

Beneath the Surface of the Clean  
Water Act: Exploring the Depth of the  
Act’s Jurisdictional Scope of  
Groundwater Pollution

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## INTRODUCTION

La ws regulating water pollution and allocation are extremely difficult to make and enforce. The Clean Water Act (CWA), one of our nation's most prominent environmental statutes, aims to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."<sup>1</sup> The U.S. Environmental Protection Agency (EPA), which has oversight for the implementation of the CWA, currently faces heat from industry, agriculture, timber, environmental, and political groups regarding many different sections of the CWA. Applying the CWA to surface water is difficult enough because of the debate over the CWA's jurisdictional language.<sup>2</sup> The task of applying the CWA grows even more challenging when groundwater is involved because the link between groundwater and surface water has not been consistently interpreted by courts.

Groundwater and surface water flow into one another, so discharge of pollution to one can contaminate the other. Unfortunately, trying to regulate the discharge of pollution to groundwater under the CWA is like trying to hammer a square peg into a round hole—the statutory language, legislative history, and subsequent court cases address groundwater ambiguously. Groundwater is partially protected under other statutes,<sup>3</sup> but all too often pollutants travel through groundwater and contaminate surface water that is regulated by the CWA. Plaintiffs seeking redress for contamination to groundwater have brought CWA claims since the 1970s when the statute was enacted, and they continue to do so. A robust body of law has developed around the application of the CWA jurisdiction to groundwater, and the CWA remains an important, if imperfect, tool for potential litigants filing suit for groundwater contamination.

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<sup>1</sup> 33 U.S.C. § 1251(a) (2006).

<sup>2</sup> Congress designated CWA jurisdiction over "navigable waters" and abstractly defined "navigable waters" as "waters of the United States, including territorial seas." 33 U.S.C. § 1362. This abstract definition raises "a question of whether navigability operates as a limit on Congress' constitutional power to regulate waters . . . under the Commerce Power." JOSEPH L. SAX ET AL., *LEGAL CONTROL OF WATER RESOURCES: CASES AND MATERIALS* 639 (4th ed. 2006). The definition also spurs controversy about which "waters" EPA may regulate as it administers CWA permit programs.

<sup>3</sup> Several federal statutes protect groundwater in some way. *See* Safe Drinking Water Act, 42 U.S.C §§ 300f–300j (2006); Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901–6992k (2006); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601–9675 (2006). Oregon has statutes protecting groundwater, including the Underground Injection Control Program. OR. REV. STAT. §§ 468B.150–468B.190, 468B.195–468B.197.

Potential litigants must understand the state of law surrounding the CWA in general, potential arguments for and against regulating contamination to groundwater under the CWA, and how upcoming developments in CWA law may affect groundwater issues. This Comment intends to guide litigants through some of the subtler and often-overlooked points of the complicated issue of groundwater pollution control under the CWA in light of current events.

Part I summarizes the larger issues and current events relating to the CWA—namely two recent United States Supreme Court cases addressing the jurisdiction of the CWA and a proposed joint guidance memorandum issued by EPA and the U.S. Army Corps of Engineers (Corps).<sup>4</sup> Part II concentrates on the groundwater issue and considers arguments for and against CWA regulation of pollutants that travel through groundwater to regulated surface water. Part III looks at the future of groundwater under the CWA, considering the relationship between the specific groundwater debate and larger CWA issues in a legal, practical, and political sense.

## I

### THE CLEAN WATER ACT GENERALLY: THE STATE OF AFFAIRS

The Clean Water Act (CWA) has been a source of frequent and heated litigation since its inception in 1972. Forty years later, litigants still battle about various CWA provisions in lower courts, and the United States Supreme Court continues to grant certiorari to CWA cases.<sup>5</sup> Section A briefly describes two of the most contentious CWA sections, sections 402 and 404, and the permit programs administered

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<sup>4</sup> The U.S. Army Corps of Engineers (Corps) has a central role in the administration of CWA Section 404 dredge-and-fill permits: “(a) The Secretary may issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites . . . (d) The term ‘Secretary’ . . . means the Secretary of the Army, acting through the Chief of Engineers.” 33 U.S.C. § 1344. In other words, the Corps: “[makes] individual and general permit decisions; [c]onducts . . . jurisdictional determinations; [d]evelops policy and guidance; and [e]nforces Section 404 provisions. *Wetland Regulatory Authority: Regulatory Requirements*, EPA, [http://www.epa.gov/owow/wetlands/pdf/reg\\_authority\\_pr.pdf](http://www.epa.gov/owow/wetlands/pdf/reg_authority_pr.pdf) (last visited Oct. 24, 2012).

<sup>5</sup> The United States Supreme Court has two CWA cases on its docket. *L.A. Cnty. Flood Control Dist. v. Natural Res. Def. Council*, No. 11-460, 2012 WL 2368688 (U.S. June 25, 2012); *Nw. Env'tl. Def. Ctr. v. Brown*, 640 F.3d 1063 (2011), *cert. granted sub nom. Decker v. Nw. Env'tl. Def. Ctr.*, No. 11-338, 2012 WL 2368685 (U.S. June 25, 2012); *see also* Thomas G. Echikson, *Supreme Court Grants Certiorari in Two Clean Water Act Cases Involving Stormwater Discharges*, MARTINDALE.COM (Aug. 10, 2012), [http://www.martindale.com/environmental-law/article\\_LeClairRyan\\_1566162.htm](http://www.martindale.com/environmental-law/article_LeClairRyan_1566162.htm).

under those sections. Section B identifies one of the greatest conflicts in CWA law, the debate over the jurisdictional scope of the statute, which became an even more confusing issue following two United States Supreme Court cases. Section C summarizes the Corps and EPA's attempts to clarify the jurisdictional scope of the CWA and the proposed legislation attempting to impede the agencies' guidance and rulemaking.

### A. Overview of the Clean Water Act

The Clean Water Act was enacted as a 1972 amendment to the 1948 Federal Water Pollution Control Act.<sup>6</sup> The 1972 Amendment granted Congress authority to regulate interstate waters<sup>7</sup> and navigable waters<sup>8</sup> through the Commerce Clause.<sup>9</sup> Additionally, it gave various agencies the authority to regulate aspects of the public right to navigation.<sup>10</sup> To achieve the goal of restoring and maintaining “the chemical, physical, and biological integrity of the [n]ation’s waters,”<sup>11</sup> Congress directed the EPA Administrator to “prepare or develop comprehensive programs for preventing, reducing, or eliminating the pollution of the navigable waters and ground waters and improving the sanitary condition of surface and underground waters”<sup>12</sup>

Thus, the CWA aims to regulate water quality via regulation of discharges of pollutants (effluents) and implementation of water quality standards.<sup>13</sup> One way that the CWA does so is by requiring a

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<sup>6</sup> *History of the Clean Water Act*, EPA (Aug 23, 2012), <http://www.epa.gov/lawsregs/laws/cwahistory.html>.

<sup>7</sup> Interstate water is water that crosses state lines; thus, Congress has the authority to make water pollution and allocation laws under the Commerce Clause. *SAX ET AL.*, *supra* note 2, at 835.

<sup>8</sup> “Navigable water” is a large, complicated legal designation based on historical principles that bodies of water used for navigation, commerce, and fishing should be held in trust by the government for public use. *See id.* at 522–23. Many different definitions of navigable water apply to various facets of water law. *See generally id.* at 521–673.

<sup>9</sup> U.S. CONST. art. I, § 8, cl. 3 (“The Congress shall have the power . . . [t]o regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes . . . .”). This clause authorizes a wide variety of legislation that governs intrastate commerce and activities. ERWIN CHEMERINSKY, *CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES* 242–43 (3d ed. 2006).

<sup>10</sup> *See* 33 U.S.C. § 1252(b)(2) (2006).

<sup>11</sup> 33 U.S.C. § 1251(a).

<sup>12</sup> 33 U.S.C. § 1252(a).

<sup>13</sup> *Summary of the Clean Water Act*, EPA (Aug. 23, 2012), <http://www.epa.gov/lawsregs/laws/cwa.html>.

permit for point-source discharges<sup>14</sup> of pollutants into navigable waters through the National Pollutant Discharge Elimination System (NPDES) permits, which are issued pursuant to CWA section 402.<sup>15</sup> These permits regulate the types of discharges that are most commonly associated with the CWA in the public mind; for example, discharges of effluent via pipes from sewage treatment plants, animal feeding operations, and industrial facilities (including industrial and municipal stormwater discharges).<sup>16</sup> Generally, states administer section 402 NPDES permit programs under the authorization and oversight of EPA.<sup>17</sup> Another way the CWA regulates water quality is by requiring permits for the discharge of dredged or fill material into navigable waters, including wetlands, pursuant to CWA section 404.<sup>18</sup> For example, section 404 dredge-and-fill permits are required for filling in wetlands for development or infrastructure projects, for water management projects like building dams, or for mining.<sup>19</sup> The Corps administers the section 404 dredge-and-fill permit program, and both the Corps and EPA develop policy and guidance and enforce section 404 provisions.<sup>20</sup>

Both sections 402 (NPDES) and (404) (dredge-and-fill permits) apply to “navigable waters,” which the CWA defines as “waters of the United States, including the territorial seas.”<sup>21</sup> Unsurprisingly, this general definition of CWA jurisdiction is the subject of ample litigation and considerable uncertainty for industries and entities who may require CWA permits, for agencies in charge of enforcing CWA permit violations, and for private citizen groups concerned about pollution of their local or regional water sources. Contamination of groundwater primarily arises in section 402 cases, but it may also contribute to proving jurisdiction in section 404 dredge-and-fill permit cases by contributing to adjacency or a significant nexus between wetlands and waters of the United States. Additionally, because this definition of CWA jurisdiction applies to all sections of

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<sup>14</sup> Point sources are specific, discrete flows of water, like a ditch or pipe. *Id.*

<sup>15</sup> *See id.*

<sup>16</sup> *See NPDES Topics*, EPA (Feb. 1, 2007), <http://cfpub.epa.gov/npdes/pareas.cfm>.

<sup>17</sup> *See State and Tribal Program Authorization Status*, EPA (Jan. 7, 2005), <http://cfpub.epa.gov/npdes/statestribes/astatus.cfm>.

<sup>18</sup> *Section 404 Permitting*, EPA (Oct. 9, 2012), <http://water.epa.gov/lawsregs/guidance/cwa/dredgdis/>.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> 33 U.S.C. § 1362(7) (2006).

the CWA, Supreme Court cases addressing CWA jurisdiction in section 404 wetlands cases are relevant to section 402 groundwater cases.

### *B. SWANCC and Rapanos Create a Jurisdictional Debate*

Two Supreme Court cases—*SWANCC* and *Rapanos*—attempted to clarify the rule for deciding which wetlands were considered waters of the United States<sup>22</sup> but instead created confusion and uncertainty over the scope of waters covered by the CWA.<sup>23</sup> In its 2001 *SWANCC* decision, the Supreme Court held that the Corps exceeded its authority by asserting CWA jurisdiction over non-navigable, isolated, intrastate waters based on the presence of migratory birds.<sup>24</sup> In part, the Corps had defined “waters of the United States” by the promulgation of the Migratory Bird Rule.<sup>25</sup> Based on this rule, the Corps had decided the Solid Waste Agency required a permit to discharge fill material into abandoned sand and gravel pits,<sup>26</sup> and the Solid Waste Agency sued.<sup>27</sup> The Court held that the Corps had impermissibly extended the jurisdiction of the CWA to non-

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<sup>22</sup> *Rapanos v. United States*, 547 U.S. 715, 738 (2006); *Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs (SWANCC)*, 531 U.S. 159, 172–74 (2001).

<sup>23</sup> *Clean Water Protection Rule*, EPA (Oct. 24, 2012), <http://yosemite.epa.gov/opel/rulegate.nsf/byRIN/2040-AF30?opendocument#5>.

<sup>24</sup> *SWANCC*, 531 U.S. at 174. Non-navigable, isolated, intrastate waters, in this case, were abandoned sand and gravel pits with excavation trenches that had evolved into permanent and seasonal ponds and become habitat for migratory birds. *Id.* at 162. The waters were not navigable by definition under the CWA, did not flow into navigable waters, and did not cross state lines. *See id.* at 173.

<sup>25</sup> The Corps promulgated the Migratory Bird Rule as an interpretation of its CWA authority. *Id.* at 164. The Rule allowed the Corps to issue permits for abandoned gravel pits which contained water that was part of migratory bird habitat. *Id.* at 164–65. The Court struck the rule down. *Id.* at 166–67.

<sup>26</sup> The Corps originally concluded that sand and gravel pits were not wetlands, but after the Illinois Nature Preserves Commission informed the Corps that over a hundred migratory bird species had been observed at the site, including several known to depend upon aquatic environments for a significant portion of their life, the Corps changed its jurisdictional determination. “[T]he Corps . . . ‘determined that the seasonally ponded, abandoned gravel mining depressions located on the project site, while not wetlands, did qualify as ‘waters of the United States’ . . . based upon the following criteria: (1) the proposed site had been abandoned as a gravel mining operation; (2) the water areas and spoil piles had developed a natural character; and (3) the water areas are used as habitat by migratory bird [sic] which cross state lines.’” *Id.* at 164–65 (quoting the Corps’ reasoning justifying the Rule).

<sup>27</sup> *Id.* at 165.

navigable, isolated, intrastate waters.<sup>28</sup> In its opinion, though, the Court did not clarify the test for defining which non-navigable waters are sufficiently related to navigable waters to confer CWA jurisdiction.<sup>29</sup> Also, the Court mentioned, but did not decide, the issue of whether Congress's Commerce Clause power, as asserted through the CWA, could constitutionally extend to non-navigable, intrastate waters.<sup>30</sup>

Some lower courts viewed the *SWANCC* holding narrowly, interpreting the case to say the Corps' jurisdiction could not rest solely on migratory birds but the holding may permit jurisdiction if the water is not isolated or intrastate.<sup>31</sup> Other courts read *SWANCC* more broadly, and interpreted the holding to mean that the CWA's jurisdiction is limited to navigable waters or non-navigable waters that are directly linked to navigable waters.<sup>32</sup>

In the 2006 case, *Rapanos v. United States*, the Court attempted to establish a test for deciding what waters constitute "waters of the United States," and through that definition define the Corps' authority to regulate wetlands under the CWA.<sup>33</sup> *Rapanos* considered whether four wetlands areas located near man-made drains or ditches, which eventually drained into navigable waters, could be regulated under the

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<sup>28</sup> *Id.* at 164, 172. The Court reasoned that Congress specifically stated that the CWA applied to navigable waters and that it was not correct to read out the word navigable. *Id.* at 172. Justice Scalia reconnected "waters of the US" to "navigable" and held that the Corps' permitting jurisdiction, just based on the presence of migratory birds, did not reach waters that were non-navigable, isolated, and intrastate. *Id.*

<sup>29</sup> Bradford C. Mank, *The Murky Future of the Clean Water Act after SWANCC: Using a Hydrological Connection Approach to Saving the Clean Water Act*, 30 *ECOLOGY L.Q.* 811, 814 (2003). The Court failed to address whether it intended to supersede the significant nexus test from *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985). *Id.* at 819. In *Riverside Bayview*, the Court held that the Corps had jurisdiction over non-navigable wetlands that were adjacent to navigable waters if the adjacent wetlands had a significant ecological and biological connection to the navigable waters; also, the word "navigable" was of limited import. *Id.* at 837.

<sup>30</sup> *See SWANCC*, 531 U.S. at 172–73. The Corps alleged that migratory birds crossed state lines, and thus, could be regulated under the Commerce Clause. *Id.* The constitutional question of the extent of the Commerce Clause is also relevant to the regulation of groundwater, since underground aquifers lie beneath multiple states and the actions of one state can impact the water quality of another.

<sup>31</sup> *See Baccarat Fremont Developers, LLC v. United States Army Corps of Eng'rs*, 425 F.3d 1150 (9th Cir. 2005); *United States v. Deaton*, 332 F.3d 698 (4th Cir. 2003); *United States v. Rueth Dev. Co.*, 335 F.3d 598 (7th Cir. 2003).

<sup>32</sup> *See In re Needham*, 354 F.3d 340 (5th Cir. 2003); *Rice v. Harken Exploration Co.*, 250 F.3d 264 (5th Cir. 2001).

<sup>33</sup> *See Rapanos v. United States*, 547 U.S. 715 (2006).

CWA as “waters of the United States.”<sup>34</sup> All the wetlands had surface water connections to the drains or ditches, but it was “not clear whether the connections between these wetlands and the nearby drains and ditches [were] continuous or intermittent, or whether the nearby drains and ditches contain[ed] continuous or merely occasional flows of water.”<sup>35</sup> The Court was asked to decide whether the term “waters of the United States” in the CWA extended to wetlands that did not contain navigable waters and were not adjacent to navigable waters.<sup>36</sup>

Unfortunately, the Court failed to agree on a majority opinion, and the case produced more confusion rather than a clear test. The plurality held that “waters of the United States” only includes relatively permanent, standing, or continuously flowing bodies of water, not seasonal or intermittent channels.<sup>37</sup> Based on this holding, the plurality set out a two-part test for determining whether the Corps had CWA jurisdiction over wetlands.<sup>38</sup> First, navigable waters for the purpose of the CWA mean only relatively permanent bodies of water, not temporary flows.<sup>39</sup> Second, only wetlands with a continuous surface connection to waters of the United States may be regulated under the CWA.<sup>40</sup> Justice Kennedy, in his concurrence, disagreed with this two-part test and advocated for the use of the “significant nexus” test, stipulating that the specific wetland at issue must possess a significant nexus with the navigable waters.<sup>41</sup> Since there is no

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<sup>34</sup> *Id.* at 729. The importance of the drains and ditches which eventually emptied into the navigable waters was that they provided the necessary link for the Corps to require a permit for filling in of occasionally saturated land. *See id.* The alleged wetlands could not be regulated unless they were “adjacent wetlands.” *Id.* at 729–30. Adjacent wetlands are defined by Corps regulation as “bordering, contiguous [to], or neighboring.” *Id.* at 724 (quoting 33 C.F.R. § 328.3(c) (2004)). “Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are ‘adjacent wetlands.’” *Id.* (quoting 33 C.F.R. § 328.3(c) (2004)).

<sup>35</sup> *Rapanos*, 547 U.S. at 729.

<sup>36</sup> *Id.* at 759 (Kennedy, J., concurring).

<sup>37</sup> *Id.* at 739.

<sup>38</sup> *Id.* at 757.

<sup>39</sup> *Id.*

<sup>40</sup> *See id.*

<sup>41</sup> *Id.* at 786–87 (Kennedy, J., concurring).

[W]etlands possess the requisite 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.” When, in contrast, wetlands’ effects on water quality are speculative



majority opinion in *Rapanos*, controlling legal rules may be drawn from principles espoused by five or more justices.<sup>42</sup> Therefore, the Court created a jurisdictional debate by failing to specify to lower courts and regulatory authorities whether to apply a two-part test or a significant nexus test to determine which waters may be regulated under the CWA. Lower courts have split on which test to apply, and some apply both tests.<sup>43</sup> Similarly, the Corps and EPA's jurisdictional guidance following *Rapanos* incorporates language from both tests.<sup>44</sup>

### C. Guidance, Rulemaking, and Politics

Aside from major litigation, EPA and the Corps confront CWA issues by issuing guidance. Although a formal rulemaking process would provide more clarity, political pressure limits executive action on these contentious issues, as discussed in Part III.<sup>45</sup>

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or insubstantial, they fall outside the zone fairly encompassed by the statutory term "navigable waters."

*Id.* at 780 (Kennedy, J., concurring).

<sup>42</sup> EPA & ARMY CORPS OF ENG'RS, CLEAN WATER ACT JURISDICTION FOLLOWING THE U.S. SUPREME COURT'S DECISION IN *RAPANOS V. UNITED STATES & CARABELL V. UNITED STATES* 3 (2008).

<sup>43</sup> WILLIAM L. WANT, LAW OF WETLANDS REGULATION § 4:31.1 (2012), available at Westlaw. The Eleventh Circuit applies the significant nexus test. *United States v. Robison*, 505 F.3d 1208, 1221 (11th Cir. 2007). The First and Eighth Circuits accept either test. *United States v. Bailey*, 571 F.3d 791, 799 (8th Cir. 2009); *United States v. Johnson*, 467 F.3d 56, 66 (1st Cir. 2006). The Fifth and Sixth Circuits require that both tests be met. *United States v. Cundiff*, 555 F.3d 200, 210 (6th Cir. 2009); *United States v. Lucas*, 516 F.3d 316, 324 (5th Cir. 2008) (upholding jury instructions requiring "that the jury find that the wetlands were waters of the United States adjacent to navigable waters with a significant nexus between the wetland and the navigable-in-fact waterway to establish CWA jurisdiction"). The Seventh and Ninth Circuits apply their own iteration of a combination of the tests, applying the significant nexus test also leaving open the option of applying the two-part test in rare circumstances. *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 1000 (9th Cir. 2007); *United States v. Gerke Excavating, Inc.*, 464 F.3d 723, 725 (7th Cir. 2006).

<sup>44</sup> EPA & ARMY CORPS OF ENG'RS, DRAFT GUIDANCE ON IDENTIFYING WATERS PROTECTED BY THE CLEAN WATER ACT 2-3 (2011), available at [http://water.epa.gov/lawsregs/guidance/wetlands/upload/wous\\_guidance\\_4-2011.pdf](http://water.epa.gov/lawsregs/guidance/wetlands/upload/wous_guidance_4-2011.pdf).

<sup>45</sup> Agency guidance can be changed at any time and does not have a substantive legal effect, but it is a faster way of explaining how EPA or Corps field-staff interpret existing regulations. A rule goes through a more stringent process and is then given administrative deference. Bruce Myers et al., *Dialogue, Assessing Jurisdiction Under the New Clean Water Act Guidance*, 41 ENVTL. L. REP. (Envl. Law Inst.) 10773, 10784 (2011) (hereinafter "ELI Dialogue") (statement by Lawrence Liebsman, Partner at Holland & Knight, LLP).

In 2003, the Corps and EPA published a joint memorandum addressing CWA jurisdiction following *SWANCC*.<sup>46</sup> In 2008, they published another memorandum addressing jurisdiction following *Rapanos*, attempting to provide some clarity and incorporate both possible tests for jurisdiction—the plurality two-part test and Justice Kennedy’s significant nexus test.<sup>47</sup> This 2008 memorandum states that the Corps and EPA will assert jurisdiction over traditional navigable waters, wetlands adjacent to navigable waters, relatively permanent non-navigable tributaries to navigable waters, and wetlands that abut such tributaries.<sup>48</sup> The agencies will conduct fact-specific analyses to determine whether certain waters have a significant nexus with navigable waters.<sup>49</sup> The significant nexus test will apply to non-navigable tributaries and adjacent wetlands that are not relatively permanent as well as wetlands adjacent to, but not abutting, relatively permanent non-navigable tributaries.<sup>50</sup> The significant nexus test “includes consideration of hydrologic and ecologic factors” and assesses “the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of downstream traditional navigable waters.”<sup>51</sup> Additionally, the Corps’ and EPA’s inclusion of the permanence and adjacency requirements echo the *Rapanos* plurality’s two-part test: “[W]hether the ditches or drains near each wetland are ‘waters’ in the ordinary sense of containing a relatively permanent flow; and (if they are) whether the wetlands in question are ‘adjacent’ to these ‘waters’ in the sense of possessing a continuous surface connection that creates the boundary-drawing problem . . . .”<sup>52</sup>

In 2011, EPA and the Corps proposed new guidance to better clarify which bodies of water are protected in addition to increasing

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<sup>46</sup> See *Clean Water Act Definition of “Water of the United States,”* EPA (Aug. 9, 2012), <http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm>.

<sup>47</sup> EPA & ARMY CORPS OF ENG’RS, CLEAN WATER ACT JURISDICTION, *supra* note 42 (incorporating revisions from the memorandum originally issued on June 6, 2007, and incorporating public comments and the agencies’ experience in implementing the *Rapanos* decision).

<sup>48</sup> *Id.* at 1.

<sup>49</sup> *Id.*

<sup>50</sup> *Id.*

<sup>51</sup> *Id.*

<sup>52</sup> *Rapanos v. United States*, 547 U.S. 715, 757 (2006).

regulatory clarity, consistency, predictability, and effectiveness.<sup>53</sup> The guidance focuses on “protection of smaller waters [(tributaries)] that feed into larger ones, to keep downstream water safe from upstream pollutants.”<sup>54</sup> EPA notes that “[t]he guidance will not extend federal protection to any waters not historically protected under the Clean Water Act and will be fully consistent with the law, including decisions of the Supreme Court.”<sup>55</sup> The initial draft guidance received about 230,000 public comments, and a final draft incorporating the comments has been submitted to the Office of Management and Budget (OMB) for federal interagency review.<sup>56</sup> The politics of an issue are often worked out at OMB, and given that 2012 is an election year, the timing of the release of the final guidance is quite uncertain.

Thus, the 2008 *Rapanos* guidance and the 2003 *SWANCC* guidance are still in effect pending the finalization of the 2011 guidance.<sup>57</sup> Note, however, that guidance lacks the force of a formal rule;<sup>58</sup> it simply reflects how the Corps and EPA interpret the CWA and their own current regulations.<sup>59</sup> EPA has expressed its intent to conduct a formal rulemaking following the urging of Congress, industry organizations, environmental groups, states, and the public.<sup>60</sup> Those entities and individuals are calling for a formal rulemaking to sync the definition of “waters of the United States” with the court cases because the status quo is “untenable” and causing “increased pollution and confusion, uncertainty, and wasted resources.”<sup>61</sup>

## II

### GROUNDWATER ENTERS THE DEBATE

In addition to the uncertainty over the scope of CWA jurisdiction in general, circuits are split on the question of whether EPA and the

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<sup>53</sup> *Clean Water Act Definition*, *supra* note 46.

<sup>54</sup> *Id.*

<sup>55</sup> *Id.*

<sup>56</sup> *Id.*

<sup>57</sup> ELI Dialogue, *supra* note 45, at 10775 (statement of Donna Downing, Jurisdictional Team Leader, Office of Wetlands, Oceans & Watersheds, EPA).

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

<sup>60</sup> *Clean Water Act Definition*, *supra* note 46.

<sup>61</sup> ELI Dialogue at 10777, 10781, 10783 (statements of Jan Goldmand-Carter, Wetlands and Water Resources Counsel at National Wildlife Federation, calling for a “deliberative science-driven rulemaking process,” and of Lawrence Liebsman, Partner at Holland & Knight LLP).

Corps may assert CWA jurisdiction over groundwater connected to navigable waters.<sup>62</sup> As discussed in detail in Part III, although *SWANCC* and *Rapanos* factually involve wetlands, the Court's decisions in these cases, and the subsequent guidance and regulation, affects CWA jurisdiction in general, including CWA regulation over discharges of pollutants into groundwater. Both the debate over groundwater regulation and the larger CWA jurisdictional debate raise both legal questions about the scope of Congress's Commerce Clause power and practical questions about how litigants and courts should determine whether the CWA applies to particular cases.

#### A. Legal Groundwater

The concept of "legal" groundwater informs the tests that courts use to decide whether the CWA regulates certain waters. Courts conceptualize groundwater differently and thus come to various conclusions about its regulation. Three main categories of legal groundwater exist;<sup>63</sup> these categories are usually defined by state statutes.<sup>64</sup> The first category is water which flows in "underground" streams;<sup>65</sup> the second is "percolating" groundwater, or water that doesn't flow but "ooze[s]" through small openings like water through coffee grounds;<sup>66</sup> the third category is the "subflow" from surface streams, which includes the water in the bed underneath or around a stream.<sup>67</sup> Defining groundwater using this third category is a good way to argue that surface and groundwater are hydrologically connected in order to satisfy the test for wetlands jurisdiction for section 404 dredge-and-fill permits.<sup>68</sup> Similar to subflow, but sometimes considered a separate category, "tributary groundwater" is groundwater that feeds surface streams.<sup>69</sup> Tributary groundwater is an

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<sup>62</sup> See *Umatilla Waterquality Protective Ass'n, Inc. v. Smith Frozen Foods, Inc.*, 962 F. Supp 1312, 1317 (D. Or. 1997).

<sup>63</sup> SAX ET AL., *supra* note 2, at 411–13. Some states have very complex classification systems for groundwater. Colorado, for example, adopted a fourth category called "not nontributary groundwater" and has substantial case law on the fine distinctions. *Id.* at 413 n.31.

<sup>64</sup> *Id.* at 411.

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

<sup>68</sup> *Id.* at 412; ELI Dialogue, *supra* note 45, at 10785 (statement by Donna Downing, stating that the new CWA guidance mentions that "groundwater, particularly shallow subsurface flows, may be relevant as a connection among different waters").

<sup>69</sup> SAX ET AL., *supra* note 2, at 412.

important distinction for the hydrological connection test sometimes used in determining the applicability of section 402 NPDES permits.<sup>70</sup>

Courts, agencies, and parties do not debate that the jurisdictional definition, “waters of the United States,” does not include isolated, non-tributary groundwater and that discharges of pollutants into groundwater that do not affect surface water are not subject to CWA regulation.<sup>71</sup> However, courts are divided on the issue of “whether the discharge of pollutants into groundwater which find their way into and affect the waters of the United States are subject to CWA regulation.”<sup>72</sup> This issue generally arises in two situations—either a discharge of pollutants onto dry land seeps into the ground and travels through groundwater to navigable water,<sup>73</sup> or the pollutant is discharged into non-navigable surface water that is connected to navigable waters by groundwater.<sup>74</sup> In either situation, plaintiffs allege that the pollution flows through the groundwater and ultimately contaminates navigable waters of the United States; therefore, the discharge should be regulated under the CWA. Some courts have held that the CWA does not regulate discharges of pollution to or through groundwater, even if it eventually affects navigable waters.<sup>75</sup> Other courts have held that the CWA may be extended to regulate the discharge of pollutants to or through groundwater if a direct hydrological connection exists between the polluted groundwater and a navigable body of water.<sup>76</sup>

Likely because of political constraints on the executive branch and the lack of clarity in the statute itself, EPA and the Corps have not provided guidance or regulation to help inform the courts. Both have marginally addressed the regulation of groundwater pollution in the section 402 NPDES permit context. In the section 404 dredge-and-fill permit context, groundwater is alluded to with the term “shallow subsurface hydrologic connection.”<sup>77</sup> EPA’s “official” position is that the

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<sup>70</sup> See *infra* Part II.B.4 (addressing the tributary groundwater theory in detail).

<sup>71</sup> *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169, 1179 (D. Idaho 2001).

<sup>72</sup> *Id.*

<sup>73</sup> This situation would likely implicate section 402 discharge permits and most often arises in mining cases or animal feeding operations.

<sup>74</sup> This situation would likely implicate section 404 dredge-and-fill permits as it would probably arise where wetlands are present.

<sup>75</sup> *Idaho Rural Council*, 143 F. Supp. 2d at 1180.

<sup>76</sup> *Id.*

<sup>77</sup> EPA & ARMY CORPS OF ENG'RS, DRAFT GUIDANCE, *supra* note 44, at 16.

direct hydrologic connection test applies to section 402 NPDES permit situations.<sup>78</sup> This position is “official” only in the sense that it appears in a proposed rule from 2001, and through this statement EPA reserves the right to regulate some pollution to groundwater on a case-by-case basis.<sup>79</sup> Thus, neither the courts nor the EPA are clear on the application of the CWA to groundwater leaving parties in groundwater cases are left to argue both sides of the issue.

### *B. The Direct Hydrological Connection Test*

Current jurisprudence is divided over whether to allow groundwater to confer CWA jurisdiction if there is a “direct hydrological connection” between the contaminated groundwater and regulated surface water.<sup>80</sup> Some courts applying this test require plaintiffs to trace pollutants “from their source to surface waters, in order to come within the purview of the CWA.”<sup>81</sup> “It is not sufficient to allege groundwater pollution, and then to assert a general hydrological connection between all waters.”<sup>82</sup>

Other courts hold that the CWA does not protect even hydrologically connected groundwater, even though it may produce an undesirable outcome. The District of Oregon case *Umatilla Waterquality Protective Ass’n v. Smith Frozen Foods, Inc.* (“*Umatilla*”) is a current, local opinion summarizing the arguments against regulating discharges to hydrologically connected groundwater under the CWA.<sup>83</sup> Similar to many other jurisdictions, the court held: “Although the CWA’s NPDES program *should* apply

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<sup>78</sup> NPDES Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations, 66 Fed. Reg. 2960 (EPA Jan. 12, 2001) (hereinafter “NPDES/CAFO Guidelines”).

<sup>79</sup> James W. Hayman, *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, 113–14 (2005) (“[I]n publishing and codifying the final rule, EPA omitted all references to requiring NPDES permits for discharges to groundwater; the term ‘groundwater’ simply does not appear in the rule as promulgated. . . . Regarding the apparent ‘backing down’ from its asserted groundwater authority under the CWA in response to public pressure, EPA still claims groundwater authority and intends on exercising it, but only on a case-by-case basis.”) (footnotes omitted).

<sup>80</sup> *Id.* at 109–11.

<sup>81</sup> Wash. Wilderness Coal. v. Hecla Mining Co., 870 F. Supp. 983, 990 (E.D. Wash. 1994).

<sup>82</sup> *Id.*

<sup>83</sup> *Umatilla Waterquality Protective Ass’n v. Smith Frozen Foods, Inc.*, 962 F. Supp. 1312, 1318–20 (D. Or. 1997).

to groundwater to adequately protect surface water . . . the law as written, as intended by Congress, and as applied in Oregon for over two decades does not regulate even hydrologically-connected groundwater.”<sup>84</sup> The *Umatilla* court, and other like-minded courts, reason that statutory language, legislative history, and agency interpretation lead to the conclusion that the direct hydrological connection test should not be applied.<sup>85</sup> Courts applying the direct hydrological connection test find authority based on the CWA’s purpose and policy arguments.<sup>86</sup>

### *1. Statutory Language*

*Umatilla* espouses the view that “when Congress wanted certain provisions of the CWA to apply to groundwater, it stated so explicitly.”<sup>87</sup> 33 U.S.C. § 1252(a) requires the EPA Administrator to “prepare or develop comprehensive programs for preventing, reducing or eliminating the pollution of *the navigable waters and ground waters* and improving the sanitary condition of *surface and underground waters*.”<sup>88</sup> Also, the Administrator must “establish, equip, and maintain a water quality surveillance system for the purpose of monitoring the quality of *the navigable waters and ground waters and the contiguous zone and the oceans*.”<sup>89</sup> Thus, as evidenced from the CWA’s statutory language, Congress considered groundwater to be one separate category of four categories of water referenced in the CWA—navigable waters, the contiguous zone, the ocean, and groundwater.<sup>90</sup>

Groundwater appears to be excluded specifically from section 402 NPDES permit regulation as well. The statute on the section 402

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<sup>84</sup> *Id.*

<sup>85</sup> See Hayman, *supra* note 79, at 106–09.

<sup>86</sup> See *id.* at 104–06.

<sup>87</sup> 962 F. Supp. at 1318.

<sup>88</sup> *Id.* (citing 33 U.S.C. § 1252(a) (1994)).

<sup>89</sup> *Id.* (citing 33 U.S.C. § 1254(a)(5) (1994)).

<sup>90</sup> *Id.* The Seventh Circuit similarly found that CWA does not purport to regulate all water, stating: “‘Waters of the United States’ must be a subset of ‘water’; otherwise why insert the qualifying clause in the statute?” *Vill. of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962, 965 (7th Cir. 1994). That court held that a six-acre artificial retention pond built along with the construction of a warehouse was not regulated under the CWA as part of “waters of the United States,” even if the pond drained into groundwater. *Id.* at 965–66. “Neither the Clean Water Act nor the EPA’s definition [of waters of the United States] asserts authority over ground waters, just because these may be hydrologically connected with surface waters.” *Id.* at 965.

NPDES permit program makes no reference to groundwater and clearly applies to navigable waters, which Congress identified as a separate category of water.<sup>91</sup> Also, Congress excluded groundwater from the definition of “discharge of pollutant.”<sup>92</sup> Discharge of pollutant is defined as: “(A) any addition of any pollutant to *navigable waters* from any point source, (B) any addition of any pollutant to the waters of the *contiguous zone* or *the ocean* from any point source other than a vessel or other floating craft.”<sup>93</sup> Returning to the larger CWA’s categories of water, it seems that section 402 only applies to pollutants from three of the four categories of water.

Some courts oppose the view that the statutory language clearly prevents any and all regulation of groundwater contamination.<sup>94</sup> That opposing view agrees that the CWA does not attempt to regulate groundwater comprehensively, but argues that Congress did not intend its language to exempt groundwater from all regulation.<sup>95</sup> Congress in fact intended the CWA to apply to situations where pollutants passing through groundwater adversely affect surface water regulated by the CWA.<sup>96</sup> The courts’ logic displays a common-sense approach to the interpretation of the legislative history: “In short, the interpretive history of the CWA only supports the unremarkable proposition with which all courts agree—that the CWA does not regulate ‘isolated/nontributary groundwater’ which has no affect [sic] on surface water.”<sup>97</sup>

The statutory language is at best ambiguous when discussing groundwater, but many courts find the CWA purpose statement meaningful. In *Washington Wilderness Coalition*, the court chose to apply the hydrologic connection test because “the goal of the CWA is to protect the quality of surface waters, any pollutant which enters such waters, whether directly or through groundwater, is subject to regulation by NPDES permit.”<sup>98</sup> The court reasoned that “[a]pplying effluent limitations to tributary groundwater does not change [the] nature of CWA monitoring,” and that plaintiffs still had to

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<sup>91</sup> See *Umatilla*, 962 F. Supp. at 1319 (citing 33 U.S.C. § 1342 (1994)).

<sup>92</sup> *Id.*

<sup>93</sup> 33 U.S.C. § 1362(12) (2006) (emphasis added).

<sup>94</sup> See Hayman, *supra* note 79, at 110.

<sup>95</sup> *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 989–90 (E.D. Wash. 1994); *Sierra Club v. Colo. Ref. Co.*, 838 F. Supp. 1428, 1433–34 (D. Colo. 1993).

<sup>96</sup> *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169, 1180 (D. Idaho 2001).

<sup>97</sup> *Id.* (quoting *Wash. Wilderness Coal.*, 870 F. Supp. at 990).

<sup>98</sup> 870 F. Supp. at 990.



demonstrate a direct hydrological connection rather than just a general assertion of connectivity to all waters.<sup>99</sup> Similarly, in *Sierra Club v. Colorado Refining Company*, the court found that the Tenth Circuit favored a broad interpretation of the waters protected by the CWA because Congress's declared goal and policy was "to restore and maintain the chemical, physical and biological integrity of the Nation's waters."<sup>100</sup> The court discussed disparities in CWA groundwater case law in general<sup>101</sup> and relied on Tenth Circuit case law in particular,<sup>102</sup> holding that "the Clean Water Act's preclusion of the discharge of any pollutant into 'navigable waters' includes such discharge which reaches 'navigable waters' through groundwater."<sup>103</sup> Many courts, including those in *Washington Wilderness Coalition* and *Sierra Club*,<sup>104</sup> are in accord with the seemingly simple and big-

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<sup>99</sup> *Id.*

<sup>100</sup> *Sierra Club*, 838 F. Supp. at 1433–34 (D. Colo. 1993) (citing 33 U.S.C. § 1251(a) (1994)). In *Sierra Club*, the plaintiff's claim stated a valid cause of action when it alleged the defendant had and continued to discharge pollutants from its refinery into the soils and groundwater beneath its property, which then made their way to navigable water through the groundwater. *Id.*

<sup>101</sup> The *Sierra Club* court compares two decisions that reached opposite conclusions about the Fifth Circuit case, *Exxon Corp. v. Train*, 554 F.2d 1310 (5th Cir. 1977). *Id.* at 1433. The court in *Kelley v. United States*, No. 79–10199 (E.D. Mich. 1980) ("*Kelley I*"), concluded that *Exxon* held that "wastes which migrate from groundwaters back into surface waters are within EPA's regulatory jurisdiction." *Id.* (quoting *Kelley* ex rel. People of State of Mich. v. United States, 618 F. Supp. 1103, 1106 (W.D. Mich. 1985) ("*Kelley II*") (citing *Kelley I*, No 79-10199, slip op. at 2–3)). Conversely, *Kelley II*, relying "considerably on the opinion in *Exxon*," held that "the Clean Water Act did not extend federal authority to the regulation of groundwater contamination." *Id.* (discussing *Kelley II*, 618 F. Supp. at 1107). See also *Town of Norfolk v. U.S. Army Corps of Eng'rs*, 968 F.2d 1438, 1451 (1st Cir. 1992) (agreeing with the Corps that since determinations about permitting "ultimately involve[ ] an ecological judgment about the relationship between surface waters and groundwaters, it should be left in the first instance to the discretion of the EPA and the Corps"); *McClellan Ecological Seepage Situation v. Weinberger*, 707 F. Supp. 1182, 1193–94 (E.D. Cal. 1988) ("Congress did not intend to require NPDES permits for discharges of pollutants to isolated groundwater. On the other hand, permits might be required for discharges to groundwater that has a direct hydrological connection to surface waters that themselves constitute 'waters of the United States.'"); *New York v. United States*, 620 F. Supp. 374, 375–76, 381 (E.D.N.Y. 1985) (declining to reach the issue of groundwater since the plaintiffs also alleged a surface water connection in a situation where contaminated groundwater was presumably tributary to navigable surface water).

<sup>102</sup> Cases discussed include *Quivira Mining Co. v. EPA*, 765 F.2d 126, 130 (10th Cir. 1985), and *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 373 (10th Cir. 1979).

<sup>103</sup> *Sierra Club*, 838 F. Supp. at 1434.

<sup>104</sup> See *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169, 1179 (D. Idaho 2001) (citing *U.S. Steel Corp. v. Train*, 556 F.2d 822, 852 (7th Cir. 1977)); *Friends of Santa Fe*

picture view elucidated by *Idaho Rural Council v. Bosma* that “whether pollution is introduced by a visible, above-ground conduit or enters the surface water through the aquifer matters little to the fish, waterfowl, and recreational users which are affected by the degradation of our nation’s rivers and streams.”<sup>105</sup>

## 2. Legislative History

The legislative history suggests Congress did not intend to regulate groundwater for two main reasons.<sup>106</sup> First, the Senate Public Works Committee Report, which accompanied the Senate version of the CWA, considered adding groundwater to the NPDES permit program. In this Report the Committee stated:

Several bills pending before the Committee provided authority to establish Federally approved standards for groundwaters which permeate rock, soil and other surface formations. Because the jurisdiction regarding groundwaters is so complex and varied from State to State, the Committee did not adopt this recommendation.<sup>107</sup>

*Umatilla* and other courts took this quote very literally to mean that “Congress did not intend to regulate groundwater in any form.”<sup>108</sup> Essentially, this passage means that the Senate Committee chose not to extend CWA regulation to all groundwater, but it does not necessarily mean that all groundwater is excluded from regulation.<sup>109</sup> A sophisticated analysis of this passage must also consider that the Committee “recognize[d] the essential link between ground and surface waters and the artificial nature of any distinction” and thus required each state to include in its section 402 NPDES permit program “affirmative controls over the injection or placement in wells

Cnty. v. LAC Minerals, Inc., 892 F. Supp. 1333, 1357 (D.N.M. 1995); Wash. Wilderness Coal. v. Hecla Mining Co., 870 F. Supp. 983, 990 (E.D. Wash. 1994); *Sierra Club*, 838 F. Supp. at 1434; *McClellan*, 707 F. Supp. at 1196).

<sup>105</sup> *Idaho Rural Council*, 143 F. Supp. at 1179–80. The *Idaho Rural Council* court denied the dairy farmer’s motion for summary judgment on pollution of a spring but cautioned the plaintiffs that they had the burden of proof to show that Grand View Dairy polluted groundwater that was hydrologically connected to the springs and that the discharges must be traced from their source to those springs. *Id.* at 1180–81.

<sup>106</sup> See *Umatilla Waterquality Protective Ass’n v. Smith Frozen Foods, Inc.*, 962 F. Supp. 1312, 1318 (D. Or. 1997).

<sup>107</sup> *Id.* at 1318 (quoting *McClellan*, 707 F. Supp. at 1194 (quoting S. REP. NO. 92-414, at 73 (1971))).

<sup>108</sup> *Id.* at 1318–19 (citing *McClellan*, 707 F. Supp. at 1194).

<sup>109</sup> See Thomas L. Casey, *Reevaluating “Isolated Waters”: Is Hydrologically Connected Groundwater “Navigable Water” Under the Clean Water Act*, 54 ALA. L. REV. 159, 169 (2002).

or any pollutants that may affect ground water.”<sup>110</sup> Further, courts should, but often do not, question what standards the Committee is referring to—whether they are either effluent limits for discharges of waste or ambient limits for the quality of the receiving body of water.<sup>111</sup> If the Committee’s statement expressed reluctance to regulate ambient standards, then its Report would not support the proposition that groundwater is not subject to regulation under section 402 NPDES permits.<sup>112</sup> Although there are arguments to the contrary, the Senate Committee Report seems clear to some courts, including *Umatilla*, to be an “unequivocal recital” that Congress did not intend to regulate “subsurface discharges” under the CWA.<sup>113</sup>

The second important piece of CWA legislative history is the debate surrounding the proposed Aspin Amendment. The House specifically rejected an amendment proposed by Representative Leslie “Les” Aspin that would have brought groundwater within the CWA’s enforcement and permit sections.<sup>114</sup> Representative Aspin was concerned with the effects of deep well injection and the “glaring inconsistency” of the fact that groundwater appears in every section of the CWA except the enforcement section.<sup>115</sup> He correctly noted: “If we do not stop pollution of ground waters through seepage and other means, ground water gets into navigable waters, and to control only the navigable water and not the ground water makes no sense at all.”<sup>116</sup> By not regulating groundwater, oil companies and other companies could pollute through “waste injection wells.”<sup>117</sup> He also noted that this inconsistency strongly favored the oil industry because certain by-products of the oil production process were excluded from the definition of “pollutant” under section 304 of the CWA.<sup>118</sup>

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<sup>110</sup> *Id.* at 170 (quoting S. REP. NO. 92-414, at 73).

<sup>111</sup> Mary Christina Wood, *Regulating Discharges into Groundwater: The Crucial Link in Pollution Control Under the Clean Water Act*, 12 HARV. ENVTL. L. REV. 569, 626 (1988).

<sup>112</sup> *See id.* at 615–16.

<sup>113</sup> *Id.* at 615 (quoting *United States v. GAF Corp.*, 389 F. Supp. 1379, 1383 (S.D. Tex. 1975), and citing *Exxon Corp. v. Train*, 554 F.2d. 1310, 1325 (5th Cir. 1977)); *Umatilla*, 962 F. Supp. at 1318–19.

<sup>114</sup> *Umatilla Waterquality Protective Ass’n v. Smith Frozen Foods*, 962 F. Supp. 1312, 1318–19 (D. Or. 1997).

<sup>115</sup> Casey, *supra* note 109, at 171 (quoting 92 CONG. REC. 10,666 (1972)).

<sup>116</sup> *Id.* (quoting 92 CONG. REC. 10,666 (1972)).

<sup>117</sup> *Id.* (citing 92 CONG. REC. 10,666 (1972)).

<sup>118</sup> *Id.* at 171, 171 n.106 (citing section 502 of the Federal Water Pollution Control Act, 33 U.S.C. § 1362 (1972)).

Representative Robert Kastenmeier, supporting Representative Aspin's amendment, criticized the oil industry for having "the sheer nerve to seek an exemption from antipollution laws" after it had reaped more benefits than any other industry from special-interest litigation.<sup>119</sup>

Opponents to the amendment either expressed views that groundwater should be regulated by the states or that it was already sufficiently federally regulated. Representative Donald Clausen, an opponent of the amendment, stated that in the early deliberations the Senate Committee thoroughly considered a provision for groundwater and decided "that there was not sufficient information on ground waters to justify the types of controls that are required for navigable waters."<sup>120</sup> Representative H. Ray Roberts also opposed the amendment, stating the oil industry was already so heavily regulated that it was not necessary to try to regulate it using the CWA.<sup>121</sup>

The *Umatilla* court and others see the rejection of the amendment as an indication that Congress did not intend to regulate groundwater under the CWA.<sup>122</sup> A more accurate assessment of legislative history of the CWA is that the exclusion of groundwater is inconclusive and can be used to support either side of the argument.<sup>123</sup> A weakness in *Umatilla* is the cursory mention of legislative history without recognizing the influence of the oil and gas industry and the effect the Aspin Amendment would have had on deleting the oil and gas exception.<sup>124</sup> Regardless, the legislative history is not dispositive on congressional intent regarding groundwater under the CWA. What the legislative history conclusively shows, though, is that groundwater is more complex and nuanced to regulate than surface water and requires greater protection than the CWA permit program currently provides.

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<sup>119</sup> *Id.* at 172 (citing 92 CONG. REC. 10,669 (1972)); see also 40 C.F.R. § 122.26(a)(2)(ii) (2008); *Regulation of Oil and Gas Construction Activities*, EPA (Mar. 9, 2009), <http://cfpub.epa.gov/npdes/stormwater/oilgas.cfm>.

<sup>120</sup> *Umatilla*, 962 F. Supp. at 1319 (quoting 118 CONG. REC. 10,667 (1972)).

<sup>121</sup> *Casey*, *supra* note 109, at 172 (citing 92 CONG. REC. 10,668 (1972)).

<sup>122</sup> *Umatilla*, 962 F. Supp. at 1318; *Exxon Corp. v. Train*, 554 F.2d. 1310, 1325 (5th Cir. 1977); *United States v. GAF Corp.*, 389 F. Supp. 1379, 1383–84 (S.D. Tex. 1975).

<sup>123</sup> See *Wood*, *supra* note 111, at 615, 617.

<sup>124</sup> When analyzing the legislative history, courts must understand that the Aspin Amendment would have deleted the exemption for gas and oil waste injection wells. *Id.* at 613. Thus, the exclusion of the amendment could likely evidence the political power of the oil and gas industry more than a Congressional intent to exclude hydrologically connected groundwater.

### 3. Agency Interpretation

EPA and individual state agencies also seem to interpret the CWA as excluding groundwater from regulation. Specifically in *Umatilla*, the court noted that “EPA has offered no formal or consistent interpretation of the CWA that would subject discharges to groundwater to the NPDES permitting requirement” and “an agency’s interpretation of a statute that it administers is entitled to great deference.”<sup>125</sup> *Umatilla* cited two 1970s EPA regulations adopting advice contained in a 1973 letter from the Office of General Counsel to EPA stating, “[d]ischarges into groundwater are not included” in the NPDES permit program.<sup>126</sup> Oregon’s Department of Environmental Quality (DEQ) is the agency that administered the CWA in Oregon, and according to the *Umatilla* decision, the state agency “ha[d] clearly interpreted that Act’s NPDES program as *not* applying to discharges to groundwater.”<sup>127</sup> The DEQ and Oregon statutes distinguished groundwater and surface water and had separate programs for permitting discharges to both.<sup>128</sup> EPA approved Oregon’s NPDES program, knew about Oregon’s system of regulating groundwater separately from NPDES permits, and never objected or required Oregon to change its NPDES program during the twenty-five years of water quality regulation in the state.<sup>129</sup> Oregon’s permit system was not controlling, but the fact that EPA approved of the system and had not sought to change it lent “weight to [the] conclusion that the CWA’s NPDES program does not apply to any discharges to groundwater.”<sup>130</sup>

Also, as a practical policy matter, the *Umatilla* court was concerned with the reliance permittees have placed on the state and federal permit systems. The court expressed concern that suddenly bringing discharges to hydrologically-connected groundwater under CWA permits would “add a new level of uncertainty and expense to NPDES permitting.”<sup>131</sup> It also cautioned that an expansion of the

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<sup>125</sup> *Umatilla*, 962 F. Supp. at 1319 (citing *Chem. Mfrs. Ass’n v. Natural Res. Def. Council*, 470 U.S. 116, 125 (1995), and *Chevron U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 843–44 (1984)).

<sup>126</sup> *Id.*

<sup>127</sup> *Id.*

<sup>128</sup> *See id.* at 1320.

<sup>129</sup> *Id.*

<sup>130</sup> *Id.*

<sup>131</sup> *Id.*

permit system “would expose potentially hundreds of permittees” to liability or litigation “if they or the DEQ has happened to make the ‘wrong’ choice about which kind of permit discharges to groundwater require.”<sup>132</sup>

On the other hand, the *Washington Wilderness Coalition* court found authority for the hydrological connection test in EPA’s preamble to *NPDES Permit Regulation for Storm Water Discharges*.<sup>133</sup> The preamble stipulated that permit regulation does not apply to groundwater “unless there is a hydrological connection between the groundwater and a nearby surface water body.”<sup>134</sup> The court took this preamble to explain, “EPA’s policy to require NPDES permits for discharges which may enter surface water via groundwater, as well as those that enter directly.”<sup>135</sup> The court’s interpretation of the preamble is corroborated by EPA’s proposed regulation of concentrated animal feeding operations (CAFO’s), which stated that the direct hydrologic connection test applies to section 402 NPDES permit situations.<sup>136</sup>

#### 4. Policy Considerations

From a policy standpoint, it makes sense to allow regulation of pollution to hydrologically connected groundwater because Congress did not intend to create “a ground water loophole through which the discharges of pollutants could flow, unregulated, to surface water.”<sup>137</sup> Congress wrote the CWA with the hydrologic cycle in mind; the Senate Report notes that “[w]ater moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.”<sup>138</sup> Even courts like *Umatilla*, which choose not to apply the direct hydrologic connection test, acknowledge the practical reality that pollution to hydrologically connected groundwater impacts surface water and should be controlled at the source.<sup>139</sup>

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<sup>132</sup> *Id.*

<sup>133</sup> *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994).

<sup>134</sup> *Id.* (citing NPDES Permit Regulations for Storm Water Discharges, 55 Fed. Reg. 47990, 47997 (Nov. 16, 1990)).

<sup>135</sup> *Id.* at 991.

<sup>136</sup> See NPDES/CAFO Guidelines, *supra* note 78.

<sup>137</sup> *Id.* at 3016.

<sup>138</sup> *Id.*; Wood, *supra* note 111, at 592.

<sup>139</sup> *Umatilla Waterquality Protective Ass’n v. Smith Frozen Foods, Inc.*, 962 F. Supp. 1312, 1318 (D. Or. 1997).

An offshoot of the hydrological connection approach is the tributary groundwater<sup>140</sup> theory, which was proposed by scholar and professor Mary Wood.<sup>141</sup> In some section 402 cases, the theory may assist in convincing a court of a hydrological connection.<sup>142</sup> The tributary groundwater theory recommends that EPA “assert that the term ‘navigable waters’ extends to all groundwater which feeds into surface water, since such groundwater is tributary in the true sense of the word and thus falls within the definition of ‘waters of the United States.’”<sup>143</sup> From a policy standpoint, “[g]iven the intimate hydrological connection between most ground and surface water, pollution control of surface water may be greatly frustrated with concomitant protection of tributary groundwater.”<sup>144</sup> Federal courts have interpreted the CWA definition of navigable waters—“waters of the United States”—broadly to include waters tributary to those which are navigable in fact.<sup>145</sup> The tributary groundwater theory expands the definition of navigable waters based on the understanding that groundwater is hydrologically connected to surface water.

A recent case uses the tributary groundwater theory to support its use of the direct hydrological test. In *Hernandez v. Esso Standard Oil Company*, citizens and property owners sued a petroleum company and owner of a former service station because of release of hazardous substances due to underground storage tank leaks.<sup>146</sup> The plaintiffs argued that the First Circuit’s position was not to categorically exclude groundwater from “waters of the United States” but rather to determine its status based on an “ecological judgment” according to the specific facts of each individual site.<sup>147</sup> The court noted that although Congress did not intend for isolated groundwater to be regulated under the CWA permit requirements, case law did not preclude the Act from applying to “tributary groundwater,” or water that migrates from the ground to surface water, which was the case in

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<sup>140</sup> “Tributary groundwater” is groundwater that feeds surface streams by migrating from the ground to the surface. SAX ET AL., *supra* note 2, at 412.

<sup>141</sup> Wood, *supra* note 111, at 626.

<sup>142</sup> *Id.*

<sup>143</sup> *Id.*

<sup>144</sup> *Id.* at 570.

<sup>145</sup> *Sierra Club v. Colo. Ref. Co.*, 838 F. Supp. 1428, 1431 (D. Colo. 1993) (citing *Quivira Mining Co. v. EPA*, 765 F.2d 126, 129 (10th Cir. 1985)).

<sup>146</sup> *Hernandez v. Esso Standard Oil Co.*, 599 F. Supp. 2d 175, 176 (D.P.R. 2009).

<sup>147</sup> *Id.* at 179.

that situation.<sup>148</sup> The court held that CWA jurisdiction extended to groundwater that was hydrologically connected to surface waters that qualified as “waters of the United States.”<sup>149</sup> The court reasoned, “the decision not to comprehensively regulate groundwater as part of the CWA does not require the conclusion that Congress intended to exempt groundwater from all regulation . . . .”<sup>150</sup> The court recognized the split among circuits on regulation of groundwater under the CWA, but found that First Circuit precedent did not preclude its ruling.<sup>151</sup>

### 5. *Practical Concerns*

Potential litigants bringing causes of action under the CWA for groundwater pollution must recognize that the circuits are split on whether to apply the direct hydrological connection test. Even in jurisdictions that apply or do not preclude the possibility of applying the hydrological connection test, litigants may have trouble meeting the high burden of proof required to show the connection. Given the difficulty of this test both legally and scientifically, one practical solution may be to find a way to allege some type of surface connection in addition to the groundwater connection.

Proving a direct hydrological connection is difficult for many reasons, one of which is that EPA and the Corps have not defined “direct.”<sup>152</sup> Regulators, regulated entities, and courts could use several different factors to determine how “direct” the connection between surface water and groundwater or pollutants is: (1) distance the pollutant or groundwater actually travels, (2) distance between the point of discharge and the surface water, (3) time of travel for the pollutant, or (4) the concentration and severity of the pollutants that remain when the groundwater reaches the surface.<sup>153</sup>

Even if the legal standard were defined, practical scientific issues complicate the legal test of a hydrological connection.<sup>154</sup> In brief, determining a direct hydrological connection requires a hydrologic study of “the nature of the aquifer, the distance and flow path the groundwater must travel, the time required for travel, and fate of the

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<sup>148</sup> *Id.* at 179–80.

<sup>149</sup> *Id.* at 181.

<sup>150</sup> *Id.*

<sup>151</sup> *See id.* at 179–81.

<sup>152</sup> Hayman, *supra* note 79, at 117–18.

<sup>153</sup> *Id.*

<sup>154</sup> *See id.* at 118–19.



pollutants during travel,” because no factor alone provides a true measure of hydrological connectivity.<sup>155</sup> Complicating factors include the fact that water may not follow the most direct route when flowing downhill and discharging into lakes and rivers.<sup>156</sup> Additionally, pollutants transported through groundwater may be dissolved, carried along in the groundwater, chemically or biologically changed, or filtered by the materials through which they pass.<sup>157</sup> Thus, even when judges choose to apply the direct hydrological test, they candidly warn the parties of the difficulty of proving that connection.<sup>158</sup>

One practical approach to ease the difficult burden of the hydrological connection test, as suggested by several cases, is to allege a surface connection independent of the groundwater connection. In *Quivira Mining Corp. v. EPA*, the Tenth Circuit held that EPA had the authority to issue CWA section 402 NPDES permits regulating uranium mining company discharges into normally dry gullies (“arroyos”) in New Mexico.<sup>159</sup> There, the arroyos were not navigable-in-fact, but at times of heavy rainfall had a surface connection with navigable waters.<sup>160</sup> Additionally, the waters of the arroyos soaked into the underground aquifers, which eventually discharged into navigable waters.<sup>161</sup> The plaintiffs did not allege a direct hydrological connection, but the court found that together the seasonal surface connection and the groundwater connection allowed the EPA to issue a section 402 NPDES permit.<sup>162</sup>

A recent Fifth Circuit case similarly demonstrates the potential usefulness of alleging a surface connection to supplement allegations of a groundwater connection. In *Rice v. Harken Exploration Company*, an oil and gas company discharged pollutants onto dry ground and into a seasonal creek which flowed into a navigable river in times of heavy rainfall.<sup>163</sup> The court held that the plaintiffs did not sufficiently prove a discharge of pollution was linked to a navigable

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<sup>155</sup> *Id.* at 124.

<sup>156</sup> *Id.* at 122.

<sup>157</sup> *Id.* at 123–24.

<sup>158</sup> See *Idaho Rural Council v. Bosma*, 143 F.Supp.2d 1169, 1180–81 (D. Idaho 2001) (explaining the heavy burden of proof for plaintiffs; in this case plaintiffs only survived motion to dismiss and did not yet prove connection).

<sup>159</sup> *Quivira Mining Corp. v. EPA*, 765 F.2d 126, 130 (10th Cir. 1985).

<sup>160</sup> *Id.* at 129.

<sup>161</sup> *Id.*

<sup>162</sup> *Id.* at 130.

<sup>163</sup> See *Rice v. Harken Exploration Co.*, 250 F.3d 264, 265 (5th Cir. 2001).

waterway when there was no evidence of at least a seasonal surface water connection or direct evidence of pollution to the surface water.<sup>164</sup> The plaintiffs offered significant evidence that the groundwater underneath the property had been contaminated by the discharges onto the surface land but did not connect that contamination with a navigable water.<sup>165</sup> The court criticized the plaintiffs for not including a “detailed or comprehensive description of any of these seasonal creeks . . . about how often the creek runs, about how much water flows through it when it runs, or about whether the creek ever flows directly (above ground) into the Canadian River.”<sup>166</sup> Basically, nothing on the record would convince a reasonable trier of fact that the discharge was sufficiently linked to an open body of navigable water.<sup>167</sup> Further, a generalized assertion that navigable waters would be affected by the contaminated groundwater was insufficient—a more direct hydrological connection was needed.<sup>168</sup> The court suggested that the plaintiffs’ expert geologist could have indicated the level of actual oil contamination in the navigable river, discussed flow rates of the river, estimated when or to what extent the groundwater contaminants would affect the river—anything to “produce evidence of a close, direct and proximate link between [the] discharges of oil and any resulting actual, identifiable oil contamination of a particular body of natural surface water.”<sup>169</sup>

*Rice* is an important case for several reasons. First, it gives some concrete examples of how plaintiffs may satisfy the direct hydrological connection test and provides ideas of how to supplement the groundwater data with allegations of occasional surface water connections. Second, the data the court asks for evidences the difficulty and cost of meeting the direct hydrological connection test. Third, discharge of oil and significant contamination of groundwater

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<sup>164</sup> *Id.* at 271. This case actually involved a claim under the Oil Pollution Act (OPA), but because both statutes apply to “navigable waters,” defined as “waters of the United States,” and because there was far more case law interpreting the CWA, the court used CWA case law in its analysis. *Id.* at 267–68. Its holding applies to “waters of the United States” in both the CWA and the OPA. *Id.*

<sup>165</sup> *Id.* at 272.

<sup>166</sup> *Id.* at 270–71. The plaintiffs’ experts merely described the streams as intermittent and only generally asserted that navigable water was down gradient from the land where the discharge occurred. *Id.*

<sup>167</sup> *See id.* at 272.

<sup>168</sup> *Id.*

<sup>169</sup> *Id.*

in *Rice* seems to be similar to what is happening in areas of natural gas mining and production, an area where future CWA cases involving groundwater will likely arise.

### III

#### THE GROUNDWATER DEBATE AND THE LARGER QUESTIONS OF CWA JURISDICTION

The circuit split and general confusion over the applicability of the direct hydrological connection test for pollution in groundwater is a subset of the chaos over the question of CWA jurisdiction following *SWANCC* and *Rapanos*. This final section will discuss how the larger CWA jurisdictional debate affects the narrower issue of CWA regulation of groundwater from a legal, practical, and political standpoint.

From a legal standpoint, *SWANCC* and *Rapanos* raise the question, but do not decide the constitutional limit, of Congress's power under the Commerce Clause. Entire law review articles have been written on this issue,<sup>170</sup> but it is sufficient to note for this Comment that any decision on the constitutionality of the CWA spurred by the wetlands controversy influences the groundwater debate as well. The regulation of wetlands is "stretch[ing] the other limits of Congress's commerce power and rais[ing] difficult questions about the scope of that power,"<sup>171</sup> so the regulation of groundwater could be seen as even more of a stretch of that power.

To the contrary, some courts, like the Tenth Circuit, hold the view that "Congress intended to regulate discharges into every creek, stream, river or body of water that in any way may affect interstate commerce,"<sup>172</sup> and that a groundwater connection through underground aquifers may be a sufficient impact on interstate commerce.<sup>173</sup> The Tenth Circuit is in the minority, though. It is more

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<sup>170</sup> William Funk, *The Court, the Clean Water Act, and the Constitution: SWANCC and Beyond*, 31 *Envtl. L. Rep. (Envtl. Law Inst.)* 10741 (2001), available at Westlaw 2 L. of *Envtl. Prot.* § 13:117.

<sup>171</sup> *Rapanos v. United States*, 547 U.S. 715, 738 (2006).

<sup>172</sup> *Sierra Club v. Colo. Ref. Co.*, 838 F. Supp. 1428, 1433 (D. Colo. 1993) (quoting *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 375 (10th Cir. 1979)).

<sup>173</sup> *Quivira Mining Co. v. EPA*, 765 F.2d 126, 130 (10th Cir. 1985) ("Further, the record supports the finding that both the Arroyo del Puerto and San Mateo Creek flow for a period after the time of discharge of pollutants into the waters. Further, the flow continues regularly through underground aquifers fed by the surface flow of the San Mateo Creek and Arroyo del Puerto into navigable-in-fact streams. The court finds that the

likely that the United States Supreme Court would find that the regulation of discharges to or through groundwater would impermissibly go beyond the bounds of Congress's power under the Commerce Clause.

From a practical standpoint, the broad CWA jurisdictional debate ties to the specific groundwater debate because some wetlands cases may allege groundwater pollution; the direct hydrological connection test may help satisfy the significant nexus or adjacency tests used to assert CWA jurisdiction. Further, the 2011 proposed guidance on CWA jurisdiction allows a "shallow sub-surface hydrologic connection" between wetlands and jurisdictional waters to satisfy the adjacency test.<sup>174</sup> At a recent dialogue about jurisdiction under the new CWA guidance, Corps and EPA representatives mentioned that "groundwater, particularly shallow subsurface flows, may be relevant as a connection among different waters."<sup>175</sup>

Two recent cases, *Northern California River Watch v. City of Healdsburg*<sup>176</sup> and *United States v. Banks*,<sup>177</sup> illustrate the significance of the inclusion of shallow, subsurface water in section 404 cases and further the proposition that future section 402 plaintiffs should allege a surface connection as well as a groundwater connection. In *Northern California River Watch*, plaintiffs alleged a hydrologic groundwater connection, occasional surface water connections, and an ecological connection to bring a cause of action for illegal discharge of pollutants under a section 402 NPDES permit.<sup>178</sup> The Ninth Circuit held that both *Rapanos*'s tests, adjacency

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impact on interstate commerce is sufficient enough to satisfy the commerce clause. And, as noted above, it was the clear intent of Congress to regulate waters of the United States to the fullest extent possible under the commerce clause.").

<sup>174</sup> EPA & ARMY CORPS OF ENG'RS, DRAFT GUIDANCE, *supra* note 44, at 16–17 (defining "shallow subsurface hydrologic connection [as] lateral water flow through a shallow subsurface layer, such as may be found in steeply sloping forested areas with shallow soils, soils with a restrictive horizon, or in karst systems").

<sup>175</sup> ELI Dialogue, *supra* note 45, at 10785 (statement by Donna Downing, Jurisdiction Team Leader, Office of Wetland, Oceans & Watersheds, EPA).

<sup>176</sup> N. Cal. River Watch v. City of Healdsburg, 496 F.3d 993 (9th Cir. 2007).

<sup>177</sup> United States v. Banks, 115 F.3d 916 (11th Cir. 1997).

<sup>178</sup> 496 F.3d at 1000–01. In this case, the city was dumping pollutants from its waste treatment plant into a rock quarry pit, separated by a man-made levee but draining via aquifer into a nearby river, which was indisputably navigable. *Id.* at 996. The water and the pollution passed through the bottom and sides of the pond and percolated through gravel into the river, but in times of high water, the pond water flowed over the surface into the river. *Id.* River Watch filed suit alleging that the City was violating the Clean Water Act by discharging without a NPDES permit. *Id.* at 995.

and significant nexus, were satisfied.<sup>179</sup> The pond receiving the polluted discharges was part of a larger wetland that was adjacent to a navigable river, and a substantial nexus existed between the pond and river.<sup>180</sup> The significant nexus test was met partially by the evidence of a direct hydrological connection.<sup>181</sup> Although the surface connection only occurred when the river overflowed, the underground hydrological connection was continuous because the pond water flowed to the river through the underground aquifer.<sup>182</sup> The water and the pollution passed through the bottom and sides of the pond, percolating through gravel into the river,<sup>183</sup> which is seemingly a shallow, sub-surface flow.<sup>184</sup> Additionally, the waters were connected ecologically and chemically; the same bird, fish, and mammal population lived in or around the pond and river, and the hazardous chemical levels in the river upstream of the pond were clearly lower than those downstream.<sup>185</sup> The court's reasoning thus demonstrates that the direct hydrological connection test for groundwater may be an important tool for plaintiffs alleging a significant nexus in cases involving wetlands.

In *Banks*, the court used evidence of hydrologically connected groundwater to meet the adjacency test for wetlands in a section 404 dredge-and-fill permit case.<sup>186</sup> There, the defendant's land was separated from adjacent wetlands by a road and about a half mile.<sup>187</sup> Experts testified that a hydrological connection did exist between the land and the wetlands; the "connection was primarily through groundwater, but also occurred through surface water during storms."<sup>188</sup> There was also ecological adjacency because the defendant's land served as wildlife habitat.<sup>189</sup> Together, *Banks* and *Northern California River Watch* demonstrate that even if the direct hydrological connection test is not sufficient to prove a cause of action on its own in section 402 cases, it may be useful corroboration

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<sup>179</sup> *Id.* at 1000.

<sup>180</sup> *Id.*

<sup>181</sup> *Id.*

<sup>182</sup> *Id.*

<sup>183</sup> *Id.* at 996.

<sup>184</sup> See EPA & ARMY CORPS OF ENG'RS, DRAFT GUIDANCE, *supra* note 44, at 17.

<sup>185</sup> *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 1001 (9th Cir. 2007).

<sup>186</sup> *United States v. Banks*, 115 F.3d at 916, 921 (11th Cir. 1997).

<sup>187</sup> *Id.* at 920.

<sup>188</sup> *Id.* at 921.

<sup>189</sup> *Id.*

in cases involving wetlands. Future plaintiffs should use these cases as an example of the importance of alleging a surface water connection in addition to a groundwater connection and should also pay attention to future developments in CWA jurisdictional cases.

The role of politics in CWA administration is complex and prevents the speedy clarification of both the issues surrounding section 404 wetlands cases and section 402 groundwater cases. Experts in the CWA field are fairly confident that the United States Supreme Court will not take on another wetlands CWA case to clarify the *SWANCC* and *Rapanos* issues before EPA and the Corps have defined jurisdiction through rulemaking.<sup>190</sup> Thus, even given the circuit split, it is highly improbable that the Court will take on a case deciding whether the CWA may regulate hydrologically connected groundwater. This is because of the broad implications of deciding a case that questions the CWA navigable water definition.<sup>191</sup>

Currently, individual state's regulations are the primary regulatory force protecting groundwater in section 402 discharge situations, and certain groups would like to insure that federal regulation over groundwater stays minimal.<sup>192</sup> EPA and the Corps are facing difficulty in creating rules or guidance that would clarify the CWA jurisdiction over wetlands or hydrologically connected groundwater, in part because of alleged federalism concerns.<sup>193</sup> Opponents of EPA's guidance feel threatened by the prospect of EPA legislating by

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<sup>190</sup> ELI Dialogue, *supra* note 45, at 10789 (statements by Lawrence R. Lieberman, partner at Holland & Knight LLP, and Jan Goldman-Carter, Wetlands and Water Resources Counsel at National Wildlife Federation).

<sup>191</sup> A case that determines whether hydrologically connected groundwater falls under CWA jurisdiction would have broad implications for all other types of CWA cases, including section 404 dredge-and-fill cases, because the definition of "navigable waters" as "waters of the United States" applies to all sections of the CWA.

<sup>192</sup> On June 19, 2012, the House Appropriations Committee released the Fiscal Year 2013 Interior-Environment Appropriations Funding Bill. *Appropriations Committee Releases the Fiscal Year 2013 Interior-Environment Appropriations Funding Bill*, U.S. HOUSE OF REPRESENTATIVES COMM. ON APPROPRIATIONS (June 19, 2012), <http://appropriations.house.gov/news/documentsingle.aspx?DocumentID=299989>. Committee Chairman Hal Rogers stated, "[t]his bill cuts spending on programs by more than a billion dollars, and prevents the EPA and other federal bureaucracies from stepping out of their lane and stifling our economic recovery." Interior Subcommittee Chairman Mike Simpson stated, "[t]he bill reins in funding and out-of-control regulation at the EPA."

<sup>193</sup> See *Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs (SWANCC)*, 531 U.S. at 159, 172-73; *House Passes Bill to Reign in EPA Regulatory Overreach*, U.S. CONGRESSMAN HAL ROGERS (July 13, 2011), <http://halrogers.house.gov/News/DocumentSingle.aspx?DocumentID=251786>.

regulating, concretely defining broad CWA jurisdictional authority, and overstepping States' decisions regarding water quality standards.<sup>194</sup> The House of Representatives passed legislation dubbed the "Rein in EPA Act," which would forbid the Corps and EPA from issuing any clarifying guidance.<sup>195</sup> Industry lobbyists and political forces behind the "Rein in EPA Act" and the rider bill to cut regulatory funding base their arguments on federalism, arguing for less federal and more state regulation.<sup>196</sup> The bill passed in the House and is pending a vote in the Senate.<sup>197</sup>

There is also a rider to the Interior-EPA Appropriations Bill that includes a number of provisions that would stop or slow EPA regulatory actions and prohibit the promulgation of any rule that defines waters of the United States.<sup>198</sup> EPA is no stranger to intense political criticism and will most likely publish the guidance relatively soon; a formal rulemaking process will take much longer.

Relying on state regulation instead of CWA jurisdiction for groundwater pollution or pollutants transmitted through groundwater is not a perfect solution, but it seems to be a practical alternative in light of the case law, proposed guidance, and political controversy. Some states expansively define waters of the United States and adequately protect water resources, including groundwater, while others have weak or failing state regulatory programs.<sup>199</sup> State

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<sup>194</sup> *House Passes Bill to Reign in EPA Regulatory Overreach*, U.S. CONGRESSMAN HAL ROGERS (July 13, 2011), <http://halrogers.house.gov/News/DocumentSingle.aspx?DocumentID=251786>.

<sup>195</sup> See Clean Water Cooperative Federalism Act of 2011, H.R. 2018, 112th Cong. (2011). The bill passed in the House on July 13, 2011. *H.R. 2018*, GOVTRACK.US, <http://www.govtrack.us/congress/bills/112/hr2018> (last visited Nov. 5, 2012).

<sup>196</sup> Industry lobbyists and representatives allege that the draft guidance violates federalism principles by taking an over-broad approach. "The Clean Water Act is a shared joint federalism approach," not "the idea that federal government knows it all, that the federal government can regulate every wet spot in the country." ELI Dialogue, *supra* note 45, at 10780 (statements by Lawrence Liebesman).

<sup>197</sup> *H.R. 2018*, GOVTRACK.US, <http://www.govtrack.us/congress/bills/112/hr2018> (last visited Nov. 5, 2012).

<sup>198</sup> Department of the Interior, Environment, and Related Agencies Appropriations Act of 2013, H.R. 6091 § 434, 112th Cong. (2012). See also *EPA Water Initiative Draws Fire*, CLEAN WATER ACTION, <http://www.cleanwateraction.org/feature/epa-wate-initiative-draws-fire> (last visited Oct. 28, 2012) (noting how lobbyists from ExxonMobil, Marathon Oil, and the American Petroleum Institute demanded earlier in 2011 that the EPA/Corps' proposed guidance be withdrawn).

<sup>199</sup> States that have strong water protection laws include Maryland, Virginia, New Jersey, and, California. ELI Dialogue, *supra* note 45, at 10784 (discussion between Jan Goldman-Carter, Lawrence Liebesman, and Donna Downing). States with weak or

regulation instead of federal regulation has its downfalls, though. Polluting industries could locate or litigate in states with less stringent regulation.<sup>200</sup> Also, the CWA is a shared responsibility between the federal government and the states, as evidenced by the delegation of the NPDES program to qualifying states.<sup>201</sup> However, without strong federal law behind them, state regulatory programs can and do sometimes fail.<sup>202</sup>

#### CONCLUSION

State and federal regulation of pollutants that travel through groundwater are crucial to protect the chemical, physical, and biological integrity of the nation's surface waters, and the Clean Water Act could be a valuable tool in the regulatory process. Currently, CWA jurisprudence is in a state of confusion over the broad question of CWA jurisdiction and the narrower question of CWA groundwater regulation. The bodies of law on both questions inform each other and share similar legal, practical, and political concerns. Potential litigants in section 404 and 402 cases will need to present significant scientific data to prove a direct hydrological connection linking groundwater and navigable water and allege an additional surface connection if possible. Groundwater issues arising under the CWA will not likely be settled anytime soon, although political decision and court cases will continue to impact and alter agency action on various interrelated CWA issues.

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threatened laws include Florida, Wisconsin, and North Carolina. *Id.* Those three states have passed laws that restrict state programs and do not allow them to become more stringent than the underpinning federal laws. *Id.*

<sup>200</sup> *EPA Water Initiative Draws Fire*, *supra* note 198.

<sup>201</sup> 33 U.S.C. § 1342(b) (2006).

<sup>202</sup> ELI Dialogue, 10784 (discussion between Jan Goldmand-Carter, Lawrence Liebesman, and Donna Downing).