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Cover Page Footnote
J.D. Candidate, 2008, Fordham University School of Law. I would like to thank Professors Tracy Higgins and Christian Turner for their guidance.

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COMMENT

THE BRIGHT LINE OF RAPANOS: ANALYZING THE PLURALITY’S TWO-PART TEST

Taylor Romigh*

INTRODUCTION

Imagine an elderly man who owns forty-five acres of land in northeastern Ohio. Though he operates only a small family farm, most of the land is agricultural in nature. One particular area, however, features heavily saturated soil and high reed-like vegetation, and has been nicknamed “the swamp.” A small creek runs intermittently through the swamp and eventually empties into the Mahoning River a few miles downstream. Five years ago, frustrated with what seemed to be the unproductive nature of the swamp, the man began to plan for its development. The process proved to be much more complicated than anticipated.

In environmental law terms, the swamp is a wetland,1 and, as such, provides ecological services to the surrounding area.2 As the law stood, it was unclear whether the man was free to develop this land as he saw fit or whether this wetland fell within federal jurisdiction under the Clean Water Act (CWA), thus requiring him to obtain a costly and time-consuming permit to develop this land.3 Faced with conflicting advice and escalating costs, the man put his plans on hold, waiting for a clear standard to emerge. Now, five years later, he would continue to wait.

Controversy has surrounded the extent of the U.S. Army Corps of Engineers’ (Corps’) jurisdiction under the CWA since its enactment.4 In

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1. According to the U.S. Army Corps of Engineers, wetlands are lands that are “inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” 33 C.F.R. § 328.3(b) (2006).


2001, the Supreme Court limited the Corps' jurisdiction in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC).* This decision increased litigation and sent CWA litigation into a "tailspin" due to landowners' increasing willingness to challenge jurisdiction. The U.S. Courts of Appeals disagreed as to whether the *SWANCC* decision should be read broadly or narrowly. In 2005, the Supreme Court granted writs of certiorari in two cases involving the Corps' jurisdiction over wetlands under the CWA: *Carabell v. U.S. Army Corps of Engineers* and *United States v. Rapanos.* While the Supreme Court sought to resolve the confusion over the extent of the Corps' jurisdiction under the CWA, the 4-1-4 decision in *Rapanos* revealed deep fissures within the Court and failed to advance a standard to govern in future challenges. Though five Justices agreed on the broad protective rationale of the CWA, ultimately, five Justices also agreed that the Corps had to do more to establish why its jurisdiction should extend to the wetlands at issue. This inquiry seeks to establish a balance between property owners' rights and protection of the nation's waters, two important interests likely to instigate further litigation from both sides.

When the Supreme Court fails to come to a majority agreement in an opinion, lower courts are to follow the most narrow holding agreed to by a majority of the Justices.

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11. See, e.g., Gregory T. Broderick, *From Migratory Birds to Migratory Molecules: The Continuing Battle over the Scope of Federal Jurisdiction Under the Clean Water Act*, 30 Colum. J. Envtl. L. 473, 522 (2005) ("With the lower courts in conflict and the political branches unable to move on this important question [of the extent of Corps' jurisdiction,] only the Supreme Court can fix the problem.").
15. See *Marks v. United States*, 430 U.S. 188, 193 (1977). While *Marks* represents the established precedent, a more recent Supreme Court case implies more flexibility for lower courts interpreting Supreme Court decisions. See *League of United Latin Am. Citizens v.*
jurisdiction when either the plurality’s or Justice Anthony Kennedy’s test is met, because the dissent would also grant jurisdiction in such cases.16 Because Justice Kennedy’s approach of requiring a significant nexus between the water at issue and a traditionally navigable water is seen as the more inclusive test, it has been, and is likely to remain, the approach most often invoked by lower courts.17 Finding a significant nexus, however, requires a case-by-case determination that places a heavy burden on both the Corps and courts and offers very little guidance to landowners.18 More navigable waters are thus likely to receive discharge or be filled before the Corps has a chance to prevent it.19 For these reasons, a clear formula approach is preferable.20 The plurality offers such a clear formula approach utilizing two criteria: relative permanence of water flow21 and a continuous surface connection with a navigable water.22 This Comment examines whether the plurality’s test offers an appropriate balance between the property interests of landowners and the purpose of the CWA “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”23

To facilitate examination of the plurality’s criteria, Part I provides background information on the controversy, including the history of the CWA, prior Supreme Court precedent on the issue, a more in-depth discussion of Rapanos and its primary opinions, and a brief look at how lower courts have responded to that decision. Part II provides an in-depth look at the plurality’s two criteria and explores justifications and critiques of their adoption on the basis of text, precedent, purpose, and scientific findings. Part III argues that neither of the plurality’s criteria should be more broadly adopted to define the outer limits of the Corps’ jurisdiction under the CWA.

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16. Rapanos, 126 S. Ct. at 2265 (Stevens, J., dissenting).
17. See, e.g., United States v. Gerke Excavating, Inc., 464 F.3d 723, 724 (7th Cir. 2006); N. Cal. River Watch v. City of Healdsburg, 457 F.3d 1023, 1029-30 (9th Cir. 2006).
19. May, supra note 7, at 140.
22. Id. at 2227.
I. CONTEXTUALIZING THE PLURALITY’S CRITERIA

A. The Clean Water Act

Congress first passed a statute to protect the nation’s waters in the Rivers and Harbors Appropriation Act of 1899.24 The Rivers and Harbors Appropriation Act aimed to keep traditionally navigable waterways clear for interstate commerce.25 As increasing population and development strained the nation’s waters, Congress passed the Water Pollution Control Act of 1948.26 In 1972, partly in response to the Cuyahoga River catching on fire,27 Congress significantly amended the Water Pollution Control Act, adding what is now commonly known as the Clean Water Act.28 The adoption of the CWA marked a shift in Congress’s focus from regulating water primarily in the interests of navigation and commerce to placing more of an emphasis on the environmental effects of pollution.29 Specifically, the stated purpose of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”30 Toward this goal, the CWA states that “the discharge of any pollutant by any person shall be unlawful” unless granted a permit by the Corps.31 Though the CWA charges the Environmental Protection Agency (EPA) with broad administration, the Corps administers the day-to-day operation permit program, with the EPA retaining ultimate enforcement authority.32

The CWA uses the phrase “navigable waters,” a legal term of art referring to those waterways that are currently used for interstate commerce or that have been, or could be, used for such in the future.33 While the Corps initially interpreted the term navigable waters traditionally in the CWA, a district court34 struck down this interpretation as too narrow given the broad purpose of the CWA and the statutory definition of “navigable

25. See Broderick, supra note 11, at 478-79.
29. May, supra note 7, at 140.
31. Id. § 1311(a).
33. See The Daniel Ball, 77 U.S. (10 Wall.) 557 (1870).
waters”—“the waters of the United States, including the territorial seas.” Following this decision, the Corps broadened its regulatory definition. In its current form, the Corps’ regulation states the following:

The term waters of the United States means

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

2. All interstate waters including interstate wetlands;

3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
   (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
   (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
   (iii) Which are used or could be used for industrial purpose by industries in interstate commerce;

4. All impoundments of waters otherwise defined as waters of the United States under the definition;

5. Tributaries of waters identified in paragraphs (a)(1) through (4) of this section;

6. The territorial seas;

7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section . . . .

This regulation has instigated much of the controversy around jurisdiction under the CWA. Over the years, the Corps and the EPA have made changes to their policies regarding federal jurisdiction under the CWA to respond to challenges faced in protecting the nation’s water quality. While the textual changes to the regulation have been slight,

36. See Downing, supra note 32, at 481.
37. 33 C.F.R. § 328.3(a) (2006).
38. In 1979, the EPA refined its definition of “waters of the United States” to cover not only waters used in interstate commerce, but where “the use, degradation or destruction [of such waters] could affect” interstate commerce. Id. § 328.3(a)(3) (2006); see also National Pollutant Discharge Elimination System; Revision of Regulations, 44 Fed. Reg. 32,854 (June 7, 1979) (codified at 40 C.F.R. pts. 115, 121, 122, 123, 124, 125, 402-03) (discussing the justifications for the amending the regulations). The Corps and the EPA also attempted to
broadening of the Corps’ understanding of jurisdiction is much more expansive. Justice Antonin Scalia refers to this phenomenon as an “immense expansion of federal regulation of land use that has occurred under the Clean Water Act—without any change in the governing statute—during the past five Presidential administrations.” By advancing a broad notion of federal jurisdiction under the CWA, the Corps wields power over a much larger number of landowners, requiring them to seek the Corps’ permission before developing their land. It is against this background that the Supreme Court has struggled to interpret the term “navigable waters” under the CWA.

B. Supreme Court Jurisprudence

The Supreme Court dealt with the question of how to interpret “navigable waters” in the CWA in order to define the Corps’ jurisdiction on two occasions prior to Rapanos. While the decisions came to different conclusions on their merits, the later case, SWANCC v. U.S. Army Corps of Engineers, nonetheless affirmed the holding made over fifteen years earlier in United States v. Riverside Bayview Homes, Inc.

1. Riverside Bayview Homes

Riverside Bayview Homes concerned the attempt to fill “low-lying, marshy land near the shores of Lake St. Clair in Macomb County, Michigan.” The Sixth Circuit Court of Appeals had determined that the wetland was not subject to the Corps’ authority by interpreting “the Corps’ regulation to exclude from the category of adjacent wetlands—and hence from that of ‘waters of the United States’—wetlands that were not subject to flooding by adjacent navigable waters at a frequency sufficient to support the growth of aquatic vegetation.” The Supreme Court reversed based on a plain reading of the Corps’ regulations to include wetlands saturated by groundwater (as long as sufficient to support wetland vegetation)—the wetlands would be subject to the Corps’ jurisdiction so long as the regulation was a permissible interpretation of the CWA.

exert jurisdiction to the extent of Congress’s commerce power by publishing examples of links to interstate commerce to be used as a basis for CWA jurisdiction. See Downing, supra note 32, at 483. Reliance on one of these examples, the Migratory Bird Rule, was struck down in SWANCC. See infra Part I.B.2.

39. See Downing, supra note 32, at 480-83.
42. SWANCC, 531 U.S. at 167-68.
43. Riverside Bayview Homes, 474 U.S. at 124.
44. Id. at 125.
45. Id. at 131.
Applying the *Chevron* doctrine,\(^{46}\) the Supreme Court explained that the Corps' regulation is permissible if "it is reasonable, in light of the language, policies, and legislative history of the [CWA] for the Corps to exercise jurisdiction over wetlands adjacent to but not regularly flooded by rivers, streams, and other hydrographic features more conventionally identifiable as 'waters.'"\(^{47}\) Citing the broad, systemic goal of maintaining and improving water quality, the Supreme Court determined that the Corps' inclusion of adjacent wetlands in the term "waters" was reasonable because the wetlands generally "play a key role in protecting and enhancing water quality."\(^{48}\) As further evidence of the regulation's reasonableness, the Supreme Court noted apparent congressional acquiescence to the Corps' construction because Congress failed to include a limitation of the Corps' jurisdiction in the 1977 amendments to the CWA despite debate centered around the issue.\(^{49}\) Though "chary of attributing significance to Congress' failure to act,"\(^{50}\) the Supreme Court nonetheless found the omission sufficient, in combination with the broad purpose of the CWA, to place the wetlands at issue under the Corps' authority.\(^{51}\)

2. **SWANCC**

In *SWANCC*, twenty-three suburban cities and villages had purchased a large parcel of land on which to "develop a disposal site for baled nonhazardous solid waste."\(^{52}\) The site had been used to operate a sand and gravel mining pit until 1960, and the trenches left behind had been grown over and developed "into a scattering of permanent and seasonal ponds of varying size... and depth."\(^{53}\) The Corps claimed jurisdiction over these ponds according to its Migratory Bird Rule, which extended jurisdiction to waters "[w]hich are or would be used as habitat by birds protected by Migratory Bird Treaties" or "by other migratory birds which cross state lines."\(^{54}\)

Examining precedent, the Court noted that "[i]t was the significant nexus between the wetlands and 'navigable waters' that informed [their] reading of the CWA in *Riverside Bayview Homes.*"\(^{55}\) Finding the Migratory Bird

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\(^{47}\) *Id.*

\(^{48}\) *Id.* at 133.

\(^{49}\) *Id.* at 136.

\(^{50}\) *Id.* at 137.

\(^{51}\) *Id.* at 137-39.


\(^{53}\) *Id.*

\(^{54}\) Migratory Bird Rule, 51 Fed. Reg. 41,217 (Nov. 13, 1986) (codified at 33 C.F.R. pt. 328) (clarifying the Corps' definition of navigable waters found at 33 C.F.R. § 328.3 (1986)).

\(^{55}\) *SWANCC*, 531 U.S. at 167.
Rule to encroach too closely on the outer extent of Congress’s Commerce Clause power and on traditional state responsibilities, the Court declined to extend *Chevron* deference to the Corps’ regulations. According to the Court, though the term “navigable” in the CWA is of “limited import,” its inclusion in the statute places Congress’s authority to enact the CWA in “its traditional jurisdiction over” navigable waters. Because Congress did not clearly state an intent to reach the extent of the Commerce Clause power or to “readjust the federal-state balance,” the Court found the Migratory Bird Rule to “exceed[] the authority granted to [the Corps] under § 404(a) of the CWA.”

In the aftermath of the *SWANCC* decision, lower courts disagreed about the appropriate implementation of its holding. The narrow interpretation of the *SWANCC* holding, invalidating only the Migratory Bird Rule, allows jurisdiction based on a hydrological connection between isolated wetlands and navigable waters. Both the Fourth and Sixth Circuit Courts of Appeals adhered to this interpretation. Conversely, a broad reading of *SWANCC* requires a “significant nexus”—more than a hydrological connection—between the wetlands and navigable waters, possibly as limited as requiring the body at issue to be “either navigable or directly adjacent to an open water.” The Fifth Circuit advanced this view. Without either side of this conflict gaining consensus, federal jurisdiction varied throughout the country and called out for clarification from the Supreme Court. It is against this backdrop that the Supreme Court heard and decided *Rapanos*.

**C. Rapanos**

1. **Facts**

*Rapanos* addressed two consolidated cases concerning four wetlands in eastern Michigan—three owned by John Rapanos or his affiliates and one

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56. Id. at 172-73.
59. Id. at 172-74.
60. Id. at 174.
61. See May, *supra* note 7, at 128.
62. Id. at 153.
63. See United States v. Rapanos, 376 F.3d 629 (6th Cir. 2004); United States v. Deaton, 332 F.3d 698 (4th Cir. 2003). At least one commentator argues that these decisions were based on dicta from earlier Seventh and Ninth Circuit cases “ discounting *SWANCC*.” Broderick, *supra* note 11, at 498.
64. See May, *supra* note 7, at 151-52.
67. See May, *supra* note 7, at 128.
68. See Broderick, *supra* note 11, at 522.
owned by June Carabell. Rapanos, despite having his land inspected to disagreeable results, spent around one million dollars between the three sites to fill the wetlands and make them more conducive to development. The district court in the Eastern District of Michigan found the wetlands to be adjacent to tributaries of navigable waters and, therefore, "waters of the United States." The Sixth Circuit affirmed, citing the hydrological connection between the wetlands and a navigable water. In contrast, Carabell sought a permit to dump, fill, and develop his parcel of land into a number of condominium units. When denied a permit due to the importance of the ecological function of his property, Carabell brought suit against the Army Corps of Engineers, also in the Eastern District of Michigan. The district court found a significant nexus between the wetlands and nearby Lake St. Clair, and the Sixth Circuit affirmed, stating that the Carabell wetland was adjacent to a navigable water for purposes of the CWA. Because both cases dealt with the same issue of law—interpreting "navigable waters" under the CWA—the Supreme Court consolidated them and filed one decision addressing both.

2. The Plurality Opinion

In determining whether the Corps' jurisdiction should extend to the wetlands at issue, Justice Scalia, writing for the plurality, focused his analysis on two interpretive problems facing the Court: how to interpret "navigable waters" in the CWA and how to interpret "adjacency" within the Court's precedent. The answers to these questions became his two-part

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70. In 1988, John Rapanos had at least one of the parcels, the Salzburg site, inspected by an official from the Michigan Department of Natural Resources who advised Rapanos that parts of his land were likely regulated wetlands. Id. at 2238 (Kennedy, J., concurring). Because he was advised that he could develop his land if he delineated and preserved the wetlands, Rapanos hired a wetland consultant. Id. Reportedly, the results of that consultation were not to Rapanos's liking, id. at 2238, and he threatened to "destroy" the consultant and not pay him unless he made the report disappear, id. at 2253 (Stevens, J., dissenting). Because Rapanos had in the past ignored a cease-and-desist letter and an administrative compliance order, he had been previously convicted of criminal charges under the Clean Water Act for the same acts at issue in this civil case. See United States v. Rapanos, 339 F.3d 447 (6th Cir. 2003).
71. Rapanos, 126 S. Ct. at 2253 (Stevens, J., dissenting).
72. Id. at 2219 (plurality opinion) (internal quotation marks omitted).
73. Id.
74. See id.
75. See id.
76. Id.
77. See id.
78. Chief Justice Roberts also wrote a concurring opinion in which he criticized the Corps for not amending its regulations following the SWANCC decision. Id. at 2235-36 (Roberts, C.J., concurring).
79. Justice Scalia was joined by Chief Justice Roberts, and Justices Thomas and Alito. Id. at 2214 (plurality opinion).
80. Id. at 2215-25.
test for federal jurisdiction over wetlands. First, Justice Scalia addressed the statutory definition of navigable waters—"waters of the United States." He began with a dictionary definition of the "waters" to show that the phrase's plain meaning refers to "continuously present, fixed bodies of water." He supported this construction by analogizing to the traditional meaning of navigable waters and also to the use of the phrase "hydrographic features" in *Riverside Bayview Homes*. Justice Scalia also argued that statutory construction urged this requirement for navigable waters by distinguishing between point sources and navigable waters and delineating channels that tend to run intermittently as point sources. Finally, Justice Scalia urged an implied requirement of relative permanence in the term "navigable waters" to promote the statutory policy of preserving rights and responsibilities traditionally delegated to states, as well as to adhere to the power delegated to Congress through the Commerce Clause.

To address his second concern, Justice Scalia turned to the meaning of "adjacency" within the Corps' regulations. Because the Court in *Riverside Bayview Homes* had emphasized the ambiguity in delineating a boundary around navigable waters with abutting wetlands, Justice Scalia determined "adjacency" to require a "continuous surface connection" between the wetland and the navigable water. Though the plurality opinion proposed a significant curtailment of the Corps' jurisdiction, Justice Scalia argued that the limitations would not significantly affect the effectiveness of the CWA due to the record of lower courts regulating discharges so long as they reach a navigable water. Because the Sixth Circuit did not analyze the cases according to this two-part test, the plurality, with Justice Kennedy's concurrence, remanded the cases for further proceedings.

3. Justice Kennedy's Concurrence

While in favor of remanding the cases, Justice Kennedy did not agree with the plurality's two-part test. Justice Kennedy found the key to interpreting navigable waters in text from *SWANCC*: "It was the significant nexus between the wetlands and 'navigable waters' that informed our reading of the CWA in *Riverside Bayview Homes*." To elaborate the meaning of significant nexus, he stated, "wetlands possess the requisite

81. *Id.* at 2220 (internal quotation marks omitted).
82. *Id.* at 2221.
83. *Id.* at 2222 (emphasis omitted).
84. *Id.* at 2222-23.
85. See *id.* at 2223-24.
86. *Id.* at 2225.
87. *Id.* at 2226.
88. *Id.* at 2227.
89. *Id.* at 2235-36.
90. See *id.* at 2236 (Kennedy, J., concurring).
nexus, and thus come within the statutory phrase ‘navigable waters,’ if the
wetlands, either alone or in combination with similarly situated lands in the
region, significantly affect the chemical, physical, and biological integrity
of other covered waters more readily understood as ‘navigable.’” 92 Because the lower courts did not use the significant nexus test, but the
established facts did at least imply that standard might be met, Justice
Kennedy cast the fifth and decisive vote to remand the cases for further
consideration. 93

4. The Dissent94

In contrast, the dissent argued the regulation at issue and its application
in the cases represented a “quintessential example of the Executive’s
reasonable interpretation of a statutory provision.” 95 Justice John Paul
Stevens, writing for the dissent, would have held that Riverside Bayview
Homes controlled in this case. 96 In Riverside Bayview Homes, the holding
was not limited to wetlands sharing a continuous surface connection; rather,
the decision acknowledged the Corps’ regulation defining “adjacent” to
include those wetlands in “reasonable proximity.” 97 Furthermore, the Court
had noted that it was not dispositive that some adjacent wetlands might not
be of great importance to the surrounding waters because it was acceptable
for the regulations to be somewhat overinclusive to ensure that enforcement
would be effective. 98 In extolling the many benefits that wetlands provide
to nearby water systems, Justice Stevens emphasized that the wetlands are
necessary to the proper functioning of a healthy water system. 99 Finally,
because the regulation had been in force for thirty years, the dissent argued
that any limitation should come from Congress, not the judiciary. 100

5. Implications for Lower Courts

Because the Court was unable to agree on a clarifying standard, lower
courts interpreting Rapanos will generally be left to do as Chief Justice
John Roberts lamented and “feel their way on a case-by-case basis.” 101
With the dissent favoring a broader jurisdictional grant than either the

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92. Rapanos, 126 S. Ct. at 2248 (Kennedy, J., concurring).
93. See id. at 2250-52.
94. Justice Stevens wrote the dissent, joined by Justices Souter, Ginsburg, and Breyer.
Id. at 2252 (Stevens, J., dissenting). Justice Breyer also wrote a dissent in which he urged
the Corps to define the term “significant nexus” in order to avoid “ad hoc determinations that
run the risk of transforming scientific questions into matters of law.” Id. at 2266 (Breyer, J.,
dissenting).
95. Id. at 2252-53 (Stevens, J., dissenting).
96. Id. at 2255.
97. Id. (internal quotation marks omitted).
98. See id. at 2256.
99. Id. at 2257.
100. Id. at 2259.
101. Id. at 2236 (Roberts, C.J., concurring).
plurality or Justice Kennedy, Justice Stevens encouraged lower courts to uphold jurisdiction whenever either the plurality's two-part test or Justice Kennedy's significant nexus test were met.\textsuperscript{102}

The few cases decided since \textit{Rapanos} illustrate continuing confusion regarding the extent of the Corps' jurisdiction under the CWA. The Seventh Circuit remanded \textit{United States v. Gerke Excavating, Inc.} for further fact-finding toward the significant nexus requirement.\textsuperscript{103} Only one circuit court has decided a post-\textit{Rapanos} case on its merits. In \textit{Northern California River Watch v. City of Healdsburg}, the Ninth Circuit found a significant nexus between a wetland into which sewage was discharged and a navigable water, despite lack of surface connection between them, because the wetland seeped directly into the navigable water.\textsuperscript{104}

Similarly, district courts have grappled with the standards articulated in the \textit{Rapanos} decision. In a Florida case, the court approved of the Corps' jurisdiction over an intermittent stream because the pollutant would, in theory, eventually discharge into navigable waters.\textsuperscript{105} In an opinion critical of the ambiguity of Justice Kennedy's significant nexus test and laudatory in its appraisal of the plurality approach, however, a district court in Texas found no significant nexus where oil spilled into a seasonally dry streambed.\textsuperscript{106} The court required evidence that the spill had reached the navigable waters to which the streambed led.\textsuperscript{107}

The struggle of lower courts to apply the significant nexus test illustrates the necessity of providing a clearer standard. Part II analyzes the plurality's dual requirements of relative permanence and continuous surface connection to determine their suitability as criteria for the Corps' jurisdiction under the CWA.

\textbf{II. ANALYSIS OF THE PLURALITY'S TWO-PART TEST}

In crafting a two-part test for federal jurisdiction over wetlands under the CWA, Justice Scalia, for the plurality, advanced a bright line approach toward this persistent interpretive problem.\textsuperscript{108} Adopting any bright line standard would allow for more consistency and efficiency within the

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\textsuperscript{102} \textit{Id.} at 2265 (Stevens, J., dissenting).
\textsuperscript{103} \textit{United States v. Gerke Excavating, Inc.}, 464 F.3d 723, 725 (7th Cir. 2006).
\textsuperscript{104} \textit{N. Cal. River Watch v. City of Healdsburg}, 457 F.3d 1023, 1030 (9th Cir. 2006).
\textsuperscript{106} \textit{United States v. Chevron Pipe Line Co.}, 437 F. Supp. 2d 605, 615 (N.D. Tex. 2006).
\textsuperscript{107} \textit{Id.}
\textsuperscript{108} \textit{Wetlands: Georgetown Law's Richard Lazarus, Other Experts Examine Supreme Court Ruling}, http://www.eande.tv/transcripts/?date=062206 (last visited Apr. 23, 2007) [hereinafter Wetlands] (posting a transcript and video of the panel discussion). Interestingly, at least one commentator has noted that it is possible that the "passionate" tone of Justice Scalia's opinion may be due to the frustration of having seen very little change since the \textit{SWANCC} opinion. \textit{See id.}
Corps and provide more notice to potentially affected landowners. Clear standards would also avoid the necessity of making the case-by-case determinations required under Justice Kennedy's significant nexus test. Indeed, for this reason, Justice Scalia's test may actually make things easier for the Corps than would Justice Kennedy's test, at least where the two-part test is satisfied.

The plurality's test revolves around two questions: (1) What does "navigable waters" mean in the CWA?; and (2) What does "adjacent" mean within the precedent of Riverside Bayview Homes and the Corps' regulations that assert federal jurisdiction over wetlands adjacent to navigable waters? To answer these questions, the plurality specifically focused on the issue in each case—jurisdiction over wetlands under the dredge and fill provision of the CWA. Despite that focus, adopting the plurality's approach more broadly would have far greater implications—from the meaning of "navigable waters" and "adjacency" relating to other sections of the CWA to the effect on jurisdiction under other laws that have adopted the CWA's "navigable waters" meaning, including the Oil Pollution Act.

No party to either of the consolidated cases promulgated the criteria advanced by the plurality. Instead, the plurality compiled the factors from different points in several amicus briefs. While this point, by itself, does not speak to the legitimacy of the factors set forth, such a practice is somewhat unusual. Furthermore, a judicially created rule may be particularly problematic when addressing a technical issue.

In the following analysis, this Comment examines the bright line approach promulgated by the plurality in order to determine whether it

109. See Hearing, supra note 13 (statement of Jonathan H. Adler, Professor of Law, Case Western Reserve University School of Law).
110. Id. (statement of Keith Kisling, National Association of Wheat Growers).
111. Rapanos v. United States, 126 S. Ct. 2208, 2236 (2006) (Roberts, C.J., concurring). Although Justice Kennedy does suggest that more specific regulations by the Corps would allow broader categorization so that case-by-case determinations would not be necessary, at least until those regulations are enacted, case-by-case determination is required. Wetlands, supra note 108.
112. See Rapanos, 126 S. Ct. at 2220-25.
114. Rapanos, 126 S. Ct. at 2215.
115. See Rice v. Harken Exploration Co., 250 F.3d 264 (5th Cir. 2001) (using CWA jurisprudence to determine jurisdiction under the Oil Pollution Act); see also Hearing, supra note 13 (statement of Sen. Hillary Rodham Clinton) (recognizing the importance of defining "the waters of the United States" due to the broad application of the term).
116. See Rapanos, 126 S. Ct. at 2259 (Stevens, J., dissenting).
118. See Rapanos, 126 S. Ct. at 2259 (Stevens, J., dissenting).
should be more broadly adopted by Congress, the Corps, or the Supreme Court as the standard for federal jurisdiction under the CWA. Because of its limited focus, this Comment does not deal directly with questions of proper agency deference and instead assumes that the plurality correctly declined to extend *Chevron* deference to the Corps’ regulations in *Rapanos*. While contestable, this assumption facilitates the discussion by focusing exclusively on the merits of the standards advanced.

Because the major questions of *Rapanos* revolve around the interpretation of the CWA, classic statutory interpretation methods informs the bulk of the analysis of the plurality’s two-part test. Part II.A examines the first of the plurality’s criteria, relative permanence, while Part II.B examines the second, continuous surface connection. For each criterion, support for and criticism of the requirements are drawn from the text and structure of the statute, precedent, and the CWA’s purpose and history. The remainder of the analysis takes a more scientific approach in asking how adoption of each requirement impacts the realization of the environmental purpose at the heart of the CWA.

### A. Relatively Permanent Bodies

Both the Corps’ regulations and Supreme Court precedent establish that wetlands adjacent to “waters of the United States” qualify as navigable waters under the CWA. In *Rapanos*, a threshold question required determining whether the channels, to which the wetlands at issue were (presumably) adjacent, were themselves “waters of the United States.” For the plurality, a necessary implication of the term “navigable waters” within the CWA limits its application to “relatively permanent, standing or continuously flowing bodies of water forming geographic features that are described in ordinary parlance as streams[,]... oceans, rivers, [and] lakes.” Specifically, the plurality considers intermittent or ephemeral streams problematic and explicitly excludes desert washes and arroyos as the most implausible candidates for status as navigable waters. Seasonal streams, though technically intermittent, would qualify as

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121. *See, e.g.*, *Rapanos*, 126 S. Ct. at 2262 (Stevens, J., dissenting).
123. *See Rapanos*, 126 S. Ct. at 2220-25.
124. *Id.* at 2225 (citation and internal quotation marks omitted).
127. *See Rapanos*, 126 S. Ct. at 2222.
THE BRIGHT LINE OF RAPANOS

navigable waters so long as they flow continuously "some months of the year."128

In analyzing the plurality's requirement of relative permanence, this Comment first explores support and then criticisms of such a requirement. While much of the discussion focuses on the rationales advanced by the Supreme Court Justices in their opinions, other perspectives, particularly addressing scientific findings and consequences, are introduced to achieve a more comprehensive consideration of the advisability of requiring navigable waters to be relatively permanent bodies.

1. Why Require Relative Permanence?

Though not advanced by the parties, a requirement of relative permanence gained favor with the plurality.129 This section offers support for requiring navigable waters to be relatively permanent bodies from both interpretive and scientific standpoints.

a. Interpretive Arguments

In interpreting a statute, logic demands beginning with the text.130 Unfortunately, legislatures are rarely able to enact statutes susceptible to only one reading.131 Instead, judges often use other methods to determine proper statutory interpretation.132 Because the CWA defines "navigable waters" as "waters of the United States," the term extends to more than traditionally navigable waters, but the exact extent of this expansion is ambiguous.133 The plurality in Rapanos interpreted "navigable waters" to imply a relative permanence requirement.134 This section analyzes the plurality's interpretation using techniques that focus on the CWA's text and structure, precedent on the issue, and the purpose and history of the CWA. While not offering an exhaustive interpretational analysis, this discussion enables consideration of a broad range of issues relevant to the CWA's interpretation.

i. Text and Structure

Congress provided the starting point for the interpretation of "navigable waters" by including a statutory definition within the CWA: "The term 'navigable waters' means the waters of the United States, including the

128. Id. at 2221 n.5.
129. Id. at 2225.
131. See Verchick, supra note 6, at 851 (articulating political controversy and ensuring flexibility to address unforeseen circumstances as reasons for statutory ambiguity).
132. See Mikva & Lane, supra note 130, at 50 (delineating a traditional interpretive approach).
134. Rapanos, 126 S. Ct. at 2225.
Based on this definition, all nine Supreme Court Justices agree that "navigable waters" within the CWA includes more than traditional navigable waters. While Riverside Bayview Homes dismissed the adjective "navigable" as having "limited import" within the CWA, the SWANCC decision clarified that "navigable" nonetheless carried meaning by creating a reference point for jurisdiction. The statutory definition for "navigable waters," "the waters of the United States," features a definite article with the plural form of water. Because water qua water is not easily separated into multiple units, this construction implies that the definition refers to more discrete entities than the general noun water. In this form, waters means "the water occupying or flowing in a particular bed." A body fits within the definition of "the waters" only if it contains water. Common sense suggests that referring to a seemingly dry area of land as part of "the waters" is, at least, problematic.

Turning to the structure of the text, the CWA prohibits "addition of any pollutant to navigable waters from any point source." This construction separates point sources and navigable waters into two distinct groups. For this reason, the definition of point source within the statute may shed light on the meaning of navigable waters. The CWA defines a point source as "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft." In general, the types of conveyances enumerated as point sources may be expected to feature intermittent flows. Likewise, some, such as a channel or ditch, might presumably be called by a different name if they flowed more continuously.

136. See Rapanos, 126 S. Ct. at 2220; id. at 2241 (Kennedy, J., concurring); id. at 2255 (Stevens, J., dissenting).
137. Riverside Bayview Homes, 474 U.S. at 133.
140. Most commonly, multiples involving water as water would require a constraining element (for example, glasses of water, drops of water, etc.).
141. See Rapanos, 126 S. Ct. at 2220.
142. Webster’s Third International Dictionary 2581 (1986). Justice Scalia referred to this definition: "'[a]s found in streams and bodies forming geographical features such as oceans, rivers, [and] lakes,’ or ‘the flowing or moving masses, as of waves or floods, making up such streams or bodies.’” Rapanos, 126 S. Ct. at 2220 (quoting Webster’s New International Dictionary 2882 (2d ed. 1954)). Justice Kennedy offers a further option from the same dictionary, allowing for impermanent occurrences: “‘flood or inundation.’” Id. at 2242 (Kennedy, J., concurring) (quoting Webster’s New International Dictionary, supra, at 2882).
143. Rapanos, 126 S. Ct. at 2222 (appealing to common sense in distinguishing intermittent and ephemeral streams from navigable waters).
145. Rapanos, 126 S. Ct. at 2223.
146. Id. at 2222-23.
148. Rapanos, 126 S. Ct. at 2222.
149. Id. at 2223 n.7.
inclusion of intermittent conveyances, like ditches, in the definition of point sources, and the inclusion of more permanent bodies, like seas, as navigable waters creates a structural inference that frequency or duration of water flow may have bearing on classification of a particular body as one or the other.\textsuperscript{150}

While the text and structure of the CWA may not offer a plain meaning capable of clear interpretation for the term navigable waters, it may nonetheless provide enough information to determine that certain bodies fall outside of federal jurisdiction.\textsuperscript{151} If bodies that are dry for the majority of a year may not reasonably be termed "waters," the text and structure of the CWA supports requiring navigable waters to be relatively permanent.

ii. Precedent

The Supreme Court has not addressed the issue of permanence in navigable waters.\textsuperscript{152} The facts of the previous cases did not involve an intermittent connection to navigable waters, so the occasion to address this issue did not arise.\textsuperscript{153} Despite being decided on other issues, however, Riverside Bayview Homes and SWANCC may offer implicit support for requiring navigable waters to be relatively permanent. In Rapanos, the Court relied on Riverside Bayview Homes, acknowledging that "waters of the United States . . . referred primarily to rivers, streams, and other hydrographic features more conventionally identifiable as 'waters.'"\textsuperscript{154} Presumably, such hydrographic features would necessarily contain water on a relatively permanent basis. Similarly, both SWANCC and Riverside Bayview Homes used the term "open water" when referring to navigable waters.\textsuperscript{155} The First Circuit has read this language as distinguishing between "rivers, lakes, streams, and similar bodies of water" and "intermediate forms of partially wet, partially dry areas, i.e. wetlands, and . . . dry land."\textsuperscript{156} If one reads the "partially wet, partially dry" language of the First Circuit to describe an intermittent stream channel during different parts of the year, this interpretation provides support for the assertion that "open water" requires a relatively permanent presence of water. Likewise, at least one district court has ruled that statutory

\begin{itemize}
  \item \textsuperscript{150} See id. at 2222-23.
  \item \textsuperscript{151} See United States v. Chevron Pipe Line Co., 437 F. Supp. 2d 605, 613 (N.D. Tex. 2006) ("Thus, the plurality looked to the statutory wording of the CWA and gave it its plain and literal meaning—a constructionist viewpoint.").
  \item \textsuperscript{153} Riverside Bayview Homes featured a wetland that abutted a traditionally navigable water. 474 U.S. at 131. SWANCC, on the other hand, concerned geographically isolated ponds with no connection to navigable waters. 531 U.S. at 163.
  \item \textsuperscript{154} Rapanos, 126 S. Ct. at 2222 (emphasis and internal quotation marks omitted).
  \item \textsuperscript{155} Id.
  \item \textsuperscript{156} United States v. Johnson, 437 F.3d 157, 169 (1st Cir. 2006).
\end{itemize}
construction would not allow inclusion of an ephemeral stream as a navigable water.\textsuperscript{157}

Though none of the precedent discussed in this section would bind the Supreme Court, it may be used to support a determination that relative permanence is required.\textsuperscript{158} The excerpts and examples outlined above support requiring navigable waters to be relatively permanent by showing how the requirement is consistent with both prior Supreme Court precedent and lower court interpretations.\textsuperscript{159}

\textbf{iii. Purpose and History}

The CWA’s purpose, “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters,”\textsuperscript{160} is immensely broad. In fact, throughout the enactment proceedings, the CWA was described as a comprehensive scheme broadly addressing issues of water quality.\textsuperscript{161} Many assumed, at least until the ruling in \textit{SWANCC}, that Congress granted jurisdiction to the Corps to the extent of its power under the Commerce Clause.\textsuperscript{162} In contrast, the second paragraph of the goals and policy section of the CWA states,

\begin{quote}
It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter.\textsuperscript{163}
\end{quote}

To the extent that the CWA limits what private landowners may do with their land designated as navigable waters, it functions as a land use restriction.\textsuperscript{164} Because land use restrictions are typically within the domain of the states, the further the Corps’ jurisdiction is extended under the CWA, the further it encroaches on a “primary responsibility” of the state.\textsuperscript{165} Unquestionably, the CWA would cover much more land area if intermittent

\begin{footnotes}
\textsuperscript{158} See \textit{Rapanos}, 126 S. Ct. at 2222.
\textsuperscript{159} See supra notes 138-44 and accompanying text.
\textsuperscript{160} 33 U.S.C. § 1251(a) (2000).
\textsuperscript{162} See Natural Res. Def. Council, Inc. v. Callaway, 392 F. Supp. 685, 686 (D.D.C. 1975); Hearing, supra note 13 (statement of Sen. Lincoln Chafee) (quoting the 1972 conference report that the CWA was to get “the broadest possible constitutional interpretation” (internal quotation marks omitted)). In \textit{SWANCC}, the Court refused to grant \textit{Chevron} deference to the Corps’ regulations because they came too close to the outer bounds of Congress’s commerce power. \textit{SWANCC}, 531 U.S. at 172. Likewise, the Court in \textit{Rapanos} refused to grant the Corps deference due to the limits of the commerce power. 126 S. Ct. at 2224.
\textsuperscript{163} 33 U.S.C. § 1251(b).
\textsuperscript{164} See \textit{Rapanos}, 126 S. Ct. at 2224; Hearing, supra note 13 (statement of Sen. James M. Inhofe).
\textsuperscript{165} 33 U.S.C. § 1251(b).
\end{footnotes}
and ephemeral streams were included as navigable waters than if they were not.\textsuperscript{166} Because much of this land is privately owned,\textsuperscript{167} some argue that states' rights should weigh on balance to exclude these occasionally flowing bodies in order for the statute to adhere to its policy of preserving states' rights.\textsuperscript{168}

No legislative action has been taken to rein in the Corps' asserted jurisdiction, although such amendments have been proposed.\textsuperscript{169} Courts generally hesitate to infer too much from the defeat of any legislative proposal, however, because individual members of Congress may have unrelated reasons for opposing a bill.\textsuperscript{170} Further, courts must interpret the intention of the enacting Congress, manifested in the words and structure of the CWA, not a later Congress's interpretation of the statute.\textsuperscript{171}

Following the \textit{SWANCC} decision, the Corps published an Advanced Notice of Proposed Rulemaking (ANPRM) in the Federal Register seeking comments on whether and how its regulations should change in response to \textit{SWANCC}.\textsuperscript{172} A draft version of the new regulations would have required "continuous flow" for a body to be covered as a navigable water under the CWA; however, the Corps never adopted the new regulations.\textsuperscript{173} Though included here as administrative history of the CWA, the Corps' consideration of a continuous flow requirement advances the notion that \textit{SWANCC} implicitly supports this requirement.\textsuperscript{174} Though the draft rule was ultimately not adopted, supporters of this provision could easily point to other political factors to explain its demise.\textsuperscript{175}

Having considered a broad range of interpretive arguments for requiring navigable waters to be relatively permanent, the next section takes a more practical approach in exploring some of the scientific bases for this requirement.

\textbf{b. Scientific Arguments}

The extent to which requiring navigable waters to be relatively permanent will affect the purpose of the CWA is largely a scientific

\begin{footnotesize}
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\textsuperscript{166} Sixty percent of stream length in the United States is intermittent and ephemeral. \textit{See} infra note 177 and accompanying text.
\textsuperscript{167} \textit{Hearing}, \textit{supra} note 13 (statement of Keith Kisling, National Association of Wheat Growers) ("Approximately 70\% of the land in the lower 48 States is owned privately.").
\textsuperscript{168} \textit{Rapanos}, 126 S. Ct. at 2223.
\textsuperscript{170} \textit{See} \textit{id}.
\textsuperscript{171} \textit{See} \textit{id}.
\textsuperscript{172} \textit{See} \textit{id}.
\textsuperscript{173} \textit{See} \textit{Verchick}, \textit{supra} note 6, at 873-75.
\textsuperscript{174} \textit{See} \textit{id}. at 869 (discussing the procedure between \textit{SWANCC} and the drafted rule).
\textsuperscript{175} While a large number of comments were received against limiting jurisdiction, it is generally thought that President George W. Bush was initially supportive of a restriction on jurisdiction, but changed his mind after a meeting with representatives from Ducks Unlimited, a wetlands conservation group that includes many hunters. \textit{Id}. at 869 n.149.
\end{footnotes}
\end{footnotesize}
question. Analyzing scientific findings regarding intermittent and ephemeral streams offers some answers. Though the plurality’s notion of relative permanence remains somewhat indeterminate with regards to intermittent streams, it clearly excludes ephemeral streams, washes, and arroyos from federal jurisdiction.\textsuperscript{176}

Around 60\% of stream length in the United States carries an intermittent or ephemeral flow.\textsuperscript{177} This percentage is even higher in the west, where 80-90\% of streams flow only seasonally or after a hard rain.\textsuperscript{178} While these numbers illustrate the significance of decisions made affecting these channels, they also illustrate the vast amounts of land that would be subject to the Corps’ jurisdiction if intermittent and ephemeral streams were included as navigable waters.\textsuperscript{179} Since the CWA seeks to preserve states’ rights while protecting water quality, limiting jurisdiction based on permanence of water flow imposes a limitation on federal jurisdiction that would further this policy.\textsuperscript{180}

Excluding intermittent and ephemeral streams from federal jurisdiction under the CWA does not leave them unprotected. In accordance with their traditional rights to enact land use restrictions, states may regulate these channels if they find it advisable to do so.\textsuperscript{181} That most states currently do not regulate intermittent and ephemeral channels should not be understood to reflect accurately their inability to enact such restrictions.\textsuperscript{182} In contrast, states have had little incentive to enact their own protections of these channels because the federal government has insisted that it can take care of it all.\textsuperscript{183} State initiatives, be they regulations or grassroots conservation efforts, may even protect intermittent and ephemeral streams more effectively than federal regulation because they can be more efficient and localized.\textsuperscript{184}

Pollutant discharges made into intermittent or ephemeral streams may still be regulated under the CWA, even if these channels are excluded from navigable water status, as long as the pollutants eventually reach navigable

\textsuperscript{176} Rapanos, 126 S. Ct. at 2221-22.
\textsuperscript{178} See Verchick, supra note 6, at 875.
\textsuperscript{179} See Joshua L. Lee, Note, Federal Wetland Jurisdiction and the Power to Regulate Commerce: Searching for the Nexus in Gerke Excavating, 2006 BYU L. Rev. 263, 289 (noting the double-edged nature of this argument because it cuts both ways).
\textsuperscript{180} Rapanos, 126 S. Ct. at 2223-24.
\textsuperscript{181} See Hearing, supra note 13 (statement of Jonathan H. Adler, Professor, Case Western Reserve University School of Law).
\textsuperscript{182} See id. (statement of Sen. James M. Inhofe).
\textsuperscript{183} See id.
\textsuperscript{184} See id. (statement of Jonathan H. Adler, Professor, Case Western Reserve University School of Law) (“Private landowners ... are far more willing to cooperate with conservation organizations and government agencies when doing so does not increase the threat of federal regulation.”).
Because relative permanence affects only classification as a navigable water, and not as a point source, intermittent or ephemeral streams may be point sources if they convey pollutants to a navigable water. Lower court precedent confirms this method of regulation. In this way, the CWA furthers its goal of improving water quality without infringing on either states' or landowners' rights by asserting jurisdiction over a large classification of land that may not significantly affect water quality. If a substance cannot be detected by the time it reaches a navigable water, it ceases to be a pollutant.

To the plurality and other proponents, requiring navigable waters to be relatively permanent represents a helpful bright line standard that promotes the purpose of the CWA while imposing a limitation, inferred from the text and structure of the statute, which will prevent federal infringement on states' and landowners' rights. The following section explores criticisms of the proposed requirement.

2. Why Not Require Relative Permanence?

Justice Kennedy, along with the four dissenting Justices in Rapanos, criticized the plurality's promulgation of requiring navigable waters to be relatively permanent. This section explores why relative permanence may not provide an appropriate bright line standard for jurisdiction under the CWA by responding to arguments in support of the requirement and introducing further considerations.

a. Interpretive Arguments

The subjective nature of interpretation renders most texts and laws susceptible to more than one reasonable reading. As with the section supporting the requirement, this section explores arguments against requiring navigable waters to be relatively permanent on the bases of the text and structure of the CWA, precedent on the issue, and the CWA's history and purpose.

185. Rapanos, 126 S. Ct. at 2227.
186. Id.
187. See id.
188. See id. at 2224 n.9 (responding to Justice Kennedy's assertion that the plurality's test is both overinclusive and underinclusive).
189. See James W. Hayman, Comment, 'Regulating Point-Source Discharges to Groundwater Hydrologically Connected to Navigable Waters: An Unresolved Question of Environmental Protection Agency Authority Under the Clean Water Act, 5 Barry L. Rev. 95, 124 (2005) (discussing a similar dilution process of groundwater).
190. See Rapanos, 126 S. Ct. at 2224 n.9.
191. Id. at 2242 (Kennedy, J., concurring); id. at 2256 (Stevens, J., dissenting).
While the use of "the waters" in the CWA and its definition illustrates that the CWA does not cover particles of water in general, they do not clearly establish that the flow or presence of water must be relatively permanent to fit within the meaning of waters. No definition of waters explicitly requires permanent water presence. The inclusion of streams in the enumerated list may even imply otherwise since ephemeral and intermittent streams are nonetheless streams. Though use of the term "waters" does not require inclusion of intermittent or ephemeral streams, it does not prohibit their inclusion. The plurality appeals to common sense to build this inference; however, it is not clear that common sense supports this conclusion. While further parsing of textual distinctions is possible, such semantic dissection may not arrive at the best interpretation of text enacted for general applicability.

As to the structural argument advanced above, reliance on the definition of a point source may be misplaced. The definition of point source within the CWA does not explicitly address permanence of flow, so a requirement of intermittency goes beyond the text of the statute. In addition, though two distinct groups, recognizing an intermittency requirement for point sources might not create the negative inference of a permanence requirement for navigable waters. This analysis suggests that the inference drawn by the plurality may actually be multiple layers of inferences. Even if the plurality’s observations about the nature of point sources were correct, reducing that generality to a rule may ignore other relevant features of the streams. For instance, all intermittent streams would be excluded from navigable water status regardless of their proximity to traditional navigable waters or volume when flowing.

Calling a streambed a channel (or point source) while dry and a stream (or navigable water) while flowing would cause the Corps’ jurisdiction to fluctuate depending on precipitation and time of year. Such distinctions are impractical and reinforce the necessity of choosing whether to protect

192. See supra Part II.A.1.a.i.
193. See Webster’s Third International Dictionary 2581 (1986).
194. Rapanos, 126 S. Ct. at 2260 (Stevens, J., dissenting).
195. Id. at 2221 n.5 (plurality opinion).
196. Id. at 2260 (Stevens, J., dissenting).
197. See id. at 2221-22 (plurality opinion).
198. See id. at 2261 n.12 (Stevens, J., dissenting). Referring to the plurality’s point source distinctions, Justice Stevens writes, “The plurality’s attempt to achieve its desired outcome by redefining terms does no credit to lexicography—let alone to justice.” Id.
199. Id. at 2260-61.
200. Id. at 2260.
201. Id.
202. See id. at 2261 n.12 (criticizing the plurality for redefining terms to fit its objectives).
203. See id. at 2242 (Kennedy, J., concurring).
204. See supra notes 144-51 and accompanying text.
the dry channel or allow the stream to fall outside of federal regulation. While a weak rationale possibly exists within the text and structure of the CWA for navigable waters to be relatively permanent, this requirement may not be a necessary interpretation of either the text or structure of the statute.

ii. Precedent

Much like the earlier definition of "waters," the quotes from Riverside Bayview Homes and SWANCC reinforce the idea of discrete bodies of water, but, if one allows that streams may be intermittent or ephemeral, they may not resolve the issue of permanence. The First Circuit’s explanation for the Supreme Court’s use of the term “open waters” may be read not to support a relative permanence requirement. By providing the example of wetlands, the First Circuit may have been describing lands that are wet and dry at the same time, saying nothing about the permanence of water flow. Even if Riverside Bayview Homes and SWANCC implied, by using the phrase “open water,” that a navigable body must be relatively permanent, such implication would not create a binding precedent because the facts of those cases did not require such a determination.

Support for a permanence requirement from the lower courts, which have been interpreting the CWA for thirty years, would be telling, even though, as previously stated, lower court rulings are not binding on the Supreme Court. In contrast, most courts have found that intermittent and ephemeral streams are within the Corps’ jurisdiction. While these courts generally extended Chevron deference to the Corps’ regulations, which explicitly include intermittent streams, their acceptance of this regulation when it had direct bearing on a case means that it at least passed the reasonability requirement of Chevron. Though not creating a binding precedent, such a consensus among lower courts counsels against instituting a relative permanence requirement for navigable waters.

205. See supra notes 135-51 and accompanying text.
206. See supra note 142 and accompanying text.
207. See supra notes 154-55 and accompanying text.
208. See United States v. Johnson, 437 F.3d 157, 169 (1st Cir. 2006) (“It is clear from this language that the Riverside court uses ‘open water’ descriptively to distinguish rivers, lakes, streams, and similar bodies of water from those intermediate forms of partially wet, partially dry areas, i.e. wetlands, and from dry land.”).
209. See id.
211. See supra note 153.
212. See, e.g., Save Our Sonoran, Inc. v. Flowers, 408 F.3d 1113, 1123 (9th Cir. 2005); Treacy v. Newdunn Assocs., 344 F.3d 407, 417 (4th Cir. 2003); Cmty. Ass’n for Restoration of the Env’t v. Henry Bosma Dairy, 305 F.3d 943, 954-55 (9th Cir. 2002); Headwaters, Inc. v. Talent Irrigation Dist., 243 F.3d 526, 534 (9th Cir. 2001); Quivira Mining Co. v. U.S. EPA, 765 F.2d 126, 130 (10th Cir. 1985); United States v. Lamplight Equestrian Ctr., Inc., No. 00-C-6486, 2002 WL 360652, at *7 (N.D. Ill. Mar. 8, 2002).
iii. Purpose and History

Though the extent of Congress’s grant of authority may be debated, regulation of intermittent and ephemeral streams fits within the broad purpose of the CWA.213 The statute does, however, contain a policy to preserve states’ rights.214 Because any jurisdiction under the CWA could be understood as infringing on states’ rights, the question would be whether regulating intermittent and ephemeral streams somehow crosses a line by intruding too far into states’ affairs.215 One might also question whether drawing the line, as the plurality does, between relatively permanent and intermittent streams is arbitrary when concerned with states’ rights.216 The answers to these questions depend on the degree to which excluding intermittent and ephemeral streams would impair the primary goal of the statute compared to the added infringement on states’ rights, because Congress presumably did not intend the CWA’s policy of protecting states’ rights to undermine its primary purpose.217

In 1977, Congress amended the CWA.218 Despite significant debate on the extent of the Corps’ jurisdiction prior to the amendments, Congress did not act to rein in the existing regulations.219 The Supreme Court, in Riverside Bayview Homes, emphasized Congress’s acquiescence to the Corps’ regulations in granting them deference.220 Though courts are hesitant to infer too much from Congress’s failure to act, the length of time the statute and regulations have been in place coupled with the passed opportunity for change may facilitate an inference of congressional acquiescence.221

In terms of administrative history, the regulations at issue have remained largely unchanged since 1977.222 Over nearly thirty years, neither Congress nor any of the five presidential administrations that have presided in the interim have acted to rein in the Corps’ jurisdiction.223 Though that nearly changed following SWANCC, the ultimate rejection of the drafted rule renders its support for a requirement of relative permanence marginal.224

213. See Verchick, supra note 6, at 875 (denying the ecological or scientific rationale for distinguishing between perennial and intermittent streams).
215. Another view would question whether an analogy to land use restrictions is correct where the benefits of an action on land would be local, but the costs imposed would be external. See May, supra note 7, at 161.
217. Id. at 2261 (Stevens, J., dissenting).
219. See supra note 169 and accompanying text.
220. Riverside Bayview Homes, 474 U.S. at 136.
221. See id. at 136-38.
222. See Rapanos, 126 S. Ct. at 2255, 2259 (Stevens, J., dissenting).
223. See id. at 2259.
224. See Verchick, supra note 6, at 869-70.
Intermittent and ephemeral streams serve a wide variety of functions.225 The frequency and speed of flow and the surrounding environment affect the types of functions that any individual intermittent or ephemeral stream may serve.226 Because intermittent and ephemeral streams tend to flow slowly, they may perform certain water quality control functions better than perennial streams.227 A slower flow allows silt to settle in the streambed, delivering clear water downstream where the silt would otherwise degrade aquatic habitat.228 Possibly more important in terms of combating water pollution, the slow flow of intermittent or ephemeral streams allows more time for microbes to convert hazardous chemicals to prevent algae blooms229 as well as other “nutrient reduction functions.”230 Intermittent, and to some extent ephemeral, streams also support wildlife and vegetation in a number of ways, which supports another policy goal of the CWA.231 Additionally, they play an important role to humans and wildlife by providing invaluable flood control functions.232 By providing a place for water to go when inundation occurs, intermittent and ephemeral streams perform a buffering function that helps to minimize flooding destruction.233

Interestingly, though perhaps not surprisingly, the water needs created by development have contributed to a large number of western streams being diminished to a nonconstant flow from their original perennial states.234 The sheer volume of stream length that would be affected by adoption of the plurality’s requirement illustrates that the issue is significant.235

226. See id.
227. See Stokstad, supra note 14, at 1870.
228. See id. Likewise, a slower flow allows for a prolonged dispersal of sources of nutrients to downstream riparian areas. See Reid & Ziemer, supra note 225.
229. Stokstad, supra note 14, at 1870.
231. 33 U.S.C. § 1251(a)(2) (2000) (articulating that “it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water”). Intermittent and ephemeral streams provide a water source in arid regions and a habitat refuge for vulnerable wildlife. Glennon & Maddock, supra note 125, at 581; Reid & Ziemer, supra note 225.
234. See Glennon & Maddock, supra note 125, at 567.
235. See Lee, supra note 179, at 289 (discussing the same principle concerning wetlands).
When flowing, intermittent and ephemeral streams carry pollutants downstream as would a perennial stream. Likewise, if ephemeral or intermittent streams are allowed to be filled over, the important functions they serve to water quality, wildlife, and flood control may be lost. Even minor alterations of the channels may affect downstream wildlife and vegetation. Classifying intermittent and ephemeral streams as potential point sources may protect against mobile pollutant discharge; however, including those streams within the definition of navigable waters would additionally promote the continuation of their water quality functions and protect the wetlands adjacent to intermittent and ephemeral streams, which likewise provide a wide range of water quality, wildlife, and flood control functions.

It is not clear from the available scientific information that drawing the federal jurisdictional line at relatively permanent flowing bodies is an appropriate distinction when seeking "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Intermittent and ephemeral streams are important to the purpose of the CWA both because they comprise a large percentage of the nation's streams, and because they provide valuable water quality services. While exempting these bodies from federal jurisdiction may not necessarily make the goal of the CWA impossible, it would make the task much more difficult by denying the Corps the opportunity to prevent the destruction of natural mechanisms that improve water quality. The western United States would bear the brunt of this restriction since wide areas would be exempt from federal jurisdiction as the climate cannot sustain year-round flows. Ironically, the development made possible by the filling in of intermittent streams might aid in the depletion of other streams through increased water use, eventually turning those streams into intermittent channels so that they too would fall outside of federal jurisdiction and could be developed.

Though other mechanisms have the potential to protect intermittent and ephemeral streams, until such mechanisms are in place, inclusion under the CWA may be required in order to achieve the statute's stated purpose. While some states have enacted legislation aimed at preserving the quality

236. See Rapanos v. United States, 126 S. Ct. 2208, 2227 (2006) (noting that intermittent streams that carry a pollutant downstream could be regulated as a point source).
237. See id. at 2263 (Stevens, J., dissenting).
238. See Reid & Ziemer, supra note 225.
239. See Rapanos, 126 S. Ct. at 2245-48 (Kennedy, J., concurring).
241. See Reid & Ziemer, supra note 225.
242. See May, supra note 7, at 140.
244. See Glennon & Maddock, supra note 125, at 568.
of their waters, their effectiveness has been disputed. Because the water system connects all bodies of water, even those that seem exclusively local may affect other areas. For this reason, even if a state protects its own streams, a neighboring state's failure to protect streams may have significant effects on water quality within the first state. In this type of situation, where the benefits of an action (like filling a streambed) are realized locally while the costs of the action are widespread (through loss of filtering services), federal regulation may be especially appropriate.

Though weak interpretive rationale exists for implying a requirement of relative permanence for classification as a navigable water, it may not be able to sustain the bulk of evidence that indicates such a requirement would undermine the broad purpose of the CWA. Because other interpretations of navigable waters are equally reasonable, a bright line standard, if implemented, should not only adhere to, but also promote, the CWA goal of clean healthy waters.

B. Continuous Surface Connection

The second requirement that the plurality advances as required for the Corps' jurisdiction is a continuous surface connection between the water at issue and a traditional navigable water. Because Supreme Court precedent from Riverside Bayview Homes established that wetlands adjacent to navigable waters are themselves navigable waters, requiring a continuous surface connection provides a bright line standard to determine when a wetland is sufficiently adjacent. Though the plurality's test speaks of a continuous surface connection to a traditionally navigable water, when considered in conjunction with the first requirement, which excludes intermittent and ephemeral streams, a surface connection with any navigable water will also result in a continuous surface connection to a traditionally navigable water.

Practically, the requirement of a continuous surface connection would have two obvious implications. First, wetlands that do not abut navigable waters but are separated by dry land, intermittent streams, or a man-made

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246. See Schmidt, supra note 120, at 117 (discussing the interconnectivity of the four-state prairie pothole region).
248. May, supra note 7, at 161.
249. See Thompson, supra note 245, at 921-22 (asserting that frequency of flow should not be a determinative factor of jurisdiction in Kansas water protection law).
structure would not be under the Corps' jurisdiction. Second, wetlands that are connected by groundwater to navigable waters, but not surface water, would not be subject to the Corps' jurisdiction. A debate is ongoing between lower federal courts as to whether groundwater offers a sufficient connection to include wetlands as navigable waters. Requiring a continuous surface connection would settle that debate.

As with the relative permanence requirement, this section explores arguments for and against adopting a continuous surface connection requirement. The basic organization of the points of view, separated into interpretive and scientific arguments, remains the same. Though many of the general arguments advanced in Part II.A are equally applicable to the continuous surface connection requirement, this section focuses on issues more unique to the plurality's second requirement.

1. Why Require a Continuous Surface Connection?

The plurality chose the bright line standard of continuous surface connection to resolve the confusion over whether a wetland should be considered adjacent to navigable waters through any hydrological connection. This section examines both the interpretive and scientific arguments supporting this requirement.

a. Interpretive Arguments

With its requirement of continuous surface connection, the plurality endeavored to interpret the meaning of adjacent within the holding of Riverside Bayview Homes. While the word "adjacent" in this context comes from Supreme Court precedent, the CWA, nevertheless, is important to the proper discernment of its meaning because Riverside Bayview Homes interpreted the statute. In exploring the interpretive rationale for requiring wetlands to have a continuous surface connection to navigable waters, this section examines the text and structure of the CWA, precedent on the issue, and the CWA's purpose and history.

252. The Carabell wetland was separated from the navigable water by a man-made structure that prevented a surface connection between the two. Rapanos, 126 S. Ct. at 2219.
253. See id. at 2226 n.10 (limiting coverage to wetlands actually touching navigable waters).
254. See id. at 2225-26.
256. Rapanos, 126 S. Ct. at 2225.
i. Text and Structure

From a purely textual viewpoint, wetlands are not explicitly included within navigable waters under the CWA, and the word adjacent does not appear in its text. Because the discussion regarding adjacency arose through the Corps’ regulations and Supreme Court rulings regarding those regulations, textual analysis of the meaning of adjacency is discussed below as one aspect of applicable precedent.

From a structural standpoint, Congress’s failure to include groundwater under § 404 of the CWA, while including it in other sections of the statute, implies that it was left out deliberately. A surface connection requirement for wetlands accords with Congress’s intention to exempt groundwater from federal jurisdiction under this provision of the CWA by exempting those wetlands connected to navigable waters only through groundwater.

Though the text and structure of the CWA provide implicit support for a requirement of continuous surface connection, they offer very little interpretive guidance. Because the adjacency requirement arises from Riverside Bayview Homes, precedent provides additional insight.

ii. Precedent

The Justices have argued that no binding precedent exists for whether a surface connection is required for federal jurisdiction over a particular body of water. However, previous Supreme Court and lower court decisions may imply such a requirement or persuade that it should exist. In Riverside Bayview Homes, the Supreme Court held that the CWA “authorizes the Corps to require landowners to obtain permits from the Corps before discharging fill material into wetlands adjacent to navigable bodies of water.” Though the decision did not define “adjacent,” the wetland in that case actually abutted a navigable water. In general, adjacent means “not distant” or “having a common endpoint or border.” “[A]djacent may or may not imply contact but always implies absence of anything of the same kind in between.”

Riverside Bayview Homes emphasized the difficulty of delineating the boundary of where a wetland stops and water begins. The emphasis on
the boundary drawing problem creates the implication that adjacency within this context takes on the more stringent definition of adjacent—actually touching or adjoined. More specifically, when dealing with wetlands and navigable waters, a surface connection would be required. Tying in the precedent of SWANCC, the “significant nexus” in Riverside Bayview Homes was the wetland’s adjacency, manifested by the surface connection.

Taking the analysis one step further, SWANCC may be read to repudiate jurisdiction based solely on the ecological functions served by wetlands. In rejecting the Migratory Bird Rule, SWANCC found that the wetland services provided to the birds did not constitute the “significant nexus” required. Similarly, the ponds in SWANCC were considered isolated despite the fact that they were presumably connected to other bodies of water through some manifestation of groundwater. Read together, Riverside Bayview Homes and SWANCC establish that a surface water connection between wetlands and navigable waters allows jurisdiction, while a groundwater connection does not.

Lower courts have also considered groundwater connections in determining whether discharges into groundwater should be regulated under the CWA. Though courts are nearly unanimous that any discharge that can be traced to the surface of navigable waters can be regulated, the natural seepage of water through the ground is not considered a discharge and is therefore excluded from the Corps’ jurisdiction. In this way, the focus remains on surface water connections as providing the basis for jurisdiction under the CWA.

The interpretive problem that the continuous surface connection requirement endeavors to solve was born of Supreme Court precedent. Accordingly, support for this solution to the question of adjacency may be found within both Supreme Court and lower court precedent.

269. Id.
270. Id. at 2226 (emphasis omitted).
271. Id.
273. See id. at 176 n.2 (Stevens, J., dissenting) (discussing “hydrological” and “ecological” connections of the “isolated” SWANCC ponds to navigable waters (emphasis omitted)).
274. Knutsen, supra note 233, at 190.
276. See, e.g., Friends of Santa Fe County, 892 F. Supp. at 1357-59.
Effectuating the purpose of a statute is important in interpreting its terms.\textsuperscript{277} At the same time, Congress does not intend to advance any purpose at all costs.\textsuperscript{278} The question becomes whether a requirement of a continuous surface connection significantly aids or hampers the goal “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”\textsuperscript{279} While regulating all wetlands might provide the maximum benefit to water quality, aside from other constitutional concerns, such an interpretation of the CWA would be extremely expensive and time consuming. By excluding isolated wetlands from jurisdiction under the CWA, a surface connection requirement focuses the Corps’ attention and resources on those bodies that are the most likely to have an impact on overall water quality due to their obvious interconnection with other bodies.\textsuperscript{280} Though fewer wetlands would be monitored, requiring a surface connection would increase the efficiency and possibly the effectiveness of the program.\textsuperscript{281}

As for legislative history, Congress defeated a bill to amend the CWA to include regulation of groundwater.\textsuperscript{282} While the weight of such evidence of intent should not be overemphasized, it is nonetheless relevant to show that a refusal to extend jurisdiction to groundwater is, at the very least, not inherently at odds with congressional intention. Further, the Corps considered adopting a surface connection requirement when it considered a Draft Rule in response to the SWANCC decision.\textsuperscript{283} Though not ultimately adopted,\textsuperscript{284} its promulgation and consideration support the requirement’s legitimacy.

b. \textit{Scientific Arguments}

As stated previously, requiring a continuous surface connection between wetlands and navigable waters will facilitate the successful realization of the CWA’s purpose by focusing the Corps’ resources on higher impact areas.\textsuperscript{285} Though all the Earth’s water is connected in one way or
another, it is necessary for practical reasons to draw a line at the kinds of connections that the federal government will regulate. Though geographically isolated wetlands may not be completely ecologically isolated, wetlands with a surface connection to navigable water provide clear evidence of their interconnectedness with the overall water system. In this way, focusing federal regulation on the areas that have a proven and observable connection to navigable waters maximizes the efficiency value of a bright line approach.

Regulation of groundwater connections involves immensely complicated considerations unique to each specific environment. In some areas, the point where water soaks into the ground and where the water eventually surfaces “may vary from fractions of a mile to tens or hundreds of miles” and take anywhere from “days to centuries or millennia” to get there. Because regulations regarding groundwater are necessarily very location specific and variable, broad-based federal regulation schemes are not practical. Even professionals in the field have been unable to propose appropriate criteria to cover more than regional areas of groundwater. Due to the inherent complexity of regulating groundwater, the plurality’s surface connection requirement provides a bright line approach that facilitates the purpose of the CWA by focusing the Corps’ efforts on wetlands that are more likely to have a direct impact on navigable waters.

2. Why Not Require a Continuous Surface Connection?

While requiring a continuous surface connection may have practical appeal, it failed to gain majority support within the Supreme Court. This section outlines the primary interpretive and scientific arguments against adopting a requirement of continuous surface connection for wetlands jurisdiction under the CWA.

a. Interpretive Arguments

In response to the plurality’s interpretive arguments for adopting a continuous surface connection requirement, this section explores arguments against adoption of the plurality’s second criterion, again through the text and structure of the CWA, precedent on the issue, and the CWA’s purpose and history.

286. See Beck, supra note 125, at 675-76.
288. Breedon, supra note 240, at 1472.
289. Hayman, supra note 189, at 123.
290. See id. at 126.
291. See id.
292. Rapanos, 126 S. Ct. at 2244 (Kennedy, J., concurring); id. at 2262 (Stevens, J., dissenting).
i. Text and Structure

At its core, very little may be gleaned on the issue of adjacency from the text of the CWA because the word does not appear. As with arguments for requiring a continuous surface connection, textual arguments should also be included in considering precedent on the issue.

While the CWA does not explicitly assert jurisdiction over groundwaters in § 404, neither does it explicitly reject jurisdiction over wetlands connected to navigable waters through groundwaters. Though proponents of the requirement may point to the structure of the CWA as evidence of congressional intent to exclude groundwaters, this argument applies only to direct regulation of groundwaters. The question of jurisdiction over wetlands connected to navigable waters through groundwater is more complicated. Because regulation of wetlands connected through groundwaters does not as clearly implicate the problems of differing state treatment of groundwaters, extending the implication in this circumstance may be unwarranted.

ii. Precedent

The precedent that supports a continuous surface connection requirement may not reflect the entire precedential picture. *Riverside Bayview Homes* established the Corps’ jurisdiction over wetlands adjacent to navigable waters. The first entry of the dictionary definition of adjacent reads “not distant: nearby.” While adjacent may refer to things that touch one another, actual adjoinment is not required by the most common definition of adjacent. In *Riverside Bayview Homes*, the Court considered the constitutionality of the Corps’ regulation asserting jurisdiction over wetlands adjacent to navigable waters. A passage from the Federal Register quoted by the Court mandated inclusion of “adjacent wetlands that form the border of or are in reasonable proximity to other waters of the United States.” Though the facts of the case only required the Court to make a holding about wetlands that abut navigable waters, it noted the Corps’ definition of adjacent in its unanimous opinion. The Court also noted that jurisdiction would be proper even if the wetland did not “hav[e] its source in adjacent bodies of open water.” Though not specifically

294. *See id.* § 1344(a).
295. *See supra* note 247 and accompanying text.
296. *See Quatrochi, supra* note 247, at 642 (arguing that differing state approaches should not prevent jurisdiction directly over tributary groundwater).
299. *Id.*
300. *Riverside Bayview Homes*, 474 U.S. at 123.
301. *Id.* at 134 (quoting 42 Fed. Reg. 37,128 (July 19, 1977)).
302. *Id.*
303. *Id.*
identifying this hypothetical situation as one lacking a surface connection, the description strongly implies that such a characterization would fit. While this discussion does not create binding precedent, because it was not necessary to the disposition of the case, it nonetheless provides support for at least the possibility of covering wetlands that did not have a surface connection with navigable water. Similarly, because the discussion regarding boundary drawing may also be seen as dicta, opponents of a surface connection requirement would likely argue that the discussion merely commented on the facts of the case and did not provide binding legal rationale.

Opponents of a surface connection requirement would also likely distinguish SWANCC. Because that case dealt with isolated waters and not adjacent or questionably adjacent wetlands, its holding should have little impact on the outcome of Rapanos and similar cases. Jurisdiction in that case did not rest on a groundwater connection, but on the Corps’ Migratory Bird Rule. Even if a groundwater connection were rejected in that case, it may be distinguishable because the question at hand would not be whether the ponds were adjacent to navigable waters; the Corps would have had to rely on a different basis for jurisdiction because the adjacent precedent applies only to wetlands.

As for lower court rulings, though the majority of courts do not allow jurisdiction over groundwater contamination due to natural seepage, they do grant jurisdiction over groundwater when a pollutant discharged there reaches the surface of navigable waters. In this way, the courts are able to balance the difficulty of regulating groundwater while allowing jurisdiction when it is apparent that water quality is being harmed. Justice Scalia touched on this line of precedent in the plurality opinion in Rapanos when he argued that the relative permanence requirement would not harm enforcement because intermittent streams could be regulated as point sources. Should the plurality’s second criterion be adopted, it may undermine at least one of its arguments in support of the first criterion by excluding any discharges that are not transferred through surface waters, but through groundwaters from intermittent streams to navigable waters.

iii. Purpose and History

At the heart of any argument in support of requiring a continuous surface connection is the assumption that the wetlands exhibiting those connections

304. See id.
306. Id. at 164.
will be those that have the greatest impact on overall water quality.\textsuperscript{310} If this is not the case, the purpose of the CWA will not be served by this requirement.\textsuperscript{311} Under this bright line standard, a small wetland with a surface connection to navigable waters would be subject to the Corps' jurisdiction while a larger wetland with no surface connection would be excluded even if it could be shown that it has a greater impact on water quality than the first.\textsuperscript{312} When aimed at promoting the purpose of the CWA, this bright line approach can thus be seen as potentially arbitrary.\textsuperscript{313}

As discussed previously, Congress failed to act to rein in the Corps' jurisdiction when enacting amendments to the CWA in 1977.\textsuperscript{314} Likewise, neither Congress nor the Corps have taken restrictive action in the thirty years that the Corps' regulations have been in place, or in the twenty years since the \textit{Riverside Bayview Homes} decision. Though not as authoritative as positive action, a long period of legislative and administrative acceptance of a technical regulation should caution courts from interfering.\textsuperscript{315} Especially considering that enforcement has been consistent through both Democratic and Republican administrations, CWA jurisdiction should not be conceived of as a partisan issue in need of protection.\textsuperscript{316} Though in responding to \textit{SWANCC} the Corps considered utilizing a surface connection requirement, this provision was heavily criticized and ultimately rejected.\textsuperscript{317}

From an interpretive standpoint, a continuous surface connection requirement is not required by the text or structure of the CWA, and may contradict the balance of precedent on the issue. The next section delves more deeply into the scientific questions underlying the purpose of the CWA.

\textbf{b. Scientific Arguments}

While charting the progress or contamination of groundwaters involves highly complex considerations, much less controversy surrounds the idea that all water is ultimately connected within the water cycle.\textsuperscript{318} Because the CWA aims at broad water quality control, no bright line standard should be

\textsuperscript{310} This assumption is not uncontroversial. \textit{See} Schmidt, \textit{supra} note 120, at 112-13 ("It is often the case that groundwater exerts a far greater influence on the 'chemical, physical, and biological integrity' of the Nation's waters than surface waters.") (citation omitted)).

\textsuperscript{311} \textit{See} \textit{Rapanos}, 126 S. Ct. at 2246 (Kennedy, J., concurring).

\textsuperscript{312} \textit{See id}.

\textsuperscript{313} \textit{See Breedon, supra} note 240, at 1474.

\textsuperscript{314} \textit{See United States v. Riverside Bayview Homes, Inc.}, 474 U.S. 121, 136 (1985).

\textsuperscript{315} \textit{Rapanos}, 126 S. Ct. at 2247 (Kennedy, J., concurring); \textit{id.} at 2263 (Stevens, J., dissenting).

\textsuperscript{316} \textit{See Hearing, supra} note 13 (statement of William W. Buzbee, Professor, Emory Law School).

\textsuperscript{317} \textit{See Verchick, supra} note 6, at 872-73.

\textsuperscript{318} \textit{See Gordon H. Howard, Save Our Sonoran, Inc. v. Flowers: Navigable Waters and Small Handles in the Dry, Dry Desert,} 35 Env'tl. L. 605, 626 (2005); Hayman, \textit{supra} note 189, at 124; Beck, \textit{supra} note 125, at 675-76.
employed that would undermine or fail to promote its purpose. Like intermittent and ephemeral streams, wetlands provide invaluable water quality functions, including trapping sediment to prevent it from degrading downstream habitat. Wetlands filter and restore water quality, providing similar functions as expensive water treatment plants. Wetlands also protect against the harms of flooding by providing extra storage of water up to their capacity. Conversely, the storage functions of wetlands mitigate the harmful effects of droughts by naturally storing moisture until needed. Both the flood and drought management services benefit wildlife populations as well. Because the processes provided by wetlands depend on the water not immediately being washed downstream, wetlands that do not share a surface connection with moving water may actually be able to provide ecological services on a greater scale than those that do directly abut navigable waters. Since "isolated" wetlands may provide an equal or superior benefit to overall water quality, their exclusion from federal jurisdiction due to a requirement of continuous surface connection could hinder the realization of the purpose of the CWA.

The water quality benefits of even isolated wetlands are immense. The services they provide are so important that "[a]ttempts to protect the quality of surface waters may prove fruitless if contaminated tributary groundwaters [are allowed to] pollute surface waters." In this way, requiring surface connections may go further than being arbitrary in light of the purpose of the CWA and actually undermine it.

One study has delineated 276 types of wetlands, 29% of which are considered isolated. Though nearly universally "support[ing] high levels of biodiversity," wetlands are not easily categorized, and "geographic, ecologic, and hydrologic isolation can be described at multiple spatial and temporal scales." Even within a single region, multiple types of wetlands coexist. Unfortunately, approximately half of the nation's original wetlands no longer exist. Because the functioning of wetlands

319. See Schmidt, supra note 120, at 110 ("It is unlikely that Congress intentionally enacted the most 'comprehensive' water pollution control in American history, but simultaneously limited the Act's regulatory authority to surface water only.").
320. See May, supra note 7, at 129.
321. Id.
322. Id. at 131; Schmidt, supra note 120, at 97.
324. See id.; May, supra note 7, at 132.
326. See Schmidt, supra note 120, at 110.
327. Quatrochi, supra note 247, at 604.
328. See May, supra note 7, at 132-33; Breedon, supra note 240, at 1474.
329. See Comer, supra note 2, at 1.
330. Id. at 1, 4.
331. Id. at 4; see also Stokstad, supra note 14, at 1870.
332. See Comer, supra note 2, at 18-20.
333. See Knutsen, supra note 233, at 156.
and groundwater are so complex, technical experts, such as those with the Corps, should make decisions regarding where the bright line of adjacency should lie. Thus far, the Corps has not focused on surface waters of wetlands, and instead relies on the saturation of soil and appropriate vegetation to define wetlands. With such a large portion of wetlands at stake, should this requirement be more broadly adopted, it could have significant negative impact on water quality.

One area of the country that has garnered much of the attention of this debate is the prairie pothole region of the Great Plains. Though the area features a great number of “isolated” wetlands that have no surface connection between them, it is believed that the entire region is hydrologically connected. Because this area is large and stretches across multiple states, the loss of federal protection for these lands through the CWA could be devastating. Similarly, states and local governments often buckle to political pressure not to protect wetlands situated entirely within an individual’s property either because of property right interests or because of fear that stifling development will have a negative effect on the economy. Federal regulation is particularly appropriate where benefits of an action are experienced locally, while the costs may be transferred downstream, likely across state lines.

Like intermittent and ephemeral streams, effective protection of wetlands cannot be limited to detecting mobile pollutants. These bodies must be protected because of their ability to filter out pollutants already in the water. Filling wetlands may have significant effects on overall water quality regardless of whether or not a surface connection exists with a navigable water. For this reason, science indicates that the adjacency requirement would undermine protection of wetlands.

III. THE PLURALITY’S BRIGHT LINE TEST SHOULD NOT BE ADOPTED

While the current status of requiring case-by-case determinations for the Corps’ jurisdiction under the CWA is not ideal and would be improved by adoption of clearer standards, the standards outlined by the plurality in

334. See Breedon, supra note 240, at 1473.
335. See Schmidt, supra note 120, at 98.
336. See Lee, supra note 179, at 289 (noting that the more wetlands left out of federal jurisdiction, the greater effect on water quality).
337. See Schmidt, supra note 120, at 116.
338. Id.
339. See May, supra note 7, at 137-38.
340. See id.; Quatrochi, supra note 247, at 642 (discussing several commentators’ argument that groundwater pollution control should be left to the states).
341. See supra note 321 and accompanying text.
343. See Delay Could Give EPA Time to Win Support for Dual Water Test, supra note 118, at 2 (“The Scalia opinion is extraordinarily wrong from a scientific position.” (internal quotation marks omitted)).
Rapanos should not be adopted. The text, structure, and precedent of the CWA require neither relative permanence in a regulated body of water nor a continuous surface connection between wetlands and navigable waters. Based on the available scientific information about water systems, drawing the jurisdictional line as the plurality does is arbitrary and may undermine the ultimate purpose of the CWA. With such important national interests at stake, this limitation of the CWA should not be adopted by Congress, the Corps, or the courts.

A. Inconclusive Interpretation

Though each of the plurality’s two criteria can be colorably supported through the text, structure, and precedent of the CWA, arguments against both criteria are equally reasonable. Because the language of the statute is highly ambiguous, many reasonable interpretive arguments may be advanced. Reasonable interpretations argue both for and against the plurality’s requirements; therefore, the text, structure, and precedent do not require the adoption of one view over the other. In such instances, the purpose of the statute, the history of its agency interpretation, and its efficiency values may be taken into account to tip favor in one direction or the other.

Because this argument is about interpretation of the statute, it does not apply equally to Congress, the Corps, and the courts. While the Corps and the courts seek to interpret statutes faithfully, Congress has the power to take statutes in new directions through amendments or subsequent enactments. However, in no circumstance does the current text, structure, and precedent of the CWA mandate a particular stance regarding the criteria advanced by the plurality in Rapanos. In determining how to act toward these criteria, governmental actors should carefully consider the purpose of the statute: “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” With this focus in mind, more restrictive textual interpretations appear less reasonable.

344. See supra Part II.A.2.a-i-ii; supra Part II.B.2.a.i-ii.
345. See supra Part II.A.2.b; supra Part II.B.2.b.
346. Compare supra Part II.A.1, with supra Part II.A.2; compare supra Part II.B.1, with supra Part II.B.2.
348. Compare supra Part II.A.1, with supra Part II.A.2; compare supra Part II.B.1, with supra Part II.B.2.
349. See Breedon, supra note 240, at 1474 (discussing Congress’s ability to overrule court interpretations).
B. Arbitrary Standards

The criteria adopted by the plurality were not advanced by any of the parties to Rapanos.\(^{351}\) Instead, the plurality combined points from amicus briefs to craft what it considered to be a reasonable bright line standard in accordance with the text and structure of the CWA.\(^{352}\) While the interpretive analysis may be reasonable, and the preference for a clear standard wise, the effect of the chosen criteria on the statute's purpose and enforcement counsels against adopting the proposed standards. In this respect, the plurality’s criteria fail.

A consensus exists around the fact that having clear standards to delineate federal jurisdiction under the CWA is preferable to a case-by-case approach.\(^{353}\) Though presented as bright line standards, the plurality’s criteria may not live up to that description. In regards to requiring a permanent presence of water flow, the plurality takes a somewhat indeterminate stance toward intermittent streams, allowing jurisdiction over seasonal streams, but not others.\(^{354}\) Particularly troubling when looking for a clear standard is the plurality’s appeal to common sense when “distinguish[ing] between a wash and seasonal river.”\(^{355}\) Likewise, in regards to the continuous surface connection between wetlands and navigable waters needed to establish adjacency, it is not entirely clear how significant of a connection would suffice or what makes a connection a surface connection.\(^{356}\) Standards are certainly not expected to remove all controversy over jurisdiction; however, if such standards create new controversy or fail to settle existing controversy, their efficiency value diminishes.

Should the criteria be judged sufficiently clear to provide helpful bright line standards, they should still make logical and scientific sense with regards to the purpose of the statute. The plurality’s criteria fail in this regard.\(^{357}\) Neither the permanence of water flow nor the continuity of surface connection between wetlands and navigable waters is a reliable indicator of the extent to which a certain body affects water quality.\(^{358}\) While determining these effects involves complex, highly scientific questions, a simplified proxy should not be adopted if it does not adequately track the measurements desired. Both intermittent and ephemeral streams and geographically isolated wetlands provide water quality services that are not taken into account by the plurality’s criteria.\(^{359}\) Furthermore, the

\(^{351}\) See supra notes 117-18 and accompanying text.
\(^{352}\) See supra notes 117-18 and accompanying text.
\(^{353}\) See supra notes 109-12 and accompanying text.
\(^{355}\) Id.
\(^{356}\) See supra note 250.
\(^{357}\) See Delay Could Give EPA Time to Win Court Support for Dual Water Test, supra note 118, at 2.
\(^{358}\) See supra Part II.A.2.b; supra Part II.B.2.b.
\(^{359}\) See supra Part II.A.2.b; supra Part II.B.2.b.
positive effects of these bodies may in certain circumstances have a greater
effect than bodies that would be included by the criteria.

C. Affecting the CWA's Purpose

Because the criteria advanced by the plurality is arbitrary in relation to
"restor[ing] and maintain[ing] the chemical, physical, and biological
integrity of the Nation's waters,"360 broad adoption of this test would not
facilitate the realization of the CWA's purpose. In particular, adopting the
plurality's test would have a disproportionate effect on the southwestern
region of the United States361 and areas like the prairie pothole region362
that depend on federal regulation to protect the diverse and important
functions performed by the local bodies of water.

Further, though regulation of the affecting bodies may be handled at the
state level, adopting the plurality's criteria for federal jurisdiction may
actually undermine those efforts. From a political standpoint, it may be
harder to introduce or garner support for protecting bodies that the federal
government exempts from its regulation; the exemption may create the
perception that those bodies are too insignificant to warrant protection.363
Indeed, many states base their conservation programs on federal
guidelines.364 Additionally, restricting federal jurisdiction as the plurality
suggests might actually create less incentive for states to initiate
conservation programs because the benefits of such plans are often not
localized within a state while the burden of the land restriction is entirely
within the state. Even when states do accurately gauge the importance
of bodies of water, their efforts at conservation may be undermined by
neighboring states' failure to protect their resources. Such a situation might
operate as a disincentive to states acting unilaterally to protect their
intermittent streams and isolated wetlands.

In a similar way, adoption of the plurality's test may not merely fail to
facilitate, but may actually undermine the realization of the CWA's
purpose. Failure to regulate bodies that have a significant impact on the
nation's water quality may render the Corps' ongoing efforts fruitless
because of a constant stream of pollutants flowing from unregulated waters,
or because development of beneficial areas has left the water system
without its natural ability to filter and purify. Any bright line test that is
likely to undermine the purpose of a statute should not be broadly adopted.

361. See Shogren, supra note 243.
362. See Schmidt, supra note 120, at 116.
363. See States Fear Increased Wetlands Workload in Wake of Rapanos Ruling, Envtl.
364. See id.
CONCLUSION

Despite the plurality's good intentions in advancing a bright line test to address federal jurisdiction under the CWA, the arguments favoring broad adoption of the criteria advanced do not overcome those in opposition. While case-by-case determinations are not ideal for establishing jurisdiction, they should continue until a bright line approach can be agreed upon that promotes the purpose of the CWA. Because this type of scientific question is best answered by the Corps, or through congressional hearings, the courts should continue to utilize Justice Kennedy's significant nexus test while urging action from Congress or the Corps.
Notes & Observations