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Groundwater Infiltrating Navigable Waters Should Not Be  
Excluded From National Pollutant Discharge Elimination System  
Permitting**

Tad Juilfs

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# Muddy Waters: Why Polluted Groundwater Infiltrating Navigable Waters Should Not Be Excluded From National Pollutant Discharge Elimination System Permitting

TAD JUILFS\*

*The debate over whether the Clean Water Act has jurisdiction over migratory groundwater in the same way that it does over navigable waters of the United States (regarding effluent standards) has left a wide split among courts attempting to interpret and apply the policy, goals, and language of the law. The problem lies in the difference between applying the law given its objectives and goals, or in a strict fashion using simply the language in the text of the Clean Water Act, while supplementing support from legislative and case law history. First in this Note, background information is provided regarding the history of the Clean Water Act, National Pollutant Discharge Elimination System (NPDES) permits and the U.S. Environmental Protection Agency regulation, navigable waters of the United States, and the relation of migratory groundwater to this process. What follows is a discussion of methods, rules, and rationales courts and legal authorities have used and provided when holding and not holding that pollutants to migratory groundwater which reach navigable waters of the United States should be regulated through NPDES permitting. Finally, there is a review as to the reason why the Clean Water Act does have jurisdiction over pollutants to migratory groundwater which reach navigable waters and a recommendation that such regulation should occur via NPDES permits.*

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## I. INTRODUCTION

Just off of Maui’s west shore lies Kahekili Beach, a favorite vacation destination of families and snorkeling enthusiasts alike. The ocean waters off this coast are pristine and well-known for the beautiful reef and colorful fish; so much so that it has been listed as one of the “best beaches for casual swimming & snorkeling in Maui.”<sup>1</sup> In 2007, it was confirmed through a tracer dye study “conducted jointly by the [United States] EPA, the Hawaii Department of Health (DOH), the U.S. Army Engineer Research and Development Center, and researchers at the University of Hawaii” that there was a wastewater presence being detected as a result of groundwater seeping through submarine springs off the coast of Kahekili Beach.<sup>2</sup> The water seeping into the ocean was confirmed to contain treated effluent particularly high in nitrogen, which was coming from a nearby wastewater reclamation facility whose treated effluent admittedly contained “suspended solids, dissolved oxygen, nitrogen, and phosphorous.”<sup>3</sup> Although this wastewater has been treated for harmful pollutants, when it is discharged into other bodies of water containing living organisms it can severely damage an ecosystem if the effluent is not treated in a manner consistent with environmental conditions which life in the area can withstand.<sup>4</sup> Furthermore, these discharged pollutants can make waters quite unsafe for humans “drinking, fishing, swimming, and [doing] other activities.”<sup>5</sup> Pollutants which are directly placed into navigable waters of the United States, such as the ocean waters at Kahekili Beach, are regulated per the Clean Water Act’s National Pollutant Discharge Elimination System (CWA and NPDES, respectively),

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1. Sue Gabel, *The Best Beaches for Casual Swimming & Snorkeling in Maui*, DEMAND MEDIA, <http://traveltips.usatoday.com/beaches-casual-swimming-snorkeling-maui-61363.html> (last visited Mar. 28, 2015).

2. *Hawai’i Wildlife Fund v. Cnty. of Maui*, 24 F. Supp. 3d 980, 984 (D. Haw. 2014).

3. *Id.*

4. *Overview*, WORLD WILDLIFE FUND, <http://www.worldwildlife.org/threats/pollution> (last visited Mar. 28, 2015).

5. *Permitting (NPDES)*, EPA, <http://water.epa.gov/polwaste/npdes/> (last updated Sept. 18, 2014).

which sets limits on the amount, type, and frequency of pollutants that can be placed into the waters necessary for human, animal, and plant life.<sup>6</sup> However, there is a split in legal authority as to whether the Clean Water Act—as it is written—by means of its NPDES permitting, has jurisdiction over those pollutants which reach navigable waters of the United States by means of “migratory” groundwater.<sup>7</sup>

The debate over whether the CWA has jurisdiction over migratory groundwater in the same way that it does over navigable waters of the United States (regarding effluent standards) has left a wide split among courts attempting to interpret and apply the policy, goals, and language of the law.<sup>8</sup> The problem lies in the difference between applying the law given its objectives and goals, or in a strict fashion using simply the language in the text of the CWA, while supplementing support from legislative and case law history.<sup>9</sup> First in this Note, background information will be provided regarding the history of the CWA, NPDES permits and EPA regulation, navigable waters of the United States, and the relation of migratory groundwater to this process. Next, there will be a discussion of methods, rules, and rationales courts and legal authorities have used and provided when holding and *not* holding that pollutants to migratory groundwater which reach navigable waters of the United States should be regulated through NPDES permitting. Finally, there will be a review as to the reason why the CWA has jurisdiction over pollutants to migratory groundwater which reach navigable waters and a recommendation that such regulation should occur via NPDES permits.

## II. A REVIEW OF THE CLEAN WATER ACT

In 1972, Congress passed the Clean Water Act with a mission to “re-store and maintain the chemical, physical, and biological integrity of the

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6. *Hawai'i Wildlife Fund*, 24 F. Supp. 3d at 989.

7. *Vill. of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962, 965 (7th Cir. 1994).

8. *Id.* The split in jurisdictions has come as a result of statutory interpretations which extrapolate Supreme Court rulings regarding CWA language. However, such Supreme Court rulings have yet to give clear guidance or ruling on the definition of “navigable waters” as it pertains to NPDES permitting of migratory groundwater.

9. *See Wash. Wilderness Coal. v. Hecla Min. Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994) (“[S]ince 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.”). *But cf. Vill. of Oconomowoc Lake*, 24 F.3d at 965 (“The omission of ground waters from the regulations is not an oversight. Members of Congress have proposed adding ground waters to the scope of the Clean Water Act, but these proposals have been defeated . . .”).

Nation's waters."<sup>10</sup> The legislation originally came as an amendment to the 1948 Federal Water Pollution Control Act,<sup>11</sup> so as to "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> At the time of the CWA enactment, there was "[g]rowing public awareness and concern for controlling water pollution"<sup>13</sup> and the somewhat recent creation of the EPA provided a dominant agency to effectuate the water pollution regulations in a way that had not been done before.<sup>14</sup>

#### A. NAVIGABLE WATERS OF THE UNITED STATES

The source of Congressional power is rooted in the Constitution's Commerce Clause from which "[t]he Congress shall have the [p]ower . . . [t]o regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes."<sup>15</sup> Beginning with the precedent set by the United States Supreme Court in *Gibbons v. Ogden*, the Commerce Clause has been read to extend Congressional power to regulate interstate water navigation.<sup>16</sup> The Court would come to determine that navigation is not the only topic of regulation as it pertains to interstate water, but rather Congressional power has been upheld to extend to the activities on or within the navigable waters of the United States.<sup>17</sup> Therefore, the key language that has been the subject of much debate is "navigable waters," and how it should be defined

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10. 33 U.S.C. § 1251(a) (2012).

11. *History of the Clean Water Act*, EPA, <http://www.epa.gov/laws-regulations/history-clean-water-act> (last updated June 1, 2015).

12. 33 U.S.C. § 1252(a) (2012).

13. See *supra* note 11.

14. See Kenneth M. Murchison, *Learning From More Than Five-And-A-Half Decades of Federal Water Pollution Control Legislation: Twenty Lessons For The Future*, 32 B.C. ENVTL. AFF. L. REV. 527, 530-32 (2005). Prior to the creation of the EPA in 1970 and subsequent Congressional enactment of the CWA, a variety of federal legislation was passed to curb water pollution. However, most of this legislation did not have much teeth and expansions of the 1948 Federal Water Pollution Control Act mostly "encouraged states to enact uniform laws and interstate compacts . . ." as "water pollution control was primarily the responsibility of state and local governments." *Id.* at 531. Furthermore, the federal government could proceed with nuisance actions when interstate pollution endangered people, but not without serious delays in procedure in many cases. *Id.* at 532. The Water Quality Act of 1965 "directed states to establish water quality standards for interstate waters" and "submit their standards to the newly created Federal Water Pollution Control Administration for approval," but this Act did not allow an administrator to "impose and enforce a federal implementation plan." *Id.*

15. U.S. CONST. art. 1, § 8, cl. 3.

16. *Gibbons v. Ogden*, 22 U.S. 1, 2 (1824) ("The power of regulating commerce extends to the regulation of *navigation*.").

17. *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 426 (1940).

has become a struggle between regulatory entities and courts. The importance of this definition plays out when interpreting the CWA, which uses the term to extend limited authority to the administrator of a permit-granting entity, one which sets requirements for permitted discharges to the navigable waters.<sup>18</sup>

The definition of navigable waters must be looked at in two parts: the statutory language provided by the CWA and the courts' interpretations of what this definition entails. The interpretations by courts other than the Supreme Court will be discussed more thoroughly in Parts III, IV, and V. The interpretation of the CWA language by the Supreme Court in other realms not involving migratory groundwater have played into lower courts' decisions and interpretations; thus, it must be discussed to supply a proper understanding of the lower courts' rationales of whether to include or not to include migratory groundwater in NPDES permit jurisdiction per the CWA.

As could be expected from such a divisive piece of legislation, the CWA defines "navigable waters" as "waters of the United States, including the territorial seas."<sup>19</sup> As has been the case since *Gibbons*, wholly intrastate navigable waters which do not avail themselves to interstate commerce are not subject to federal control.<sup>20</sup> Despite ruling out one type of navigable water located in the United States, this ambiguous definition still leaves open to interpretation what constitutes "navigable" and what is a "water of the United States." Until litigation can provide some authority, uncertainty leaves regulatory agencies, watch-dog groups, and discharging industries with little guidance.

The CWA has provided two relevant sections that are controlled by the "navigable waters" definition—sections 402 and 404.<sup>21</sup> Section 402, which will be the primary focus of later discussion, provides for the regulation of pollutant or "effluent" discharges by requiring a permit when these discharges are submitted to navigable waters via point-sources.<sup>22</sup> The permit that regulates these effluent discharges is the National Pollutant Discharge

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18. See generally 33 U.S.C. § 1251(a) (2012).

19. 33 U.S.C. § 1362(7) (2014).

20. See generally *Gibbons*, 22 U.S. at 2 (when talking about the extent of the commerce clause, "[b]ut it does not extend to a commerce which is completely internal.>").

21. These sections of the CWA are codified at 33 U.S.C. § 1342 (2014) and 33 U.S.C. § 1344 (2012), respectively. Section 404 covers dredge or fill material which is discharged into navigable waters, including wetlands in some instances. See *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985). But see *Rapanos v. United States*, 547 U.S. 715 (2006); *SWANCC v. U.S. Army Corps of Eng'rs*, 531 U.S. 159 (2001). The U.S. Army Corps of Engineers administers section 404 permitting while the Corps and EPA enforce the section 404 permits.

22. *Summary of the Clean Water Act*, EPA, <http://www.epa.gov/laws-regulations/summary-clean-water-act> (last updated Oct. 8, 2015). See also 33 U.S.C. § 1342 (2014).

Elimination System (“NPDES”) permit.<sup>23</sup> A variety of pollutants which have been shown to have a harmful effect on humans, animals, or plants are regulated by the EPA through NPDES permitting, such as toluene, polychlorinated biphenyls (PCBs), and heavy metals like arsenic and lead.<sup>24</sup> A point-source is identified by the CWA as “discrete conveyances such as pipes or man-made ditches.”<sup>25</sup> While individual homes typically are not required to obtain an NPDES permit, other facilities such as industrial, municipal, and animal feed operations in some instances are required to obtain NPDES permits if their effluent discharges directly enter surface waters.<sup>26</sup> The effect of requiring NPDES permits for these facilities is that they are held accountable for the types and amount of pollutants which they may or may not be allowed to introduce to protected waters. The permit requirements are set to be in agreement with the purposes of the CWA.<sup>27</sup>

Section 404 covers dredged or fill material which is discharged into navigable waters, including wetlands in some instances.<sup>28</sup> The section 404 NPDES permits are required so as to protect navigable waters when there are development projects which have discharges that could be particularly damaging to the waters of the United States, such as dam construction, highway construction, or mining projects.<sup>29</sup> The U.S. Army Corps of Engineers administers section 404 permitting while the Corps and EPA enforce the section 404 permits.<sup>30</sup> Some activities that typically involve dredged or fill material may be exempted from section 404 regulation, such as farming or silvicultural activities.<sup>31</sup>

Two important government entities are traditionally tasked with providing NPDES permits to those facilities that are required to hold

23. *Summary of the Clean Water Act*, EPA, <http://www.epa.gov/laws-regulations/summary-clean-water-act> (last updated Oct. 8, 2015).

24. 40 C.F.R. § 401.15 (2014). Title 40 of the Code of Federal Regulations governs the regulatory interpretations, processes, and effectuations which are carried out in protection of the environment. EPA regulations for NPDES permitting can be located here and NPDES specific regulations can be found starting at 40 C.F.R. § 122.1 (2014).

25. *See supra* note 23.

26. *Id.*

27. *See* 33 U.S.C. § 1251(a) (2012).

28. *See Section 404 Permit Program*, EPA, <http://water.epa.gov/lawsregs/guidance/cwa/dredgdis/> (last updated Jan. 20, 2016). *See also* *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985). *But see* *Rapanos v. United States*, 547 U.S. 715 (2006); *SWANCC v. U.S. Army Corps of Eng'rs*, 531 U.S. 159 (2001).

29. *Section 404 Permit Program*, EPA, <http://water.epa.gov/lawsregs/guidance/cwa/dredgdis/> (last updated Jan. 20, 2016).

30. *Id.*

31. *Id.*

them—the EPA and the U.S. Army Corps of Engineers.<sup>32</sup> Generally, states administer the section 402 NPDES permit program with the authorization of the EPA.<sup>33</sup> The state programs can have more rigorous requirements for approval, such as more disqualified pollutants than are provided by the EPA, but state requirements and procedures cannot extend CWA federal jurisdiction of navigable waters.<sup>34</sup> State waters not included through Commerce Clause federal jurisdiction would require separate regulation through state law.<sup>35</sup> The entity authorized to grant permits will use different methods regarding procedure to determine the requirements of the permit. Application requirements are developed by the authorized entity and an administrator for CWA compliance establishes conditions for the permits on a case-by-case basis.<sup>36</sup> Along with determining the conditions of a permit, the administrator must determine whether the body of water which the effluent is entering is actually under CWA jurisdiction.<sup>37</sup> This step in the process has become the subject of much legislation in the hopes of determining a clearer definition of which recipient waters are under the jurisdiction of the CWA.

When determining the scope of jurisdiction for the CWA, authorities such as courts, EPA, and Army Corps of Engineers have looked to the language of the CWA for guidance with little help. As mentioned above, the term “navigable waters” is defined as “waters of the United States, including the territorial seas.”<sup>38</sup> Congress provided along with the definition of

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32. See *Permitting (NPDES)*, EPA, <http://water.epa.gov/polwaste/npdes/> (last updated Sept. 18, 2014); *Section 404 Permit Program*, EPA, <http://water.epa.gov/lawsregs/guidance/cwa/dredgdis/> (last updated Jan. 20, 2016).

33. 33 U.S.C. § 1342(b) (2014). See also *State Program Information*, EPA, <http://water.epa.gov/polwaste/npdes/basics/State-and-Tribal-Program-Authorization-Status.cfm> (last updated July 15, 2014); *State Program Status*, EPA, <http://water.epa.gov/polwaste/npdes/basics/NPDES-State-Program-Status.cfm> (last updated Sept. 9, 2014) (detailed table of states with approved NPDES permit programs).

34. 40 C.F.R. § 123.1(i)(1) (2014).

35. 40 C.F.R. § 123.1(i)(2) (2014).

36. See 40 C.F.R. § 122.21 (2014) (application requirements); 40 C.F.R. § 122.41 (2014) (conditions applicable to all permits); 40 C.F.R. § 122.43 (2014) (establishing permit conditions); 40 C.F.R. § 123.25 (2014) (state program requirements for EPA approval).

37. 40 C.F.R. § 122.21(f)(1) (2014) (application for new permits); 40 C.F.R. § 122.21(g)(1) (2014) (application for existing permits). Separate determinations of NPDES jurisdiction and conditions are made by the U.S. Army Corps of Engineers. 33 C.F.R. § 328.3 (2014). However, some jurisdictions have struck down parts of 33 C.F.R. § 328.3 as they can be too inclusive of isolated waters not subject to NPDES permitting per the decision in *Rapanos*. See *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 998 (9th Cir. 2007).

38. 33 U.S.C. § 1362(7) (2014).



navigable waters some definitions of aqueous environments which have not been the subject of great legislation in regards to CWA jurisdiction.<sup>39</sup>

Given their inclusion into the CWA with definitions and common understanding that these interstate waters fall within the purview of Congressional power, it is no surprise that not much jurisdictional debate has arisen. “Territorial seas” are defined to include sea waters at the ordinary low water line and extending into the sea for three miles.<sup>40</sup> “Contiguous zone” is defined as “the entire zone established or to be established by the United States under [A]rticle 24 of the Convention of the Territorial Sea and the Contiguous Zone.”<sup>41</sup> The term “ocean” is defined as “any portion of the high seas beyond the contiguous zone.”<sup>42</sup> These definitions are included generally as part of the CWA, but are not the only contexts in which they all interact.<sup>43</sup> For instance, when touching on “comprehensive programs for water pollution control,” Congress provided that “[t]he Administrator shall . . . 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>44</sup> When touching on national programs and water quality surveillance, Congress provided that “[t]he Administrator shall establish national programs for the prevention, reduction, and elimination of pollution and as part of such programs shall . . . 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>45</sup> 33 U.S.C. § 1342 provides jurisdiction for NPDES permits through 33

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39. See generally 33 U.S.C. § 1362 (2014). President Obama has also directed the promulgation of rules which seek to clarify the extent of the term “waters of the United States” as used in a variety of environmental legislation, including 402 and 404 permits. GREGORY KORTE, *Obama Vetoes Attempt to Kill Clean Water Rule*, USA TODAY (Jan. 20, 2016), <http://www.msn.com/en-us/news/politics/obama-vetoes-attempt-to-kill-clean-water-rule/ar-BBorLgk?li=BBnbcA1>. However, this “Waters of the United States” rule stated: “The rule excludes for the first time certain waters and features over which the agencies have generally not asserted CWA jurisdiction, as well as groundwater, which the agencies have never interpreted to be a ‘water of the United States’ under the CWA.” 80 Fed. Reg. 37,054, 37,073 (Jun. 29, 2015) (to be codified at 40 C.F.R. § 110 et al.). While the EPA has not construed “waters of the United States” to include groundwater under this rule for CWA purposes, the regulation seems to only address non-migratory groundwater and does not truly dive into the issue of migratory groundwater for CWA and NPDES purposes. *Id.* Thus, this Note stays focused on the unturned stone that is migratory groundwater which is polluting traditional waters of the United States.

40. 33 U.S.C. § 1362(8) (2014).

41. 33 U.S.C. § 1362(9) (2014).

42. 33 U.S.C. § 1362(10) (2014).

43. See 33 U.S.C. § 1362 (2014).

44. 33 U.S.C. § 1252(a) (2014).

45. 33 U.S.C. § 1254(a)(5) (2014).

U.S.C. § 407 by only explicitly stipulating that the waters subject to the permit are “navigable waters.”<sup>46</sup> The jurisdiction or authorization of NPDES permits under 33 U.S.C. § 1342 is supplemented by language from 33 U.S.C. § 1343 which limits effluent discharge to territorial seas, waters of the contiguous zone, or oceans as subject to the requirements of 33 U.S.C. § 1342.<sup>47</sup> Therefore, groundwater, migratory or otherwise, is not explicitly mentioned in relation to the terms navigable waters, territorial sea, the waters of the contiguous zone, or oceans for 33 U.S.C. § 1342 purposes.<sup>48</sup>

The limited terms provided by the CWA have not prevented the Supreme Court from adjudicating on the jurisdiction of the CWA as it relates to other possible non-explicit “waters of the United States,” namely wetlands. A string of Supreme Court precedent regarding wetlands has extended or refused to extend CWA jurisdiction depending on the connection or relation the wetland has with navigable-in-fact waters which are under the jurisdiction of the CWA.<sup>49</sup> These cases provide some insight as to how the Supreme Court views polluted bodies of water which enter navigable waters albeit with ambiguous language.<sup>50</sup> This language, along with the decades old language of the CWA, provides the back drop for EPA and Army Corps of Engineers’ policy for determining which waters can or will be regulated per the CWA NPDES permit program.<sup>51</sup> Although wetlands will not be the main discussion here, some background regarding the current status of the law as wetlands relate to NPDES permitting is necessary and helpful in explaining the rationales lower courts have given to uphold or strike CWA jurisdiction over migrating groundwater.

#### B. WETLANDS JURISDICTION: THE PRECURSOR TO MIGRATORY GROUNDWATER

Since 1985, the Supreme Court of the United States has been attempting to clarify the jurisdictional scope of the CWA as it pertains to what are “navigable waters” and “waters of the United States.”<sup>52</sup> For the purposes of migratory groundwater being under the jurisdiction of the CWA and section 402 permits, a very relevant and related battle over wetlands for CWA jurisdiction, particularly for section 404 permits, has already been adjudicated

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46. See 33 U.S.C. § 1342 (2014) and 33 U.S.C. § 407 (2014).

47. 33 U.S.C. § 1343(a) (2014).

48. 33 U.S.C. § 1342 (2014). The provisions for effluent discharge to territorial seas, waters of the contiguous zone, or oceans are provided by 33 U.S.C. § 1343 and are subject to the requirements of 33 U.S.C. § 1342. See 33 U.S.C. § 1343 (2014).

49. DANIEL R. MANDELKER ET AL., *PLANNING AND CONTROL OF LAND DEVELOPMENT: CASES AND MATERIALS* 426-27 (8th ed. 2011).

50. *Id.*

51. *Id.* at 428.

52. See *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985).

by the Supreme Court.<sup>53</sup> The wetlands cases established precedent for how the Supreme Court would review and adjudicate on regulatory definitions and policies regarding waters which are not explicitly mentioned as “navigable waters” or “waters of the United States.” Given that migratory groundwater is not mentioned in the relevant parts of the CWA, any direction from prior Supreme Court decisions would be tantamount in predicting how the Court would rule on the topic of migratory groundwater should a case make it before the Court.<sup>54</sup>

A seminal case for wetland jurisdiction under the CWA comes from *U.S. v. Riverside Bayview Homes, Inc.*, where the Supreme Court initially framed some of the scope of what it means to be a “navigable water” or “water of the United States.”<sup>55</sup> In *Riverside Bayview Homes*, a Michigan land developer began construction on its 80-acre property by placing fill materials on the marshy lands.<sup>56</sup> The Army Corps of Engineers had determined per regulations in 33 C.F.R. § 323.2(c) (1978)<sup>57</sup> that the property in question fell under the definition of a wetland and fill operations required a permit per section 404 of the CWA.<sup>58</sup> The Court was called upon to determine the Corps’s definition of wetlands as “waters of the United States” was within the scope of authority under the CWA,<sup>59</sup> but only those wetlands which are “adjacent to but not regularly flooded by rivers, streams, and other hydrographic features more conventionally identifiable as ‘waters.’”<sup>60</sup> The Court ruled in favor of the Corps and deferred to the Corps’s judgment in determining that wetlands serve a purpose to the goals of the CWA,<sup>61</sup> and

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53. *Id.* See also *Rapanos v. United States*, 547 U.S. 715 (2006); *SWANCC v. U.S. Army Corps of Eng’rs*, 531 U.S. 159 (2001).

54. 33 U.S.C. § 1342 (2014).

55. *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985).

56. *Id.* at 124.

57. 33 C.F.R. 323.2(c) (1978) has since been replaced by 33 C.F.R. 328.3(b) (2014). However, regulatory definitions of wetlands by the Army Corps of Engineers have come under judicial scrutiny and held invalid because they are not narrowly tailored enough to only cover wetlands which have significant nexus between the wetlands and navigable waters, as the definition could be read to include those wetlands which are isolated or in other words do not satisfy the significant nexus test. See *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 998 (9th Cir. 2007). Other courts have upheld 33 C.F.R. 328.3(b) because they determined that the Army Corps of Engineers could determine whether or not the area is a wetland with the definition at hand through “wetland delineations” which would determine a significant nexus; thus, not requiring any mention of a significant nexus in the regulation. See *United States v. Bailey*, 571 F.3d 791, 800 (8th Cir. 2009).

58. *Riverside Bayview Homes, Inc.*, 474 U.S. at 124.

59. *Id.* at 126.

60. *Id.* at 131.

61. *Id.* at 134.

that “all wetlands adjacent to other bodies of water over which the Corps has jurisdiction is a permissible interpretation of the Act.”<sup>62</sup>

Particular language that the Corps provided in its regulations was that “[w]etlands, in turn, are defined as lands that are ‘inundated *or saturated* by surface *or ground water* . . . .’”<sup>63</sup> Although the language of this regulation has since changed, it still stands to say that the Supreme Court upheld the language and the holding in *Riverside Bayview Homes* is still precedential law.<sup>64</sup> This is important because it shows that the Supreme Court has recognized that groundwater, as well as surface water, is pertinent to the discussion of CWA jurisdiction, and that polluted surface water or groundwater, even through wetlands, could be contrary to the goals of the CWA.

The Supreme Court would decline to extend jurisdiction of the CWA as it pertained to section 404 permits and wholly intrastate waters.<sup>65</sup> In *SWANCC*, the U.S. Army Corps of Engineers had determined that a section 404 permit would need to be obtained before the Solid Waste Agency could discharge dredge or fill material in abandoned sand and gravel pits in northern Illinois.<sup>66</sup> The decades since abandonment had seen the sand and gravel pits turn into seasonal ponds which were frequented by migratory birds crossing state lines in migratory patterns.<sup>67</sup> This “Migratory Bird Rule” which the Corps had adopted was not within the power granted by the Clean Water Act because it did not satisfy the *Riverside Bayview Homes* precedent that the waters in question be adjacent to navigable-in-fact waters, as the ponds themselves were wholly intrastate.<sup>68</sup> Furthermore, the Court was not willing to decide the argument that the intrastate activities could be precisely evaluated to show that the activity “‘substantially affect[s]’ interstate commerce” and thus be under the purview of the Commerce Clause.<sup>69</sup>

While the Court determined that wholly intrastate waters which are not in any way connected to navigable waters are not within the jurisdiction of the CWA,<sup>70</sup> the Court had not determined with any more clarity a test for which waters in particular were covered under the CWA as “navigable wa-

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62. *Id.* at 135.

63. *Riverside Bayview Homes, Inc.*, 474 U.S. at 129.

64. *Id.*

65. *See* Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs (*SWANCC*), 531 U.S. 159 (2001).

66. *Id.* at 162.

67. *Id.* at 164-65.

68. *Id.* at 172.

69. *Id.* at 174.

70. *See* *SWANCC*, 531 U.S. at 174.

ters” or “waters of the United States.”<sup>71</sup> Likewise, the Court had hardly determined the required degree of relation which waters adjacent to or connected to navigable-in-fact waters must establish before qualifying for regulation under CWA permit programs beyond reaffirming the Court’s holding in *Riverside Bayview Homes* that “[i]t was the significant nexus between the wetlands and ‘navigable waters’ that informed our reading of the CWA . . . .”<sup>72</sup> The Supreme Court would attempt to address these issues three years after *SWANCC* in *Rapanos*.

The Supreme Court decision in *Rapanos v. United States* set the benchmark test for determining which wetlands fall under regulatory authority per the CWA, and this would become an important reference point for many lower courts attempting to determine which groundwaters qualify as “waters of the United States” for CWA purposes.<sup>73</sup> In *Rapanos*, the Army Corps of Engineers informed Mr. Rapanos that his “sometime-saturated” soil was considered a wetland per regulatory authority of the CWA, and the previous backfilling and developing of the wetlands required a section 404 permit.<sup>74</sup> The wetlands lay near ditches which “eventually empty into traditional navigable waters,”<sup>75</sup> 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 continuous or merely occasional flows of water.”<sup>76</sup>

The Court in *Rapanos* could not agree on a majority opinion and thus emerged two tests that lower courts have referenced for determining what is a water of the United States. Writing for the plurality, Justice Scalia expressed that “‘the waters of the United States’ includes only those relatively permanent, standing or continuously flowing bodies of water . . . .”<sup>77</sup> The

71. 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, 819 (2003).

72. *SWANCC*, 531 U.S. at 167. See also Mank, *supra* note 71, at 814.

73. See *Rapanos v. United States*, 547 U.S. 715 (2006).

74. *Id.* at 719-21.

75. *Id.* at 729.

76. *Id.*

77. *Id.* at 739. The plurality opinion written by Justice Scalia in *Rapanos* provides two very different mindsets of how the Court would possibly approach the question of migratory groundwater regulation. At the beginning of the opinion, Justice Scalia expresses a tone that is seemingly very condescending and skeptical of broad CWA jurisdiction via the definitions of “navigable waters” and “waters of the United States,” particularly for the regulation costs which applicants incur. *Rapanos*, 547 U.S. at 720-22. Justice Scalia noted:

On this view [Corps jurisdiction scheme], the federally regulated “waters of the United States” include storm drains, roadside ditches, ripples of sand in the desert that may contain water once a year, and lands that are covered by floodwaters once every 100 years. . . . [T]he entire land area of the United States lies in some drainage basin, and an endless network

plurality gave a two-part test to determine whether there was CWA jurisdiction over a wetland when that wetland lacks the “significant nexus” to traditional navigable waters to be considered a “water of the United States” in and of itself per the ruling in *Riverside Bayview Homes*.<sup>78</sup> For CWA jurisdiction over the wetlands in *Rapanos*, there must first be an “adjacent channel [which] contains a ‘wate[r] of the United States,’ . . . and second, that the wetland has a continuous surface connection with that water, making it difficult to determine where the ‘water’ ends and the ‘wetland’ begins.”<sup>79</sup> Given the plurality test, the case was remanded to determine if the ditches, which had some connection to wetlands, were considered “waters of the United States,” as was the question of whether the wetlands were considered to have a continuous connection to the ditches even if they had been considered “waters of the United States.”<sup>80</sup> In his concurrence, Justice Kennedy called for a different test that would allow wetlands to be covered under CWA jurisdiction so long as they possessed a significant nexus to traditional navigable waters.<sup>81</sup> Without a specified test to apply to CWA

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of visible channels furrows the entire surface . . . . Any plot of land containing such a channel may potentially be regulated as a “water of the United States.”

*Id.* at 722. However, some key discussions give insight that maybe not all future waters in question of CWA jurisdiction will be excluded, as Scalia points out that “[i]t is the discharge of ‘dredged or fill material’ – which, unlike traditional water pollutants, are solids that do not readily wash downstream – that we consider today,” and “[i]n contrast to the pollutants normally covered by the permitting requirement of § 1342(a), ‘dredged or fill material,’ which is typically deposited for the sole purpose of staying put, does not normally wash downstream.” *Id.* at 723, 744. This could mean that a plurality of the Court would lean towards broader CWA jurisdiction for § 1342 purposes than it did for wetlands under § 1344. The other arguments the plurality addressed regarding the water in question being a water of the United States, waters connected to traditionally navigable waters being subject to regulation, and conduits subject to regulation under § 1342 are discussed *infra*.

78. *Rapanos*, 547 U.S. at 742. The Court is trying to distinguish those wetlands which are abutting or adjacent to traditional navigable waters as in *Riverside Bayview Homes, Inc.* and those wetlands which have a limited connection to traditional navigable waters but nonetheless are located near or “adjacent” to the navigable waters. *Id.* The wetland type pictured in *Riverside Bayview Homes, Inc.* is the more traditional notion of a wetland where a river blends in or consistently floods a plain, such as the Everglades; whereas, the wetland in *Rapanos* is a sometimes-saturated land which is separated from a possible water of the United States (ditch waters) by a berm with “occasional overflow to the ditch.” *Id.* at 730. The wetlands in *Rapanos* and *Riverside Bayview Homes, Inc.* really are distinguishable as the Court attempts to draw the land of “where water ends and abutting (“adjacent”) wetlands begin . . . .” *Id.* at 742 (clarifying *Riverside Bayview Homes, Inc.*, 531 U.S. at 132).

79. *Rapanos*, 547 U.S. at 742.

80. *Id.* at 757.

81. *Id.* at 780 (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,

jurisdictional debate cases, lower courts are divided regarding which test to apply in wetlands cases<sup>82</sup> as well as in migratory groundwater cases.

The importance of *Rapanos* for courts trying to determine the test to use for CWA migratory groundwater cases cannot be overstated. This particular case discusses five different ways in which courts could find that migratory groundwater is covered under the authority of the CWA, with only one plausible rebuttal that migratory groundwater is not covered.<sup>83</sup> The first situation involves migratory groundwater being considered a water of the United States in and of itself, as is the case for traditionally navigable waters.<sup>84</sup> Under this approach, the Court really only wants to extend CWA jurisdiction to “include only relatively permanent, standing or flowing bodies of water,”<sup>85</sup> with the caveat that the Court noted “we repeatedly described the ‘navigable waters’ covered by the Act as ‘open water’ and ‘open waters.’”<sup>86</sup> The second and third situations involve the type of waters which were the subject of *Riverside Bayview Homes* and the test which was clarified in the *Rapanos* plurality opinion.<sup>87</sup> The plurality test requires “that the adjacent channel contains a ‘wate[r] of the United States’” through its connection with a traditional navigable water and that the water in question has

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physical, and biological integrity of other covered waters more readily understood as ‘navigable.’”). Justice Kennedy’s concurrence seems to take a more policy driven approach to the goals of the CWA when applying a rule to identify “waters of the United States”, particularly when clearly stating “[t]he required nexus must be assessed in terms of the statute’s goals and purposes.” *Id.* at 779.

82. Anna Makowski, Comment, *Beneath the Surface of the Clean Water Act: Exploring the Depth of the Act’s Jurisdictional Scope of Groundwater Pollution*, 91 OR. L. REV. 495, 503 (2012) (noting which courts have used one test or both).

83. See generally *Rapanos*, 547 U.S. 715 (2006). For other examples of ways which groundwater could be regulated at the federal, state, and private level – in addition to the examples given here of groundwater as a navigable water in-and-of-itself, the *Riverside Bayview Homes* connection, the *Rapanos* plurality connection, the significant nexus relationship, groundwater as a point source, and the conduit theory – please visit the Comment by Allison Kvien. Allison L. Kvien, Comment, *Is Groundwater That Is Hydrologically Connected To Navigable Waters Covered Under the CWA?: Three Theories of Coverage & Alternative Remedies for Groundwater Pollution*, 16 MINN. J.L. SCI. & TECH. 957 (2015).

84. *Id.* at 730-35. The Court noted that although the “qualifier ‘navigable’ is not devoid of significance, . . .” the “Act’s term ‘navigable waters’ includes something more than traditional navigable waters.” *Id.* at 731 (discussing traditional navigable waters in the sense that they are navigable-in-fact). Furthermore, the Court stated “[w]e have twice stated the meaning of ‘navigable waters’ in the Act is broader than the traditional understand of that term . . .” *Id.*

85. *Id.* at 732.

86. *Id.* at 735. However, the context of the *Rapanos* opinion when discussing “open waters” as “navigable waters” was to note that “[u]nder no rational interpretation are typically dry channels described as ‘open waters,’” which speaks more to the amount of water in question rather than its relation to being at surface level. *Id.* (referring to the ditches in *Rapanos* which contained intermittent flows of water).

87. See *Rapanos*, 547 U.S. at 742; *Riverside Bayview Homes, Inc.*, 474 U.S. 121.

a continuous surface connection to the water in the adjacent channel.<sup>88</sup> Since *Riverside Bayview Homes* was not overturned, its holding reflects the second situation where those relatively permanent waters which are connected to traditional navigable waters, such as those in part one of the *Rapanos* plurality test.<sup>89</sup> Migratory groundwater, which could be thought of as a relatively permanent water and is connected to a traditional navigable water, could be covered under the CWA per *Riverside Bayview Homes*.<sup>90</sup> The third situation courts rely on in determining that migratory groundwater is covered under the CWA comes where migratory groundwater simply satisfies the plurality test in *Rapanos*.<sup>91</sup> The fourth situation involves Justice Kennedy's significant nexus test, where migratory groundwater would merely have to have a significant nexus to traditional navigable waters with the goals and purposes of the CWA in mind.<sup>92</sup> The fifth situation involves the difference between point-source waters and non-discrete waters as referenced in *Rapanos*.<sup>93</sup> The migratory groundwater itself would not be considered a water of the United States, but rather as a point source given the separate classification in the CWA as pointed out by the Court.<sup>94</sup> In holding that certain bodies of water would not be covered for section 404 purposes as "waters of the United States,"<sup>95</sup> the Court left open that these waters which convey materials covered under the CWA could be considered point sources in the alternative.<sup>96</sup> Furthermore, the Court stated "the discharge

88. *Rapanos*, 547 U.S. at 742.

89. *Id.* The Court noted that:

Though we upheld in that case [*Riverside Bayview Homes, Inc.*] the inclusion of wetlands abutting such a "hydrographic featur[e]" – principally due to the difficulty of drawing any clear boundary between the two . . . nowhere did we suggest that "the waters of the United States" should be expanded to include, in their own right, entities other than "hydrographic features more conventionally identifiable as 'waters.'"

*Id.* at 735 (internal citations omitted).

90. See generally *Riverside Bayview Homes, Inc.*, 474 U.S. 121.

91. *Rapanos*, 547 U.S. at 742. A case could be made that the plurality opinion test only applies only to those waters with a continuous *surface* connection per part two of the plurality test, which would exclude migratory groundwater as by definition it is not located on the surface. *Id.*

92. *Id.* at 779-80 (Kennedy, J., concurring).

93. *Id.* at 735-37, 743-45.

94. *Id.* at 736.

95. *Rapanos*, 547 U.S. at 745 (noting that "[t]he Act recognizes this distinction by providing a separate permitting program for such discharges in § 1344(a)").

96. *Id.* at 735-36. The Court seems to express that "'ditch[es], channel[s], and conduit[s]" can be man-made or natural so long as they are "discernable, confined and discrete." *Rapanos*, 547 U.S. at 135-36, n.7. Also, the Court noted "many courts have held that such upstream, intermittently flowing channels themselves constitute 'point sources' under the Act." *Id.* at 743. This is important in the way the CWA covers waters which are not



into intermittent channels of any pollutant *that naturally washed downstream* likely violates § 1311(a) [effluent limitations for § 1342], even if the pollutants discharged from a point source do not emit ‘directly into’ covered waters, but pass ‘through conveyances’ in between.<sup>97</sup> Therefore, if migratory groundwater could be established as a point source, it would be covered under the CWA for § 1342 purposes.<sup>98</sup> This fifth situation is the crux of the decision in *Hawai’i Wildlife Fund* and will be discussed later.<sup>99</sup> All this dicta from the Supreme Court could be referenced by courts when trying to determine the applicability of migratory groundwater for regulatory authority per the CWA.

Despite all the tests a court may use to determine whether migratory groundwater is covered by the CWA, there still lies the argument that there is a lack of statutory language proving the intent of Congress to include certain waters under the CWA. However, in *Rapanos* the Court noted there are differences between simply reading the plain text, “deliberate acquiescence,” and a “failure to express any opinion.”<sup>100</sup> Simply reading the plain text and its lack of detail in explaining what “waters of the United States” are, or that wetlands or other waters like migratory groundwater are covered under the CWA, would lead one to believe that Congress did not intend to include these extraneous waters under the CWA regulatory authority. The Court in *Rapanos* did not take this approach, but rather identified the lack of legislation or Congressional action as a “failure to express any opinion.”<sup>101</sup> This neutral approach is clearly different from a plain text approach<sup>102</sup> and noticeably different from “deliberate acquiescence,” where deference would be given to the regulatory agency when it has decided to assert authority over a water per the CWA and Congress has done nothing to address the authoritative reach.<sup>103</sup> Although there is significance in a

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waters of the United States themselves, but still have an effect on waters of the United States.

97. *Id.* at 743.

98. *Id.* at 745 (“It does not appear, therefore, that the interpretation we adopt today significantly reduces the scope of § 1342.”).

99. *See generally* *Hawai’i Wildlife Fund v. Cnty. Of Maui*, 24 F. Supp. 3d 980 (D. Haw. 2014).

100. *Rapanos*, 547 U.S. at 750.

101. *Id.*

102. *Id.* at 731. Since the plain text gave a definition of “navigable waters” as “waters of the United States,” the Court noted that “[w]hatever the scope of these qualifiers [“navigable”], the CWA authorizes federal jurisdiction only over ‘waters.’” *Id.* The Court determined the term would not receive the broad construction the Corps had given it, particularly without an ordinary presence of water, but not read so narrowly so as to limit the term only to traditional navigable waters. *Id.* at 731, 734.

103. *Rapanos*, 547 U.S. at 750 (quoting *SWANCC*, “[a]bsent such *overwhelming evidence* of acquiescence, we are loath to replace the plain text and original understanding of a statute with an amended agency interpretation.”).

plain text meaning, this approach is not a definitive answer in determining whether unlisted waters, such as migratory groundwater, are covered under CWA jurisdiction.<sup>104</sup>

The extension of CWA jurisdiction over wetlands is imperative to the discussion of migratory groundwater because it shows that the Supreme Court has recognized that not all “waters of the United States” for CWA purposes are explicit in the Act. Courts and authors alike have noted the lack of explicit language concerning groundwater in relevant parts of the CWA for NPDES permitting.<sup>105</sup> This contention is the overwhelming reason many courts have taken to refusing to extend CWA jurisdiction to migratory groundwater. However, this is clearly an erroneous notion, or at the very least inaccurate, as the Supreme Court has upheld that wetlands are under the jurisdiction of the CWA even though they are not explicitly mentioned as “waters of the United States” in the same context as oceans, territorial seas, the contiguous zone, or other navigable-in-fact waters.<sup>106</sup> Although it is possible Congress did not understand the full breadth and authority of the language in the CWA for “waters of the United States,” the Supreme Court has noted that “Congress chose to define the waters covered by the Act broadly” and that:

In adopting this definition of “navigable waters,” Congress evidently intended to repudiate limits that had been placed on federal regulation by earlier water pollution control statutes and to exercise its powers under the Commerce Clause to regulate at least some waters that would not be deemed “navigable” under the classical understanding of that

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104. *Id.*

105. Makowski, *supra* note 82, at 509-10 (noting that “[g]roundwater appears to be excluded specifically from section 402 NPDES permit regulation . . .” and given the “CWA’s categories of water, it seems that section 402 only applies to pollutants from three of the four categories of water.”).

106. *See generally* 33 U.S.C. § 1251 et seq. (2014). The term “wetlands” does show up in sections of the CWA, most notably in 33 U.S.C. § 1344(g)(1), which allows states to administer individual permitting for dredge and fill material discharges navigable waters, including wetlands according to the Supreme Court. *Rapanos*, 547 U.S. at 731. The term wetlands also shows up in CWA language regarding funding and recovery efforts in oil and hazardous substance liability. 33 U.S.C. § 1321 (2014). Furthermore, the most obvious place any authority over wetlands appears comes from 40 C.F.R. § 122.2 (2014). However, this appearance of the term “wetlands” comes in EPA regulation rather than Congressional language which specifically authorizes authority over such waters, which is the case the wetlands cases the Supreme Court has reviewed and are discussed *infra* at Part II-B. *Id.*

term.<sup>107</sup>

By the same token that Congress did not intend for CWA jurisdiction to extend to migratory groundwater because it was not explicitly written in the law, this would mean that Congress did not intend for wetlands to be included under CWA jurisdiction either. Although it is debatable that Congress did have the intent to make the CWA language broad enough to include such waters as wetlands or migratory groundwater as evidenced by the Supreme Court's findings in *Riverside Bayview Homes* above, the Supreme Court has, at a minimum, found that the CWA does have jurisdiction over waters not listed in the current text and regulatory agencies like the Army Corps of Engineers and EPA have the authority to regulate these waters.<sup>108</sup>

It has even been noted that legislative history does not support the notion that Congress meant for the CWA to have jurisdiction over migratory groundwater.<sup>109</sup> Critics of CWA jurisdiction over migratory groundwater have pointed out that bills have been introduced to Congress which would extend jurisdiction to groundwater, but they have not been passed; thus, showing that Congress does not have the intent to extend CWA jurisdiction.<sup>110</sup> This notion ignores the fact that the language in these proposed bills wanted to extend jurisdiction over groundwater, not simply migratory groundwater;<sup>111</sup> which is important as the Supreme Court has noted that not all waters are considered “navigable” waters or “waters of the United States” but could still be covered by the CWA if they are point sources, particularly for section 402 permitting.<sup>112</sup> Furthermore, there are the difficulties the law would face given that non-migratory groundwater, which is not interstate, would not be subject to Congressional authority under the Commerce Clause in and of itself given its isolation.<sup>113</sup> Perhaps more importantly than the linguistic differences, the Supreme Court has stated that “a refusal by Congress to overrule an agency’s construction of legislation is at least some evidence of the reasonableness of that construction, particular-

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107. *Riverside Bayview Homes, Inc.*, 474 U.S. at 133.

108. *See Rapanos*, 547 U.S. 715; *SWANCC*, 531 U.S. 159; *Riverside Bayview Homes, Inc.*, 474 U.S. 121.

109. Makowski, *supra* note 82, at 512.

110. *Id.* at 512-14.

111. Thomas L. Casey III, Comment, *Reevaluating “Isolated Waters”: Is Hydrologically Connected Groundwater “Navigable Water” Under the Clean Water Act*, 54 ALA. L. REV. 159, 170 (2002) (when speaking to a U.S. Senate Public Works Committee Report, “by choosing not to extend federal authority to all groundwater, including isolated groundwater, it does not necessarily follow that Congress did not intend to regulate hydrologically connected groundwater”).

112. *See Rapanos*, 547 U.S. at 745.

113. *SWANCC*, 531 U.S. at 174.

ly where the administrative construction has been brought to Congress' attention through legislation specifically designed to supplant it."<sup>114</sup> The Supreme Court recognized that when Congress tried to limit the definition of "waters of the United States," particularly over wetlands which were not yet included in the text of the CWA, and failed to do so when it was brought to Congress's attention, it could not be said the language already in place did not authorize regulation of unspecified waters through CWA jurisdiction.<sup>115</sup> Although subsequent legislation has been proposed to add some definition of groundwater for CWA jurisdiction and Congress has failed to act on it,<sup>116</sup> this means the status quo language of the CWA is still in place, which grants regulation of unspecified waters through CWA jurisdiction as was the case in *Riverside Bayview Homes*, rather than the proposition that failure to pass clarifying legislation completely eliminates the ability to define and regulate unspecified waters under the current text of the CWA.<sup>117</sup>

### C. CATEGORIES OF GROUNDWATER

The distinction or definition between types of groundwater and those waters which are navigable-in-fact could make all the difference in the ability to characterize the groundwater as a type of water which is regulated under the CWA. As noted above, when migratory groundwater cannot be characterized as a navigable-in-fact water in and of itself for CWA purposes, the migratory groundwater must have some relation to a more traditionally regulated water under the CWA.<sup>118</sup> The categories of groundwater can be identified so that they are clearly distinguishable from the non-migratory groundwater.

It has been established from courts that non-migratory groundwater is not a water of the United States for purposes of the CWA.<sup>119</sup> Non-migratory groundwater is wholly intrastate and does not reach other waters regulated under the CWA and the Commerce Clause. However, migratory groundwater that moves or reaches interstate waters is the topic of debate for courts. Polluted water discharges can reach migratory groundwater in a number of

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114. *Riverside Bayview Homes, Inc.*, 474 U.S. at 137.

115. *Id.*

116. Makowski, *supra* note 82, at 512-14.

117. *See Riverside Bayview Homes, Inc.*, 474 U.S. at 137. *See also* Makowski, *supra* note 82, at 514 ("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.")

118. *See infra* notes 85-93 (discussing tests for determining which waters may be subject to CWA regulation as a "water of the United States.")

119. *Exxon Corp. v. Train*, 554 F.2d 1310 (5th Cir. 1977); *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169 (D. Idaho 2001).

ways, including discharge to dry land which then seeps through the ground into the migratory groundwater,<sup>120</sup> discharge to surface water which is non-navigable but has a subsurface connection to migratory groundwater,<sup>121</sup> or even direct discharge to migratory groundwater.<sup>122</sup> When the polluted discharges reach the migratory groundwater, the polluted migratory groundwater must reach the traditionally regulated waters. The way the groundwater migrates represents the category in which the groundwater can be placed. The first type of migration involves groundwater that “flows in ‘underground’ streams.”<sup>123</sup> A second type involves percolating groundwater that trickles or seeps through earth.<sup>124</sup> A third type involves “‘subflow’ from surface streams, which includes the water in the bed underneath or around a stream.”<sup>125</sup> Another important category, which can also be effectuated through the means or types listed above, is referred to as “tributary groundwater,” where the groundwater feeds surface streams.<sup>126</sup> These categories of migratory groundwater are important to lower courts’ discussions of CWA jurisdiction over migratory groundwater because the relationship and magnitude of the relationship of the migratory groundwater to more traditionally regulated waters is relevant, as there seems to be more of a connection between an underground stream and an ocean rather than percolating groundwater and a tributary creek.

### III. JURISDICTIONS IN FAVOR OF NPDES REGULATION

Despite the approaches the Supreme Court has taken in *Bayview*, *SWANCC*, and *Rapanos* to develop a working test to determine which non-traditionally regulated waters are regulated under the CWA,<sup>127</sup> many lower courts have taken to a “direct hydrological connection” test<sup>128</sup> or a conduit theory<sup>129</sup> to determine if migratory groundwater would be subject to CWA

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120. Makowski, *supra* note 82, at 508.

121. *Id.*

122. See *Hawai’i Wildlife Fund*, 24 F. Supp. 3d at 984 (injection wells at a water treatment facility were connected to an aquifer of migratory groundwater).

123. Makowski, *supra* note 82, at 506.

124. *Id.*

125. *Id.*

126. *Id.*

127. See *infra* notes 85-93.

128. 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, 111-12 (2005) (“The district courts and courts of appeals decisions . . . when taken as a whole, express with a convincing majority that, if discharges to groundwater are regulated under the CWA, the groundwater must have a demonstrated direct hydrologic connection to surface waters which are waters of the United States.”).

129. See generally *Hawai’i Wildlife Fund*, 24 F. Supp. 3d 980.

jurisdiction given its relation to more traditionally regulated waters. The courts using a test for determining jurisdictional adequacy are doing so without clear guidance from statutory language or common law precedent, namely the Supreme Court.<sup>130</sup> Recognizing that a test could even be used by a court is in stark contrast to those jurisdictions which do not recognize any CWA jurisdiction over migratory groundwater and thus do not effectuate any test.<sup>131</sup> The jurisdictions which have not yet recognized CWA jurisdiction over migratory groundwater will be discussed later.

#### A. THE DIRECT HYDROLOGICAL CONNECTION

In the relatively short existence of the CWA, American jurisprudence has developed the “direct hydrological connection” test to determine whether there is a sufficient connection between migratory groundwater and traditionally regulated (i.e. navigable) waters of the United States so as to establish CWA jurisdiction over migratory groundwater which may be polluted.<sup>132</sup> The contemporary understanding of the “direct hydrological connection” test can be found when broken down into its parts – direct and hydrological connection.

There are some discrepancies in the case law that would indicate a requirement of some “directness” of the hydrological connection. In a contemporary case which came after the *Rapanos* decision, the United States District Court for the Middle District of Tennessee determined that the test is indeed that the migratory groundwater must display a “direct hydrologic connection to surface waters that are waters of the United States.”<sup>133</sup> The “directness” refers to the immediacy or magnitude of the relationship between the traditionally regulated waters of the United States and the migratory groundwater. This is most controversial when there are many “pass throughs”<sup>134</sup> or with the percolating groundwater category, as these instances involve groundwater migrating to traditionally regulated waters in a manner that is not straightforward or as explicit as underground streams

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130. See *supra* notes 96-98 (noting *Rapanos* and the Court’s limited discussion of § 1342 jurisdiction and authority).

131. See *infra* Part IV.

132. Makowski, *supra* note 82, at 508.

133. Ass’n Concerned Over Resources and Nature, Inc. v. Tenn. Aluminum Processors, Inc., No. 1:10-00084, 2011 WL 1357690 \*1, \*17 (M.D. Tenn. 2011). In *MESS*, a United States District Court in California noted that NPDES permits might be required if there was a “direct hydrological connection” between groundwater and surface waters which constituted waters of the United States. *McClellan Ecological Seepage Situation (MESS) v. Weinberger*, 707 F. Supp. 1182, 1194 (E.D. Cal. 1988) (vacated on other grounds).

134. *Id.* at \*18 (establishing the definition of pass through as given in 40 C.F.R. § 403.3(p) for CWA regulation of publicly owned treatment works and their relation to discharges to groundwater).

might be.<sup>135</sup> However, most jurisprudence prior to the aforementioned Tennessee case did not clearly include a requirement of directness.<sup>136</sup> The directness requirement seems to be implied or included without specification,<sup>137</sup> or at least founded in other forms of authoritative persuasion as provided by the EPA.<sup>138</sup> In the case law on this topic, the term “direct” was reserved for surface waters or tributaries not considered waters of the United States in and of themselves.<sup>139</sup>

Most of the case law executing a test for CWA jurisdiction over migratory groundwater indicates a test that only requires a “hydrological connection.”<sup>140</sup> The “hydrological connection” requires that a relationship ex-

135. In a 2014 holding by the United States District Court of Hawai’i, the court determined that the depth and expanse of the aquifer which held the polluted groundwater did not matter to the test used for CWA jurisdiction, regardless of any diminishing effect the parameters of the groundwater had on the resulting pollution to ocean waters. *Hawai’i Wildlife Fund*, 24 F. Supp. 3d at 999 (“Neither logic nor case law supports distinguishing between ‘shallow’ and ‘deep’ groundwater. The key factor is not the depth of the groundwater, but the existence of a pollutant that eventually reaches the ocean. . . . There is no support, therefore, for creating a categorical exclusion for ‘deep’ groundwater.”).

136. Hayman, *supra* note 128, at 105.

137. *Id.* (“Without identifying it as such, the courts in this and the MESS decisions have required a ‘directness’ test to the ‘hydrological connection’ between discharges to groundwater and the affected surface waters.”). In *Hecla Mining*, the court found that there needs to be more than “a general hydrological connection between all waters.” *Washington Wilderness Coalition v. Hecla Min. Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994). In breaking this statement down which *Tennessee Aluminum* and Hayman have relied upon to establish that a level of “directness” is inferred as a requirement, it can be seen that the statement is not clear as to whether a general hydrological connection to the *specific* (rather than general) traditionally regulated water would suffice, nor is there any clear guidance as to whether the test asks for a more strict burden of proof such as a direct hydrological connection between all waters. *See Tenn. Aluminum Processors, Inc.*, No. 1:10-00084, 2011 WL 1357690 at \*17. *See also* Hayman, *supra* note 128, at 105.

138. Hayman, *supra* note 128, at 96, 113-15. Hayman notes EPA regulation proposals and rulemakings which resulted in the EPA asserting that “discharges of pollutants to groundwater that has a ‘direct hydrologic connection’ to surface water . . . are subject to regulation and require an NPDES permit.” *Id.* at 96 (citing 66 Fed. Reg. 2960, 3015-18 (Jan. 12, 2001)).

139. *See Idaho Rural Council v. Bosma*, 143 F. Supp. 2d at 1179; *Hecla Min. Co.*, 870 F. Supp. at 990.

140. *Compare* *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133, 1144 (10th Cir. 2005) (upholding the notion that “‘addition of any pollutant’ is defined as . . . discharges through pipes, sewers, or other conveyances *owned by a . . . person* which do not lead to a treatment works,” and the hydrological connection can be established through underground mine water, if not groundwater on its own which carries the mine water to navigable waters); *United States v. Banks*, 115 F.3d 916, 920-21 (11th Cir. 1997) (wetlands can be hydrologically connected through groundwater water and be a sufficient connection for CWA purposes); *Quivira Mining Co. v. EPA*, 765 F.2d 126, 130 (10th Cir. 1985) (“[I]t was the clear intent of Congress to regulate waters of the United States to the fullest extent possible under the commerce clause.”); *Hernandez v. Esso Standard Oil Co.*, 599 F. Supp. 2d 175, 181 (D. Puerto Rico 2009); *N. Cal. Riverwatch v. Mercer Fraser Co.*, No. C-04-4620 SC, 2005 WL

ists between the groundwater and the traditionally regulated waters of the United States.<sup>141</sup> Simply put, “hydrologically connected” is synonymous with “migratory” insofar as they are referring to the relationship between groundwater and its relationship with traditionally regulated waters of the United States.

Although the CWA jurisdiction over a particular migratory groundwater is determined on a case-by-case basis using the “direct hydrologic connection” test, the test was developed and has been implemented so as to conform with the goals and purposes of the CWA.<sup>142</sup> It has been stated that “since 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>143</sup> Despite clear evidence in the final text of the intent of Congress regarding its attempt to grant regulatory jurisdiction, there is legislative history which supports the extension of CWA authority to migratory groundwater.<sup>144</sup> Referencing the goals of the

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2122052 \*1, \*4 (N.D. Cal. Sept. 1, 2005); *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d at 1180; *Mutual Life Ins. Co. of New York v. Mobil Corp.*, No. CIVA96CV1780RSP/DNH, 1998 WL 160820 \*1, \*2 (N.D.N.Y. Mar. 31, 1998); *Williams Pipe Line Co. v. Bayer Corp.*, 964 F. Supp. 1300, 1319 (S.D. Iowa 1997); *Friends of Santa Fe Cnty. v. LAC Minerals Inc.*, 892 F. Supp. 1333, 1358 (D.N.M. 1995); *Sierra Club v. Colo. Ref. Co.*, 838 F. Supp. 1428, 1434 (D. Colo. 1993) (noting that discharges which reach navigable waters through groundwater are covered by the CWA, without any specific mention of “directness” or a “hydrologic connection”), *with* *Tenn. Aluminum Processors, Inc.*, No. 1:10-00084, 2011 WL 1357690 at \*17 (noting the proper test requires a “direct” hydrologic connection) *and* *Umatilla Waterquality Protective Ass’n, Inc. v. Smith Frozen Foods, Inc.*, 962 F. Supp. 1312, 1318 (D. Ore. 1997) (discussing the contrary view of the unpublished decision *Friends of the Coast Fork v. Turner*, Civ. No. 95-6105-TC 1, at 8 (D. Ore. July 8, 1996) which “required a specific connection between groundwater and surface water”) *and* *MESS*, 707 F. Supp. 1182, 1194 (“direct hydrological connection” required).

141. Hayman, *supra* note 128, at 110-11 noting that:

The Tenth Circuit, directly and by implication, found that the CWA does grant authority to EPA to regulate discharges to groundwater; it did not address to what degree the directness of groundwater connection must be demonstrated. Two subsequent conforming decisions by district courts within the Tenth Circuit, however, have gone on to require that the hydrologic connection between the discharge to groundwater and the affected surface be clearly demonstrated.

*Id.*

142. See, e.g., *Bosma*, 143 F. Supp. 2d at 1179-80; *Hecla Min. Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994). See also *Williams Pipe Line*, 964 F. Supp. 1300, 1319-20 (“Because the CWA’s goal is to protect the quality of surface waters, the NPDES permit system regulates any pollutants that enter such waters either directly or through groundwater.”).

143. *Hecla Min. Co.*, 870 F. Supp. at 990.

144. After reviewing legislative history, the court in *Hecla* determined that “[g]uided by the legislative history, courts that have considered the issue agree that ‘waters of the United States’ do not include ‘isolated/nontributary groundwater.’ They are split, however, on the present question of whether tributary groundwater, which is naturally connected to



CWA as a reason for extending jurisdiction is not completely unrelated to the codified text of the CWA which states the CWA purpose as a mission to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”<sup>145</sup> Courts have rationalized that given the goals of the CWA, the intent to grant regulatory authority can be inferred because:

It would, of course, make a mockery of [the Clean Water Act’s regulatory scheme] if [the] authority to control pollution was limited to the bed of the navigable stream itself. The tributaries which join to form the river could then be used as open sewers as far as federal regulation was concerned. . . . No less can be said for groundwater flowing directly into the ocean.<sup>146</sup>

This interpretation of CWA jurisdictional boundaries is much broader than the scope based off of a narrow and strict interpretation of codified language of the CWA, which is the rationale given for limited CWA jurisdiction over migratory groundwater which will be discussed later.

#### B. THE CONDUIT THEORY

The “direct hydrologic connection” test is not the only way in which migratory groundwater could be regulated per CWA authority. In a recent United States District Court case from Hawaii, the court stated that migratory groundwater did not have to satisfy the “direct hydrologic connection”

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surface water, is subject to CWA regulation.” *Id.* While referring to *Hecla*, the court in *Bosma* found that:

Congress’s decision not to comprehensively regulate groundwater as part of the CWA, does not require the conclusion that Congress intended to exempt ground water from all regulation—particularly under circumstances where the introduction of pollutants into the groundwater adversely affects the adjoining surface waters. 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 on surface water. . . . It does not suggest that Congress intended to exclude from regulation discharges into hydrologically connected groundwater which adversely affect surface water.

*Bosma*, 143 F. Supp. 2d at 1180 (internal citations omitted). Furthermore, “[i]t would not be inconsistent with the Clean Water Act’s legislative scheme for this court to decide the question of whether the County requires an NPDES permit for its discharge . . .” to migratory groundwater. *Hawai’i Wildlife Fund*, 24 F. Supp. 3d at 990.

145. 33 U.S.C § 1251(a) (2012).

146. *Hawai’i Wildlife Fund*, 24 F. Supp. 3d at 995 (internal citations omitted).

test so long as the migratory groundwater could be established as a conduit.<sup>147</sup> In *Hawai'i Wildlife Fund*, a wastewater treatment facility was releasing treated sewage effluent into injection wells, after which the treated effluent traveled some "200 feet underground into a shallow groundwater aquifer beneath the facility."<sup>148</sup> The groundwater containing the effluent was connected or migrating to the Pacific Ocean, the emergence of which came through "submarine springs."<sup>149</sup>

The court referred to the decision in *Rapanos*,<sup>150</sup> as well as a precedential Ninth Circuit decision which expanded upon Justice Kennedy's "significant nexus" test which seemed to require a plaintiff's showing that both a "hydrological connection exists between the . . . groundwater discharges and coastal waters' and that 'there are significant physical, chemical and biological impacts as a result of the connection to warrant issuance of an NPDES permit.'"<sup>151</sup> However, the court recognized that the *Healdsburg* test would be to identify the water in question (migratory groundwater, here) as a "navigable water" in and of itself,<sup>152</sup> and that the plurality in *Rapanos* noted that "[t]hus, . . . lower courts have held that the discharge into intermittent channels of any pollutant that naturally washes downstream likely violates § 1311(a), even if the pollutants discharged from a point source do not emit directly into covered waters, but pass through conveyances in between"<sup>153</sup> as well as "many courts have held that . . . upstream, intermittently flowing channels themselves constitute 'point sources' under the Act."<sup>154</sup> Given the definition of "point sources" under the CWA,<sup>155</sup> the court

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147. *Id.* at 994 ("However, this court concludes that such a showing [hydrologic connection] is not necessarily the only way in which Plaintiffs may prevail.").

148. *Id.* at 984.

149. *Id.* The connection and prevalence of harmful effluent substances were confirmed through a tracer dye study performed by researchers of the EPA, Hawaii Department of Health, U.S. Army Engineer Research and Development Center, and University of Hawaii. *Id.*

150. *Hawai'i Wildlife Fund*, 24 F. Supp. 3d at 993-95.

151. *Id.* at 994 (citing the Ninth Circuit decision in *Healdsburg*, 496 F.3d 993, 999-1000 (9th Cir. 2007)). In *Healdsburg*, the court held that unpermitted pollutant discharges to a surface pond and river violated the CWA as "water from the Pond seeps into the river through both the surface wetlands and the underground aquifer." *Hawai'i Wildlife Fund*, 24 F. Supp. 3d at 994 (citing *Healdsburg*, 496 F.3d at 1000).

152. *Hawai'i Wildlife Fund*, 24 F. Supp. 3d at 994-95 (defendants were arguing that plaintiff's must show both prongs of the *Healdsburg* test to prove the migratory groundwater as a "navigable water" in and of itself). The court in *Hawai'i Wildlife Fund* indicates that despite defendant's assertion to require the *Healdsburg* test for migratory groundwater, the test is limited to situations of protecting wetlands which could be considered "navigable waters" in and of themselves if they pass the test. *Id.* at 995. Migratory groundwater could still be regulated under the *Healdsburg* test, but it is not the only way a plaintiff could prevail. *Id.* at 995.

153. *Id.* (citing *Rapanos*, 547 U.S. at 743).

154. *Id.* at 995.

determined that “[i]t may be inferred from this narrow list of exclusions that Congress sought to include sufficiently ‘confined and discrete’ *groundwater conduits* as ‘point sources’ under the Act.”<sup>156</sup> Although *Rapanos* particularly focused on surface water conduits for indirect pollution through conveyances,<sup>157</sup> the court in *Hawai’i Wildlife Fund* determined “[t]here is nothing inherent about groundwater conveyances and surface water conveyances that requires distinguishing between these conduits under the Clean Water Act” as both types can ultimately lead to the addition of pollution to traditionally regulated waters of the United States.<sup>158</sup> The characterization of the migratory groundwater as a conduit or point source, rather than a navigable water in and of itself, is the conduit theory which is satisfactory for CWA jurisdiction.<sup>159</sup>

The conduit theory means that the groundwater is simply a conveyance of the pollution between the point source and the traditionally regulated waters of the United States.<sup>160</sup> While migratory groundwater in and of itself might not satisfy the requirements to be a navigable water, the conduit theory “applies only when pollutants find their way to navigable-in-fact waters.”<sup>161</sup> Rather than viewing the groundwater as an extension of the tra-

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155. 33 U.S.C. § 1362(14) (2012). The court in *Hawai’i Wildlife Fund* particularly focused on “‘any discernible, confined and discrete conveyance, including . . . but not limited to any conduit . . . from which pollutants are or may be discharged.’” 24 F. Supp. 3d at 995 (citing 33 U.S.C. § 1362(14) (2012)).

156. *Hawai’i Wildlife Fund*, 24 F. Supp. 3d at 995 (emphasis added). The court particularly noted that “agricultural stormwater discharges” are exempt from being considered “point sources” under the CWA and that the limited inclusion of exemptions allows for inference that migratory groundwater would be included as a “point source.” *Id.* (citing *Tang v. Reno*, 77 F.3d 1194, 1197 (9th Cir. 1996) as holding “[a]n item which is omitted from a list of exclusions is presumed not to be excluded.”) The court in *San Francisco Herring Association* noted that buried manufactured gas plant sites which were causing leaks into groundwater that migrated to San Francisco bay could be viewed as a point source. *San Francisco Herring Ass’n v. Pac. Gas and Elec. Co.*, 81 F. Supp. 3d 847, 862 (N.D. Cal. 2015). The court in that case refused to grant a motion to dismiss for defendants given that “[t]he statutory definition of a point source is meant to be ‘extremely broad.’ . . . A ‘source’ may be ‘[a]ny building, structure, facility, or installation from which there is or may be the discharge of pollutants.’” *Id.* This precedent argues that a confined or discrete conveyance which is necessary for a point source could be something as large as a factory, and therefore groundwater should not be ruled out as a possible point source. *Id.*

157. *Rapanos*, 547 U.S. at 743.

158. *Hawai’i Wildlife Fund*, 24 F. Supp. 3d at 995.

159. *Id.*

160. *Id.*

161. *Id.* at 996. *See also* *Yadkin Riverkeeper, Inc. v. Duke Energy Carolinas, LLC*, 2015 WL 6157706 \*1, \*10 (M.D.N.C. 2015) (The court sided with the court in *Hawai’i Wildlife Fund* in that a CWA violation may occur when “pollutants travel from a point source to navigable waters through hydrologically connected groundwater serving as a conduit between the point source and the navigable waters.”); *Ohio Valley Envtl. Coal. Inc. v. Pocahontas Land Corp.*, 2015 WL 2144905 \*1, \*8 (S.D.W.Va. 2015) (taking the EPA posi-

ditionally regulated waters which might become polluted as in wetlands cases,<sup>162</sup> or as a navigable water in and of itself, the conduit theory looks at the groundwater as a means for polluting traditionally regulated waters. That is to say, plaintiffs do not have to argue that “the groundwater requires protection for its own independent ecological value. Instead, the concern is that the County [polluter] should not be allowed to pollute the ocean [traditionally regulated water] *through* that groundwater.”<sup>163</sup>

The conduit theory used in *Hawai'i Wildlife Fund* finds support from jurisprudence, administrative actions, and legislative goals. The jurisprudence support of the conduit theory comes from the language used in *Rapanos*, as discussed above.<sup>164</sup> Administrative actions by the EPA support the regulation of discharges to groundwater that reach surface waters subject to the CWA.<sup>165</sup> Congressional goals are evidenced by the text of the CWA, other court holdings on the topic of migratory groundwater regulation, and the strict liability scheme of the CWA. As noted above in Part III-A, the court believed it would make a “mockery” of the CWA to allow unpermitted polluted groundwater to migrate to the ocean,<sup>166</sup> and “the goal of the CWA is to protect surface waters” so the addition of pollutants to such waters through migratory groundwater is subject to CWA NPDES permitting.<sup>167</sup> The strict liability scheme of the CWA shows that Congress did not intend different proof requirements (i.e. the *Healdsburg* test) based on the way pollutants reach traditionally regulated waters, as this would lead to less protection of waters of the United States, even though Congress intended to categorically bar all unpermitted discharges to such waters.<sup>168</sup>

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tion that there can be no unpermitted discharges to groundwater that acts as a conveyance for pollutants which reach navigable waters); David Zucchini, *Coal Ash Contamination Upsets Residents Near North Carolina Plants*, L.A. TIMES (May 5, 2015), <http://www.msn.com/en-us/news/us/coal-ash-contamination-upsets-residents-near-north-carolina-plants/ar-BBjd3gn>.

162. See *infra* Part II-B.

163. *Hawai'i Wildlife Fund*, 24 F. Supp. 3d at 997. See also *San Francisco Herring Ass'n*, 81 F. Supp. 3d at 863 (“[D]efendants’ argument is unpersuasive” that pollution of San Francisco Bay should be allowed through groundwater.).

164. See *infra* notes 153-57.

165. *Hawai'i Wildlife Fund*, 24 F. Supp. 3d at 995-96. The court referenced a proposed EPA rule from 2001 for concentrated animal feeding operations (CAFOs) regarding pollutants conveyed to surface waters through groundwater could be an unpermitted discharge under the CWA. *Id.* Furthermore, a final rule by the EPA for water quality standards on Indian reservations stated “discharges to them [groundwaters] are regulated because such discharges are effectively discharges to the directly connected surface waters.” *Id.* (citing Amendments to the Water Quality Standards Regulation That Pertain to Standards on Indian Reservations, 56 Fed. Reg. 64876, 64892 (Dec. 12, 1991) (codified at 40 C.F.R. pt. 131)).

166. *Hawai'i Wildlife Fund*, 24 F. Supp. 3d at 995.

167. *Id.* (citing *Hecla Min. Co.*, 870 F. Supp. at 990).

168. *Id.* at 997-98.

Despite the support for the conduit theory, the court could not “point to controlling appellate law or statutory text expressly allowing this theory in the present context.”<sup>169</sup> This is because the Supreme Court in *Rapanos* and the Ninth Circuit in *Healdsburg* did not apply the conduit theory as it relates to wetlands or other surface waters, respectively.<sup>170</sup> Likewise, there is no language in the CWA which clearly articulates that migratory groundwater can be characterized as a conduit.<sup>171</sup> Regardless, the court in *Hawai’i Wildlife Fund* found the evidence for support of CWA jurisdiction over migratory groundwater more compelling than the lack of concrete authority of which to point.

#### IV. JURISDICTIONS NOT IN FAVOR OF NPDES REGULATION

Although there are a majority of courts in agreement that migratory groundwater is subject to CWA jurisdiction, albeit through different methods, there are a number of jurisdictions which do not recognize any CWA jurisdiction over migratory groundwater.<sup>172</sup> The rationales for not interpreting CWA jurisdiction are similar to the reasons expressed in *Hawai’i Wildlife Fund*,<sup>173</sup> the statutory text, legislative history, jurisprudence, and agency interpretation are not clear and persuasive enough to extend CWA jurisdiction.<sup>174</sup>

The limitations in the statutory language and legislative history are the common footholds many courts express as the reason for not finding CWA authority over migratory groundwater. As mentioned above, some waters are more readily identifiable as “navigable waters” or “waters of the United States” given their obvious characteristics and location in the text of the CWA.<sup>175</sup> These limited waters can be thought of as navigable-in-fact. This list would be exhaustive but for the ambiguity of the CWA term “navigable waters” and the tests by the Supreme Court in the wetlands cases which have allowed other waters to be characterized as navigable waters in and of themselves for CWA purposes.<sup>176</sup> Likewise, the lack of legislative action to

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169. *Hawai’i Wildlife Fund*, 24 F. Supp. 3d at 996.

170. *Id.* at n.2.

171. *Id.* at 996-97 (discussing EPA guidance that groundwater, particularly non-migratory groundwater, in and of itself has never been considered a “water of the United States”).

172. See Makowski, *supra* note 82, at 508-9; Hayman, *supra* note 128, at 109-11. For a “scorecard” of decisions on migratory groundwater and CWA authority prior to 2005, see Hayman, *supra* note 128, at 110.

173. *Hawai’i Wildlife Fund*, 24 F. Supp. 3d at 996-97.

174. Makowski, *supra* note 82, at 509.

175. See *infra* Part II-A (discussing oceans, territorial seas, and waters of the contiguous zone).

176. See *infra* Part II-B.

include migratory groundwater, or any groundwater, has been viewed as an outcome which Congress intended, given subsequent proposals to change CWA language.<sup>177</sup>

The limitations in jurisprudence are less pronounced in the case law that does not recognize CWA authority over migratory groundwater. While most courts reference other jurisdictions which have or have not recognized CWA authority over migratory groundwater, the courts have not spent much time discussing Supreme Court precedent on the scope of the CWA term navigable waters, namely the wetlands cases discussed in Part II-B.<sup>178</sup> As such, most discussion involving jurisdictional differences turn on the compelling notions surrounding statutory language, legislative history, administrative actions, and sometimes the goals of the CWA.

The limitations in administrative rulemaking and interpretation revolve around EPA willingness to change rules. Given the broad and ambiguous language of the CWA, the Supreme Court has upheld the authority of the EPA to regulate waters that might not be specifically or clearly covered by the CWA definition of navigable waters.<sup>179</sup> As such, the inability of the EPA to pass new rules and regulations for including migratory groundwater under its authority has been given some respect to mean that the EPA has no desire to regulate migratory groundwater, and more importantly Congress did not intend to grant regulatory authority over migratory groundwater via the CWA.<sup>180</sup>

One influential case which held that there was no CWA jurisdiction over migratory groundwater was *Village of Oconomowoc Lake v. Dayton Hudson Corp.*<sup>181</sup> In *Village of Oconomowoc Lake*, a village was trying to

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177. See, e.g., *Vill. of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962, 965 (7th Cir. 1994).

178. The jurisdictions which have referenced Supreme Court precedent on inexplicit waters under the authority of the CWA have done so only inasmuch as identifying that the Supreme Court has expanded the CWA language to include a broad number of non-navigable-in-fact waters (*Riverside Bayview Homes, Inc.*) and limited the expansion so as not to include waters with a very attenuated connection to traditionally regulated waters (*SWANCC*). See generally *Rice v. Harken Exploration Co.*, 250 F.3d 264 (5th Cir. 2001); *Vill. of Oconomowoc Lake*, 24 F.3d 962.

179. See generally *Riverside Bayview Homes, Inc.*, 474 U.S. 121.

180. *Rice*, 250 F.3d at 272 (EPA did not have authority to regulate discharges to migratory groundwater because Congress had not granted that authority); *Umatilla*, 962 F. Supp. at 1319 (“EPA has offered no formal or consistent interpretation of the CWA that would subject discharges to groundwater to the NPDES permitting requirement.”); *Vill. of Oconomowoc Lake*, 24 F.3d at 965 (EPA not asserting any authority over migratory groundwater). See also Makowski, *supra* note 82, at 515-16.

181. *Vill. of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962 (7th Cir. 1994).

prevent the construction of a warehouse which had a retention pond.<sup>182</sup> The resulting uses of the warehouse caused pollutants to enter the retention pond, which in turn seeped into groundwater,<sup>183</sup> although there was no evidence in the decision that there was a clear link between the groundwater and underground aquifers which feed traditionally regulated waters.<sup>184</sup> Rather, the court looked straight to the lack of language for which to include groundwater, migratory or otherwise, and the legislative history surrounding the CWA.<sup>185</sup>

The Seventh Circuit in *Village of Oconomowoc Lake* determined that “[a]s the statute and regulations stand . . .” the federal government has not claimed jurisdiction over groundwater, migratory or otherwise, via the CWA.<sup>186</sup> The court noted that “[n]either the Clean Water Act nor the EPA’s definition asserts authority over ground waters, just because these may be hydrologically connected with surface waters.”<sup>187</sup> Given the definitions in the CWA, the court found the lack of groundwater, migratory or otherwise, to be important to statutory text limitations.<sup>188</sup> Furthermore, “[t]he omission of ground waters from the regulations is not an oversight. Members of Congress have proposed adding ground waters to the scope of the Clean Water Act, but these proposals have been defeated . . . .”<sup>189</sup> The court believed Congress intended to exclude at least some waters, and “ground waters are a logical candidate” given the inability of Congress to change the CWA text.<sup>190</sup> In addition to statutory and legislative history support, the court identified the inability to pass administrative changes by the EPA as telling, noting that “[o]n several occasions the EPA has noted the potential connection between ground waters and surface waters, but it has left the regulatory definition alone.”<sup>191</sup> Despite the apparent lack of detail to the important distinction between migratory and non-migratory groundwater and their relation to the text of the CWA and EPA rules, the court in *Village of Oconomowoc Lake* took the minority approach in determining that the limited statutory text, legislative history, and administrative unwillingness

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182. *Vill. of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962 (7th Cir. 1994).

183. *Id.*

184. *Id.* at 965.

185. *Id.*

186. *Id.* at 966.

187. *Vill. of Oconomowoc Lake*, 24 F.3d at 965.

188. *Id.*

189. *Id.*

190. *Id.*

191. *Id.* (“[N]either the statute nor the regulations makes such a possibility a sufficient ground of regulation.”).

to change rules was most persuasive, particularly without any discussion of the goals of the CWA.<sup>192</sup>

Most jurisdictions which do not recognize CWA authority over migratory groundwater do so in a similar fashion to *Village of Oconomowoc Lake*. These cases focus primarily on the lack of explicit statutory text and legislative history of extending jurisdiction over groundwater.<sup>193</sup> While it may be difficult sometimes to find the articulation of the courts as to whether their holding only applies to all groundwater, non-migratory groundwater, or migratory groundwater, it seems that they all do indeed take the position that no groundwater is subject to CWA authority and regulation, including migratory groundwater which may reach traditionally regulated waters.<sup>194</sup>

Although the courts which refuse to extend CWA jurisdiction over migratory groundwater may be ruling against all groundwater regulation under the CWA by default, there is a lack of clarity as to whether such limits pertain to migratory groundwater which acts a conduit.<sup>195</sup> The court in *Hawai'i Wildlife Fund* noted that the split in authority over migratory groundwater may flow from the inability of the court to distinguish whether or not it is ruling on the migratory groundwater's characterization in and of itself (i.e. as a navigable water) or whether it may be regulated when "it serves as a conduit to water that is indeed regulated."<sup>196</sup> As was pointed out in *Hawai'i Wildlife Fund*, "[a]most every court that has allowed unpermitted discharges into groundwater has done so under the theory that the groundwater is not *itself* 'water of the United States.' That is, those courts were not determining whether discharging pollutants into groundwa-

192. See generally *Vill. of Oconomowoc Lake*, 24 F.3d at 962.

193. As discussed in Part II-B, the lack of any laws being passed to amend the scope of "navigable waters" under the CWA is misleading as the bills which have been presented have attempted to authorize regulation over *all* groundwater and not simply make migratory groundwater explicit.

194. See generally *Exxon Corp. v. Train*, 554 F.2d 1310 (5th Cir. 1977) ("recounting legislative history"); *Town of Norfolk v. U.S. Army Corps of Eng'rs*, 968 F. 2d 1438; *Vill. of Oconomowoc Lake*, 24 F.3d 962; *Chevron U.S.A. Inc. v. Apex Oil Co., Inc.*, 2015 WL 6408191 \*1, \*4-\*5 (D. Md. 2015) (referencing CWA precedent to hold that oil leaks into groundwater which reach Baltimore Harbor are not to be regulated under the Oil Pollution Act); *Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc.*, No. 7:13-CV-200-FL, 2014 WL 2573052 (E.D.N.C. 2014); *Tri-Realty Co. v. Ursinus Coll.*, 2013 WL 6164092 \*1, \*9 (E.D. Pa. 2013) (referencing CWA precedent to hold that groundwater is not a point source or navigable water in and of itself, nor to be regulated under the Oil Pollution Act); *Rice*, 250 F.3d 264; *Patterson Farm, Inc. v. City of Britton*, 22 F. Supp. 2d 1085 (D.S.D. 1998); *Umatilla*, 962 F. Supp. 1312; *Cooper Indus., Inc. v. Abbott Labs.*, No. 93-CV-193, 1995 WL 17079612 (W.D. Mich. 1995); *Kelley v. United States*, 618 F. Supp. 1103 (W.D. Mich. 1985).

195. *Hawai'i Wildlife Fund*, 24 F. Supp. 3d at 996.

196. *Id.*



ter conduits required a permit.”<sup>197</sup> This distinction is important to the jurisdiction of the CWA because it is unknown whether prior cases determined if the CWA categorically allows unpermitted discharges to migratory groundwater or if those jurisdictions may have overlooked the ability of groundwater to be characterized as a conduit or “point source” subject to CWA NPDES regulatory authority.<sup>198</sup>

The court in *Umatilla* did reference this sort of idea where unconventional collections of water could be considered a “point source” and subject to regulation under the CWA.<sup>199</sup> However, the court in *Umatilla* found that no groundwater, migratory or otherwise, is subject to CWA jurisdiction.<sup>200</sup> In the event that the Ninth Circuit found that migratory groundwater which was hydrologically connected was subject to CWA authority, the issue of an existing point source would be settled.<sup>201</sup> Thus, the *Umatilla* decision was stating that if migratory groundwater was subject to the CWA, it would have to be a navigable water in and of itself, and could constitute as a point source in the same situation.<sup>202</sup> This case shows that at least one court has looked at migratory groundwater in and of itself for jurisdiction, rather than as a conduit to a separate navigable water.<sup>203</sup>

## V. CONCLUSION

The Clean Water Act’s National Pollution Discharge Elimination System has a jurisdictional split, with the majority of jurisdictions agreeing that the Clean Water Act grants regulatory authority over migratory groundwater. The jurisdictional split comes as a result of the ambiguity as to the intent of Congress in regulating interstate waters. In order to ensure that regulatory authority is carried out through NPDES section 402 permitting, a plaintiff must show that the migratory groundwater is a “water of the United States” (i.e. navigable water) or that the migratory groundwater is a conduit to convey and discharge polluted effluent to a traditionally recognized “water of the United States.” The tests which can establish a groundwater as subject to regulation, be it in and of itself (i.e. navigable water), or because of its relationship in conveying pollutants to a navigable water, can

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197. *Id.*

198. *Id.*

199. *Umatilla*, 962 F. Supp. at 1320-21 (“The unlined brine pond is a confined and discrete conveyance within the CWA’s definition of ‘point source,’ readily identifiable to a single source. The fact that those pollutants now migrate through dirt with the help of water sources such as rain water and gravity . . . does not change the old brine pit’s status.”).

200. *Id.*

201. *Id.*

202. *Id.*

203. *Id.*

be found in Supreme Court jurisprudence (*Rapanos*)<sup>204</sup> or in other federal jurisprudence—like courts using the direct hydrologic connection test<sup>205</sup> or the conduit theory.<sup>206</sup> Given the evidence above, migratory groundwater does fall within CWA NPDES jurisdiction, despite any notion of ambiguous statutory language currently in the CWA.

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204. See *infra* Part II-B.

205. See *infra* Part III-A.

206. See *infra* Part III-B.