balancing of economic necessity or private use against public values such as recreation, fishing, or ecological protection, “has tended to favor the private use side.”⁹⁵

In 1970, Professor Joseph Sax noted that the public trust is “the classic notion of a trust,” meaning “the government actually serves in the capacity of a trustee to carry out the wishes of the donor,” and the government’s proposed uses of the trust must “conform to the wishes of the donor.”⁹⁶ This concept has been immortalized in many state constitutions.⁹⁷

The Public Trust Doctrine is closely intertwined with the navigability for title test and puts limitations on States’ ability to manage navigable waterways. Many States have expanded the protective scope of the Public Trust Doctrine to include more than just navigation, commerce, and fishing. As a result, the Public Trust Doctrine offers some protection to the environment by forcing state agencies to balance economic activity against the public interest, which oftentimes includes environmental protection.

VI. THE SUPREME COURT CHANGED COURSE AND ESTABLISHED A NEW STANDARD THAT UNBALANCED THE *DANIEL BALL* TWO-PART TEST

The Supreme Court erred in *PPL Montana* when it incorrectly assumed that previous Court opinions adopted a segment-by-segment approach for determining navigability for title. In accepting the segment-by-segment approach, the Supreme Court unbalanced the well-established two-part test set forth in the

industries, protect wildlife, and protect recreational facilities,” but also strategies to “maintain the lake and the marshes as important to the waterfowl flyway system . . . provide public access to the lake for recreation, hunting, and fishing.”

⁹³ Nat’l Audubon Soc’y v. Superior Court, 658 P.2d 709, 719 (Cal. 1983); see also Craig, *supra* note 25, at 53 (“[S]tates have evolved their public trust doctrines in light of the particular histories and the perceived needs and problems of each state.”).

⁹⁴ Craig, *supra* note 25, at 80.

⁹⁵ *Id.* at 55.

⁹⁶ Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 483 (1970).

⁹⁷ As an example, Utah’s Constitution states that “[a]ll lands of the State that have been, or may hereafter be granted to the State by Congress . . . are hereby accepted . . . and are declared to be public lands of the State; and shall be held in trust for the people . . .” UTAH CONST. art. XX, § 1. As a result, navigable waterways within the State, e.g., the Colorado River and Great Salt Lake, are protected such that the State has an obligation as trustee to ensure that all decisions impacting those waterways must be made in conformity with the public’s interest. See Sax, *supra* note 96, at 486–87 (“[T]he State has an obligation as trustee which it may not lawfully divest, whatever title the grantee has taken is impressed with the public trust and must be read in conformity with it.”).

Daniel Ball by limiting the applicability of evidence of present-day recreational activity.

A. *For Well Over a Century the Supreme Court Had Endorsed a “River as a Whole” Approach for Determining Navigability for Title*

PPL argued to the Supreme Court that the segment-by-segment approach should be adopted because waterways can contain both navigable and nonnavigable sections.⁹⁸ According to PPL, the appropriate standard in the navigability for title test should focus on “distinct segments, because many rivers do not have uniform characteristics along their lengths.”⁹⁹ The United States, as amicus, argued for a similar standard.¹⁰⁰ The State of Montana countered that the segment-by-segment approach—which would have the Supreme Court examine a 17-mile stretch of the Great Falls in isolation from the rest of the river—would be hard for early American explorers like Lewis and Clark to accept.¹⁰¹ To the contrary, “[e]arly Americans, particularly those who helped settle the West, had a hardier conception of distances than the typical modern day city slicker.”¹⁰²

To support its position, PPL relied almost entirely on the Supreme Court’s decision in *United States v. Utah*. According to PPL, the Supreme Court recognized “no fewer than three distinct segments within the relevant portion of the Colorado River—a non-navigable segment of 36 miles sandwiched between navigable segments of 4.35 miles and 150 miles.”¹⁰³ The Supreme Court agreed with PPL’s position and held that portages around nonnavigable segments, even if relatively short, destroy a finding of navigability for title.¹⁰⁴

The Supreme Court’s prior decisions took a river as a whole approach that focused on the totality of circumstances surrounding the navigability of a waterway and did not support the “modern day city slicker” approach adopted in

⁹⁸ Brief of Petitioner, *supra* note 7, at 34 (arguing that “[a] river can contain both navigable and non-navigable segments, and a State may not claim title to the non-navigable stretches merely because other parts of the river may be navigable”).

⁹⁹ *Id.* at 36.

¹⁰⁰ Brief for the United States as Amicus Curiae Supporting Petitioner at 7, *PPL II*, 132 S. Ct. 1215 (2012) (No. 10-218), 2011 WL 3947562, at *7 (arguing that “[a]lthough portaging may connect *navigable* segments into a continuous highway for commerce, portaging around a non-navigable segment does not make *that* segment navigable for title purposes”).

¹⁰¹ Brief of Respondent at 41, *PPL II*, 132 S. Ct. 1215 (No. 10-218), 2011 WL 5126226, at 41 [hereinafter State of Montana Brief].

¹⁰² *Id.*

¹⁰³ Brief of Petitioner, *supra* note 7, at 38. In oral argument before the Supreme Court, PPL argued, “[*United States v. Utah*] is a situation that seems irreconcilable with the Montana Supreme Court decision . . . because there the special master and this Court recognized a non-navigable segment right in the middle of two navigable portions of stream.” Transcript of Oral Argument, *supra* note 67, at 7–8.

¹⁰⁴ *PPL II*, 132 S. Ct. at 1232.

PPL Montana.¹⁰⁵ These decisions took a more holistic approach that accounted for the calm, easily navigable segments, while also accounting for the segments that were treacherous, difficult, or nonnavigable.¹⁰⁶

The river as a whole approach eliminated the two unworkable extremes that would arise if a contrary approach were adopted. First, under an overly expansive approach, an examining court could find the whole river, from beginning to end, navigable in fact based on evidence that a particular segment was navigable at statehood. Conversely, an overly restrictive standard, such as the one argued for by PPL and unanimously adopted by the Supreme Court, is nothing more than an attempt to slice the segment of waterway so thin that it is impossible for an examining court to do anything but find the particular segment nonnavigable.¹⁰⁷

In 1870, the Supreme Court held that waterways could be navigable for many hundreds of miles.¹⁰⁸ The important fact was the waterway's "navigable capacity."¹⁰⁹ In 1874, the Court applied this standard to the Fox River and Wisconsin River and held that they were navigable in fact despite there being "several rapids and falls" that required a "short portage" because commerce was still successfully accomplished on the river.¹¹⁰

More than fifty years later the Supreme Court continued to follow the holistic river as a whole approach to determine navigability for title. In 1931, the Colorado River was held to be navigable in fact despite obstructions such as "logs and debris, ice, floods, rapids, and riffles in certain parts, rapid velocities with sudden changes in the water level, sand and sediment which, combined with the tortuous course of the rivers, produce a succession of shifting sand bars, shallow depths, and instability."¹¹¹ These obstructions made navigation difficult

¹⁰⁵ See *supra* Part II.

¹⁰⁶ *Id.*

¹⁰⁷ During oral arguments, Chief Justice Roberts questioned the feasibility of carving a waterway into navigable and nonnavigable segments, noting that "if you start drawing these lines, they become very difficult . . . to apply. I'm sure there are reasonable fluctuations. They may be navigable in some seasons, but not in others. The line at which you pass from navigability to non-navigability may be difficult to ascertain." Transcript of Oral Argument, *supra* note 67, at 19.

¹⁰⁸ *The Daniel Ball*, 77 U.S. 557, 563 (1870) ("Some of our rivers are as navigable for many hundreds of miles above as they are below the limits of tide water . . ."). The Court applied this standard to the Grand River in Michigan and found it to be navigable in fact because it was "capable of bearing a steamer . . . laden with merchandise and passengers, as far as Grand Rapids, a distance of forty miles from its mouth in Lake Michigan." *Id.* at 564.

¹⁰⁹ *Id.* at 563.

¹¹⁰ *The Montello*, 87 U.S. 430, 440–42 (1874). The portage required that boats be "partially or wholly unloaded and their cargoes carried on land to a greater or less distance." *Id.* at 442. The Court noted that the short portage did not destroy a finding of navigability since the "vital and essential point is whether the natural navigation of the river is such that affords a channel for useful commerce," even though navigation be made difficult by reason of natural obstructions. *Id.* at 443.

¹¹¹ *United States v. Utah*, 283 U.S. 64, 80 (1931).

but they did not “constitute a serious obstacle to navigation.”¹¹² Instead, the Court pointed out that “[t]he question here is not with respect to a short interruption of navigability in a stream otherwise navigable,” rather, “[w]e are concerned with the long reaches with particular characteristics of navigability or non-navigability”¹¹³ In contrast, Justice Kennedy noted the Great Falls reach has “distinct drops including five waterfalls and continuous rapids in between,” and as a result, “[t]here is plenty of reason to doubt that reach’s navigability based on the presence of the series of falls.”¹¹⁴

The reasoning used by Justice Kennedy to support the segment-by-segment approach is itself segmented, as it chooses to focus on certain language from the Court’s prior opinions, but ignores the larger context. As an example, in *United States v. Utah*, a forty-mile section along the Colorado River that ran through Cataract Canyon was found to be nonnavigable by special master Charles Warren.¹¹⁵ Mr. Warren’s findings and conclusions were challenged by the State of Utah, but only in regards to about four and a half miles of the forty-mile stretch.¹¹⁶ Neither party contested Mr. Warren’s findings and conclusion for the remaining thirty-six miles of the forty-mile section.¹¹⁷ The challenged section was held to be navigable in fact.¹¹⁸ Importantly, the Court assumed Mr. Warren’s findings and conclusions regarding the undisputed thirty-six mile section were correct and did not upset his determination.¹¹⁹ The Court said nothing regarding the thirty-six mile segment because it was not an issue in dispute before them.¹²⁰ In other words, the Court did not endorse a segment-by-segment approach to

¹¹² *Id.* at 84.

¹¹³ *Id.* at 77.

¹¹⁴ *PPL II*, 132 S. Ct. 1215, 1231 (2012).

¹¹⁵ *Utah*, 283 U.S. at 73–74 (noting that Mr. Warren had “made his findings as to navigability as of [the date Utah was admitted to the Union] . . . and that the following streams were nonnavigable waters of Utah: The Colorado river, south from the confluence of the Green and the Grand rivers down to the end of Cataract Canyon at Mile 176 above Lees Ferry (about 40 miles)”).

¹¹⁶ *Id.* at 75 (“Utah excepts to the findings and conclusion of the [special] master as to the nonnavigability of the Colorado river from the confluence of the Green river and the Grand river at Mile 216.5 above Lees Ferry down to the first rapid or cataract at Mile 212.15 above Lees Ferry.”); *see also id.* at 89 (“The [S]tate of Utah excepts to the finding of the [special] master as to nonnavigability so far as it relates to the first 4.35 miles of the stretch of the Colorado river south from the confluence of the Green river with the Grand river.”).

¹¹⁷ *Id.* at 74 (“Neither party excepts to the findings and conclusions with respect to the nonnavigability of the . . . Colorado river from the first rapid or cataract at Mile 212.15 above Lees Ferry down to the end of Cataract Canyon at Mile 176 above Lees Ferry.”).

¹¹⁸ *Id.* at 89–90.

¹¹⁹ *See id.*

¹²⁰ *See id.* at 74; *see also* *Hormel v. Helvering*, 312 U.S. 552, 556 (1941) (holding the Court does not consider issues not previously raised); *Walters v. City of St. Louis*, 347 U.S. 231, 233 (1954) (same).

determining navigability, as argued for by PPL and held to be well-established law in *PPL Montana*.¹²¹ To the contrary, considering the river as a whole, the Court noted that “the government has not called our attention to any facts which would substantially differentiate this portion of the Colorado river . . . from those parts of these rivers found by the master to be navigable.”¹²²

Therefore, the Supreme Court unanimously changed course when it agreed with PPL and incorrectly held the segment-by-segment approach is well-settled law for determining navigability for title.

B. The Supreme Court Unbalanced the Daniel Ball Two-Part Test and Established a Standard That Fails to Recognize Present-Day Realities

The Montana Supreme Court held that evidence of present-day navigation upon waterways was “unequivocally” part of the navigability for title test and that such evidence was “probative” as to whether the waterway was navigable in fact at statehood.¹²³ The United States Supreme Court agreed in part with the Montana court’s interpretation but narrowed the extent to which present-day evidence could be used.¹²⁴ In particular, the Court noted that present-day evidence could be used only when the watercrafts used today are similar to those used at statehood and the waterways cannot have undergone “material” changes from their ordinary or natural condition at statehood.¹²⁵ Neither of these requirements were part of the original two-part test.¹²⁶

¹²¹ *PPL II*, 132 S. Ct. 1215, 1229 (2012) (holding that “[t]he Court [in *United States v. Utah*] went on to conclude, after reciting and assessing the evidence, that the Colorado River was navigable for its first roughly 4-mile stretch, nonnavigable for the next roughly 36-mile stretch, and navigable for its remaining 149 miles”).

¹²² *Utah*, 283 U.S. at 89.

¹²³ *PPL I*, 229 P.3d 421, 446–47 (Mont. 2010), *cert. granted in part*, 131 S. Ct. 3019 (2011), *rev’d and remanded*, 132 S. Ct. 1215 (2012).

¹²⁴ *PPL II*, 132 S. Ct. 1215, 1233 (2012).

¹²⁵ *Id.* (holding that “poststatehood evidence, depending on its nature, may show susceptibility of use at the time of statehood,” but such evidence “must be confined to that which shows the river could sustain the kinds of commercial use that, as a realistic matter, might have occurred at the time of statehood”).

¹²⁶ On several occasions, the Supreme Court held that both prongs of the *Daniel Ball* two-part test should be afforded equal evidentiary value. First, in *The Daniel Ball*, the Court held that waterways are navigable in fact when they are “used, or are susceptible of being used, in their ordinary condition, as highways for commerce.” 77 U.S. 557, 563 (1870) (emphasis added). Second, in *The Montello*, the Court held that “[t]he capability of use by the public for purposes of transportation and commerce affords the true criterion of the navigability of a river, rather than the extent and manner of that use.” 87 U.S. 430, 441 (1874) (emphasis added). Finally, on a separate occasion, the Court held that susceptibility of use was the “crucial question.” *Utah*, 283 U.S. at 82.

The Supreme Court's holding unbalances the *Daniel Ball* two-part test.¹²⁷ Stated differently, these two new requirements permit exactly that which prior Court opinions held to be unallowable: they deny, or at a minimum, make it significantly more difficult, for States to claim title to the beds and banks of waterways within their borders.¹²⁸

Successfully providing information on the types of watercrafts used and the "natural condition" of the waterways at statehood, especially for waterways that were remote, isolated, or unexplored at statehood, will be nearly impossible. The information a State must provide under the Court's new standard presumably includes seasonal and yearly data on flow rates and water levels. It must also account for the natural process of nature whereby the "natural condition" of a waterway can change over time due to accretion,¹²⁹ reliction,¹³⁰ erosion,¹³¹ or avulsion.¹³² In other words, the evidence needed to satisfy the new standard was both figuratively and literally a moving target at the time of statehood.¹³³

¹²⁷ The Court's holding essentially adopted arguments made before it by PPL. In its brief to the Court, PPL argued that the second part of the *Daniel Ball* two-part test (susceptibility of use) should be given less evidentiary value and used only in "rare" circumstances. Brief of Petitioner, *supra* note 7, at 26–27. According to PPL, evidence of whether a waterway was susceptible of being used as a highway for trade and travel "is rarely relevant to whether a [waterway] was navigable at statehood." *Id.* at 45. Rather than giving both parts of the *Daniel Ball* test equal weight, an examining court should consider present-day navigation on a waterway "[o]nly in the rare instance when a river and its surrounding lands were . . . inaccessible or unpopulated at statehood." *Id.* Finally, PPL argued that a contrary rule would open the door to the "potential for constant reevaluation of the navigability of rivers, streams, and lakes whose ownership has long been thought settled." *Id.* at 46–47.

¹²⁸ As discussed previously, the original two-part test did not support the proposition that a waterway was nonnavigable due to its location or due to lack of exploration or demand. *See Utah*, 283 U.S. at 83.

¹²⁹ "Accretion" has been defined as "the process whereby the action of water causes the gradual and imperceptible deposit of soil so that the soil becomes fast, dry land." Phillip Wm. Lear, *Accretion, Reliction, Erosion, and Avulsion: A Survey of Riparian and Littoral Title Problems*, 11 J. ENERGY NAT. RESOURCES & ENVTL. L. 265, 265 (1991).

¹³⁰ "Reliction" (or "dereliction") has been defined as "the process whereby the gradual and imperceptible receding of water results in the emergence of fast, dry land." *Id.*

¹³¹ "Erosion" has been defined as "the process whereby soil is lost gradually and imperceptibly by the encroachment of water or other natural elements." *Id.*

¹³² "Avulsion" has been defined as "the process whereby the action of water causes a sudden, perceptible loss of or addition to land." *Id.* at 265–66.

¹³³ Somewhat ironically, Justice Kennedy recognized that waterways' natural conditions change over time when he noted that the Mississippi River, one of the rivers in dispute, "shifted and flooded often, and contained many sandbars, islands and unstable banks." *PPL II*, 132 S. Ct. 1215, 1222 (2012). He also recognized that the Mississippi River had historically been described "as one of the most variable beings in creation, as inconstant as the action of the jury." *Id.* (internal quotation marks and alterations omitted).

For most States, the information needed is over 100 years old, which means there are likely no eyewitnesses alive that could testify.¹³⁴ It has been noted that, as time passes, “history fades into fable; fact becomes clouded with doubt and controversy.”¹³⁵ In many instances, it is likely that the information necessary to prove whether a waterway was navigable in fact was either never recorded (due to lack of exploration or demand), or it was recorded but has since been destroyed or lost (due to the passage of time or natural causes).¹³⁶ Even if the necessary information has been preserved, there is no guarantee that it is admissible under rules of evidence or that the documentation is accurate. Accordingly, evidence of present-day use upon waterways is of increasing importance.

To demonstrate the unworkability of the Supreme Court’s new standard, consider man-made dams. According to the United States Army Corps of Engineers, there are more than 84,000 dams in the United States.¹³⁷ These dams reach “heights of up to 770 feet and store billions of gallons of water.”¹³⁸ It is not unreasonable to assume that many, if not all, of the waterways upon which these 84,000 dams are built have undergone “material” changes to their natural condition. The impact dams can have on the natural environment is immense. For example, “[d]ams have caused the inundation of over 600,000 stream miles, and diversions from those structures seriously alter natural stream flows and habitats.”¹³⁹ It has also been noted, “[T]he number of free-flowing rivers that remain in the West can be counted on two hands.”¹⁴⁰ Dams have altered the landscape so severely that

God’s riverine handiwork in the West has been stood on its head. A number of rivers have been nearly dried up. One now flows backward.

¹³⁴ There have been only two states admitted to the Union within the past one hundred years: Alaska and Hawaii in 1959.

¹³⁵ WASHINGTON IRVING, *THE SKETCH BOOK OF GEOFFREY CRAYON GENTN* 196 (David McKay rev. ed. 1892).

¹³⁶ See Bruce B. Dykaar & David A. Schrom, *Public Ownership of U.S. Streambeds and Floodplains: A Basis for Ecological Stewardship*, 53 *BIOSCIENCE* 428, 429–30 (2003) (quoting *United States v. Utah*, 283 U.S. 64, 69 (1931)) (noting that historical records of navigation may be sparse or nonexistent for many water bodies, and only three states have conducted comprehensive inventories of navigable streams, based on cursory examination of available historical records).

¹³⁷ *National Inventory on Dams*, U.S. ARMY CORPS OF ENG’RS, <http://www.agc.army.mil/Media/FactSheets/FactSheetArticleView/tabid/11913/Article/10236/national-inventory-of-dams.aspx> (last visited Oct. 22, 2013).

¹³⁸ *Water and Environment: Dams*, 2009 REPORTCARD FOR AMERICA’S INFRASTRUCTURE, <http://www.infrastructurereportcard.org/fact-sheet/dams> (last visited Mar. 3, 2013).

¹³⁹ DAVID M. DRIESEN ET AL., *ENVIRONMENTAL LAW: A CONCEPTUAL AND PRAGMATIC APPROACH* 19 (2d ed. 2011).

¹⁴⁰ MARC REISNER, *CADILLAC DESERT: THE AMERICAN WEST AND ITS DISAPPEARING WATER* 14 (Penguin Books rev. and updated ed. 1993).

Some flow through mountains into other rivers' beds. There are huge reservoirs where there was once desert; there is desert, or cropland, where there were once huge shallow swamps and lakes.¹⁴¹

Adding to the confusion, it is likely that many of these dams were built on remote and isolated areas of waterways before any relevant information such as seasonal flow or depth data was recorded.¹⁴²

The unbalancing of the *Daniel Ball* two-part test is bad policy (if not bad law) and suggests that a new legal standard—one that recognizes present-day realities—is needed.¹⁴³ The Court's new standard conflicts with prior legal precedent and fails to recognize that nearly all waterways in the United States have undergone material changes to their ordinary or natural condition as a result of natural transformations or human expansion and progression. As a result, the new standard places large informational and evidentiary hurdles in the path of States that attempt to claim title to the beds and banks of waterways within their borders.

VII. A UNANIMOUS DECISION TO MAKE WATER AND NATURAL RESOURCES MANAGEMENT MORE DIFFICULT AND LESS EFFECTIVE

The unanimous decision by the Supreme Court to accept PPL's thinly sliced segment-by-segment approach to determining navigability for title makes it more likely that ownership and control of the beds and banks of waterways will be fragmented amongst state and federal government, as well as private parties. The fragmentation that is likely to result will have at least two negative impacts on water and natural resources management. First, natural resources, including water, are more difficult to manage, preserve, and/or protect when control over them is bifurcated amongst different entities that oftentimes have competing interests. Second, the slicing up of waterways into various segments will result in fewer beds and banks being owned by States. States hold such lands in trust for their citizens subject to the Public Trust Doctrine, a doctrine that forces state agencies to consider and balance the environmental effects of their decisions. State ownership is thus desirable, because it promotes resource conservation and protection.

¹⁴¹ *Id.* at 12.

¹⁴² The evidence collected in *PPL Montana* illustrates this point. As an example, the dams operated by PPL had been in place for decades, and in some instances for over a century. *PPL II*, 132 S. Ct. 1215, 1219 (2012).

¹⁴³ See generally Robert W. Adler, *The Ancient Mariner of Constitutional Law: The Declining Role of Navigability*, 90 WASH. U. L. REV. 1643 (2013) (arguing that a new standard is needed to determine navigability for title, one that recognizes modern day realities).

A. *Fragmented Authority Over Natural Resources, Including Waterways, Makes Effective Management, Conservation, and Protection More Difficult*

The segment-by-segment approach adopted by the Supreme Court allows examining courts to slice waterways into countless segments such that the beds and banks along a waterway can be owned or controlled by any number of parties, including state and federal governments.¹⁴⁴ In other words, the segment-by-segment approach permits waterways to be carved up like a “Thanksgiving turkey, hacking away at every non-de minimis portion containing a natural obstacle and considering it in isolation as a new ‘stretch’ with each change in the river’s physical characteristics.”¹⁴⁵ There are over 100,000 public entities involved in water resources in the United States, prompting some commentators to suggest that the “very institutions designed to protect the resources have now, by virtue of their number and unwieldiness, become an additional threat.”¹⁴⁶

Fragmented managerial authority frustrates efforts to protect fisheries, aquatic ecosystems, water quality, and other natural resources.¹⁴⁷ To the extent possible, ecosystems should be managed in a holistic, landscape-scale manner and administrative fragmentation should be avoided.¹⁴⁸ The segment-by-segment approach ignores the fact that there is an ecological imperative to manage waterways as a single interconnected system because of “the basic nature of aquatic ecosystems, including the interaction between land and water resources, the links between water quantity and quality, the connections between groundwater and surface water, and the heterogeneity of aquatic ecosystems.”¹⁴⁹ A significant shortcoming of managerial fragmentation is that it promotes a “piecemeal approach” to ecosystem protection.¹⁵⁰ Such an approach is designed to address only a single environmental issue and creates entities that are driven

¹⁴⁴ *United States v. Utah*, 283 U.S. 64, 74 (1931) (explaining that title to the beds and banks of waterways that are navigable in fact is passed to the State in which the waterway lies, otherwise title remains with the United States).

¹⁴⁵ State of Montana Brief, *supra* note 101, at 34.

¹⁴⁶ Charles F. Wilkinson & Daniel K. Conner, *A Great Loneliness of the Spirit*, in WESTERN WATER MADE SIMPLE 62 (1987).

¹⁴⁷ See Robert W. Adler, *Addressing Barriers to Watershed Protection*, 25 ENVTL. L. 973, 981–1003 (1995) (discussing imperatives for watershed-based approaches to river management).

¹⁴⁸ Karen A. Poiani et al., *Biodiversity Conservation at Multiple Scales: Functional Sites, Landscapes, and Networks*, 50 BIOSCIENCE 133, 134 (2000) (“[A] growing appreciation of the enormous complexity and dynamic nature of ecological systems led to the concept of ecosystem management, wherein success is best assured by conserving and managing the ecosystem as a whole.” (citation omitted)).

¹⁴⁹ Adler, *supra* note 147, at 981.

¹⁵⁰ *Id.* at 994.

by single-minded goals.¹⁵¹ Stated simply, fragmented approaches to environmental problems have proved inadequate.¹⁵²

Fragmented approaches to environmental problems have proven unsuccessful because they fail to recognize the extent and scope of ecosystem interconnectedness.¹⁵³ What is needed is a holistic ecosystem approach that avoids addressing “symptoms of harm through isolated projects.”¹⁵⁴

Fish and wildlife move freely across property lines and jurisdictional boundaries, so a patchwork of management regimes is likely to inhibit wildlife management goals. A holistic approach to water body management recognizes the cumulative impacts of multiple stresses in an entire ecosystem and improves “ecosystem integrity and health.”¹⁵⁵ Thus, less fragmentation is better when it comes to land management, especially when it comes to water management.¹⁵⁶

Managing fragmented lands is expensive and inefficient. Recognizing this fact, the Bureau of Land Management (BLM) and United States Forest Service (USFS) have, for the past thirty years, increasingly “used exchanges to dispose of fragmented parcels of land to consolidate land ownership patterns to promote more efficient management of land and resources.”¹⁵⁷ The BLM Land Exchange

¹⁵¹ *Id.* In contrast, a river as a whole approach to water body management has the advantage allowing the governing entity to have the ability “to tailor water quality standards, restoration, and protection efforts for the needs and characteristics of the target ecosystem.” *Id.* at 985; *see also* Craig Anthony (Tony) Arnold, *Fourth-Generation Environmental Law: Integrationist and Multimodal*, 35 WM. & MARY ENVTL. L. & POL’Y REV. 771, 845 (2011) (stating that less fragmentation of management responsibilities for environmental problems better provides an “opportunity to address problems in a coordinated or holistic manner at the *scale* at which they affect natural systems, functions, and processes”).

¹⁵² Arnold, *supra* note 151, at 831 (noting that “fragmentation fails to meet the challenges of complex, interrelated, nonlinear, dynamic environmental problems that have arisen and loom even larger on our policy response horizon”); *see also* Adler, *supra* note 147, at 981 (arguing that ecosystem fragmentation has resulted in a decline of aquatic species and ecosystem health despite “engineered” human solutions which failed to consider the interconnectedness of natural ecosystems).

¹⁵³ *See* Adler, *supra* note 147, at 982 (noting that “water bodies cannot be viewed simply as the water within the banks of a river or the shores of a lake, but are connected ecologically to the immediate floodplain and riparian ecosystem and to natural or artificial land conditions further upland”); *see also* NAT’L RESEARCH COUNCIL, RESTORATION OF AQUATIC ECOSYSTEMS: SCIENCE, TECHNOLOGY, AND PUBLIC POLICY 341–42 (1992) (concluding that “[I]akes, streams, rivers, ponds, ground water, estuaries, and wetlands are interconnected parts of larger landscapes” and environmental programs must be coordinated on a larger (un-fragmented) scale).

¹⁵⁴ Adler, *supra* note 147, at 983.

¹⁵⁵ *Id.* at 984.

¹⁵⁶ Arnold, *supra* note 151, at 845.

¹⁵⁷ Melanie Tang, *SNPLMA, FLTFA, and the Future of Public Land Exchanges*, 9 HASTINGS W.-NW. J. ENVTL. L. & POL’Y 55, 59 (2002) (internal quotation marks omitted) (citation omitted).

Handbook characterizes land exchanges as an “important tool” that results in “more efficient management.”¹⁵⁸ The USFS averaged 115 land exchanges a year during the 1990s, and in the period of 2004–2008 there were 250 completed, pending, or terminated land exchanges handled by USFS or BLM.¹⁵⁹ Importantly, land exchanges help to avoid interagency conflict by consolidating managerial authority in one agency where that agency is solely responsible for the management, conservation, or preservation of the resource.¹⁶⁰

Aldo Leopold wrote, “The outstanding scientific discovery of the twentieth century is not television, or radio, but rather the complexity of the land organism.”¹⁶¹ He also noted, “A thing is right as it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”¹⁶² The segment-by-segment approach established by the Supreme Court “tends otherwise” by failing to recognize the complexity and interconnectedness of our nation’s ecosystems. The Court’s approach in *PPL Montana* fails to preserve the integrity, stability, and beauty of our nation’s waterways.

B. The Public Trust Doctrine Promotes Environmentally Protective and Sustainable Management Policies

The Public Trust Doctrine promotes environmentally protective and sustainable management policies by forcing state agencies to balance economic or developmental activity against the public interest in the lands held in trust.¹⁶³ Professor Joseph Sax wrote, “Of all the concepts known to American law, only the public trust doctrine seems to have the breadth and substantive content which might make it useful as a tool of general application for citizens seeking to develop a comprehensive legal approach to resource management problems.”¹⁶⁴

¹⁵⁸ BUREAU OF LAND MGMT., U.S. DEPT. OF THE INTERIOR, LAND EXCHANGE HANDBOOK H-2200-1, at 1-1 (2005), available at http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/blm_handbook.Par.72089.File.dat/h2200-1.pdf.

¹⁵⁹ Neil LaRubbio, *Watching Land Swaps in Idaho and the West*, HIGH COUNTRY NEWS, http://www.hcn.org/issues/44.15/watching-land-swaps-in-idaho-and-the-west/print_view (last visited Mar. 3, 2013).

¹⁶⁰ See NAT’L RESEARCH COUNCIL, *supra* note 153, at 343 (noting that land exchanges are encouraged because “[t]he politics and consensus building required for integrated management of the resource are often as complex as the ecosystem itself”).

¹⁶¹ ALDO LEOPOLD, *A SAND COUNTY ALMANAC* 190 (1966).

¹⁶² *Id.* at 262.

¹⁶³ Dykaar & Schrom, *supra* note 136, at 428 (“Public proprietary interests in streambeds and floodplains afford a legal basis to limit human interference with fluvial processes and thereby protect habitat on a broad scale. Such actions are essential to arrest or reverse declines in ecosystem services.”).

¹⁶⁴ Sax, *supra* note 96, at 474 (citations omitted).

Others have noted that a “fundamental paradigm shift in natural resources and environmental law” must center on application of the Public Trust Doctrine.¹⁶⁵

Despite the importance of the Public Trust Doctrine, the Supreme Court failed to “recognize the synergy between science and law”¹⁶⁶ and limited its discussion of the doctrine to only two short paragraphs.¹⁶⁷ According to the Court, its decision would not undermine the Public Trust Doctrine because “the States retain residual power to determine the scope of the public trust over waters within their borders, while federal law determines riverbed title under the equal-footing doctrine.”¹⁶⁸ By making this statement, the Court failed to acknowledge that state power to determine the scope of the public trust over waters within their borders is limited by whether those waterways were navigable in fact at statehood. The Court’s decision makes it more difficult to claim title to some of these waterways, particularly those waterways that were remote or isolated at statehood.¹⁶⁹ Therefore, the Court’s decision undermines the Public Trust Doctrine.

The Court’s short discussion of the Public Trust Doctrine is unfortunate, especially because our nation needs more environmentally sustainable approaches to resource issues and problems. Climate change and its effects on national, regional, and local ecosystems make the need for sustainable solutions even more pressing.¹⁷⁰

To illustrate how the Public Trust Doctrine can be used to promote environmentally protective and sustainable decisions, consider the Utah Division of Fire, Forestry, and State Lands (UDFFSL). Utah law requires UDFFSL to balance the economic necessity of *any* proposed use of sovereign lands against “the protection of navigation, fish and wildlife habitat, aquatic beauty, public

¹⁶⁵ Mary Christina Wood, *Advancing the Sovereign Trust of Government to Safeguard the Environment for Present and Future Generations (Part I): Ecological Realism and the Need for a Paradigm Shift*, 39 ENVTL. L. 43, 88 (2009). The author also notes the Public Trust Doctrine is “the most compelling beacon for a fundamental and rapid paradigm shift towards sustainability.” *Id.* at 45.

¹⁶⁶ Dykaar & Schrom, *supra* note 136, at 428.

¹⁶⁷ *PPL II*, 132 S. Ct. 1215, 1234–35 (2012) (reciting the basic legal history of the Public Trust Doctrine and noting that the State of Montana’s fears that the segment-by-segment approach to navigability for title would threaten public access to waterways was merely a “misapprehension” of the doctrine).

¹⁶⁸ *Id.*

¹⁶⁹ See *supra* Part VI.A and accompanying text.

¹⁷⁰ Ian Burton, et al., *Adaptation to Climate Change: International Policy Options*, PEW CTR. ON GLOBAL CLIMATE CHANGE 7 (Nov. 2006), http://www.pewclimate.org/docUploads/PEW_Adaptation.pdf (noting that “[c]limate change is expected to have significant impacts on water supplies—creating or exacerbating chronic shortages—and on water quality”). For this reason, twenty-six states signed on as amicus in support of the State of Montana, arguing if the Court adopts the segment-by-segment approach, it would “wreak havoc in States across the country especially, in the western States.” Transcript of Oral Argument, *supra* note 67, at 44.

recreation, and water quality.”¹⁷¹ Under this or similar approaches, the Public Trust Doctrine imposes “broad duties on governments to act for the long-term preservation of ecosystems and other environmental values.”¹⁷²

For well over 100 years, States have struggled to balance economic necessity against the public interest. In “[t]he most celebrated public trust case in American law,”¹⁷³ the Illinois legislature gave nearly all of the land—out to one mile from the shoreline—of the Chicago waterfront to private entities for construction of railroads.¹⁷⁴ The Supreme Court held that transfer of land beneath Lake Michigan to private entities violated the Public Trust Doctrine because the land was held in trust for the citizens of Illinois to use for navigation, commerce, and fishing free from obstruction or interference.¹⁷⁵

The principle supporting the Court’s holding that States cannot abdicate their role as trustees in favor of private entities “has become the central substantive thought in public trust litigation.”¹⁷⁶ It is a powerful litigation tool because courts “will look with considerable skepticism upon *any* governmental conduct which is calculated *either* to relocate that resource to more restricted uses *or* to subject public uses to the self-interest of private parties.”¹⁷⁷

Therefore, the Public Trust Doctrine is an environmentally protective doctrine that forces state agencies to balance economic necessity against the public interest. Unfortunately, the Supreme Court discredited the impact its decision would have on such an important litigation tool when it ruled in favor of the thinly sliced segment-by-segment approach to determining navigability for title.

VIII. CONCLUSION

The Supreme Court dealt a sharp blow to States’ sovereign ability to control and manage waterways within their borders when it unbalanced the well-established two-part test for determining navigability for title. The navigability for title test is closely intertwined with the Public Trust Doctrine because the beds and banks of waterways deemed to have been navigable in fact at statehood are held in trust by the State. The State, as trustee, must hold these lands in trust

¹⁷¹ Sovereign Land Management Objectives, UTAH ADMIN. CODE r. 652-2-200 (2012).

¹⁷² Craig, *supra* note 25, at 83. Professor Craig goes on to note that the Public Trust Doctrine “encapsulates a more general values system for the environment and its ecosystems—an environmental ethos . . . that is longer-term in focus, more comprehensive in its considerations, and more willing to preserve purely public values than regulatory law.” *Id.*

¹⁷³ Sax, *supra* note 96, at 489.

¹⁷⁴ Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387 (1892).

¹⁷⁵ *Id.* at 452.

¹⁷⁶ Sax, *supra* note 96, at 490.

¹⁷⁷ *Id.*

for its citizens and must balance economic necessity against environmental protection.

Unfortunately, when the Court disturbed the *Daniel Ball* two-part test by limiting the applicability of modern-day use as evidence of whether a waterway was susceptible of being used as a highway for commerce at the time of statehood, it made it more difficult for States to claim title to land underneath these water bodies. As a result, managerial authority over natural resources, particularly waterways, will be fragmented among state, federal, and private entities, and fewer of the beds and banks of these waterways will come under the environmentally protective shield of the Public Trust Doctrine.

The Supreme Court's decision is based on incorrect interpretation of prior legal precedent and establishes an unworkable standard that has undesirable consequences for ecosystem management and protection. "In the West . . . water flows uphill toward money,"¹⁷⁸ and the Supreme Court, a court dominated by Easterners, has now held that it also flows against effective management of waterways and the ecosystems and wildlife dependent thereon.

¹⁷⁸ REISNER, *supra* note 140, at 12.