Atomizing the Clean Water Act:

Ignoring the Whole Statute and Asking the Wrong Questions

[In Publication, Environmental Law]

Robert W. Adler¹

Brian House²

Abstract

When attempting to resolve difficult issues of statutory construction involving complex statutes, courts sometimes focus on individual words and phrases without evaluating how they fit within the text and structure of the whole statute. We call this "atomization" of the statutory text. Judges have fallen into this trap in construing the Clean Water Act (CWA) and other lengthy, complex federal environmental statutes. That tendency contributes to ongoing confusion about the scope and coverage of the CWA. During the 2019-2020 Term, the U.S. Supreme Court will resolve a circuit split in the most recent line of cases exhibiting this tendency. Courts have struggled to ascertain the scope of CWA permitting jurisdiction when pollutants reach water bodies through an intermediary conduit such as groundwater. Some courts have "atomized" that analysis, leading to further analytical confusion. Evaluating this issue in light of the functions CWA permits serve in the whole statutory scheme leads to more logical results. The "conduit" cases thus serve as a good example of the perils of atomization, and how it can be avoided through a whole text analysis. That method, in turn, can allow courts to avoid altogether separate debates about the relevance of legislative history and other non-textual indicia of congressional purpose in statutory construction.

¹ Jefferson B. and Rita E. Fordham Presidential Dean, Distinguished Professor of Law, University of Utah, S.J. Quinney College of Law. This article was funded in part by the Albert and Elaine Borchard Excellence in Teaching and Research Fund. The idea for this article originated with an invitation by Doug Kenney and Mark Squillace to present on the "conduit" line of Clean Water Act cases at the Martz Water Law Symposium at the University of Colorado College of Law in June 2018. Michael Hutchings provided invaluable research assistance, in addition to that conducted by co-author Brian House.

² J.D. Candidate 2020, University of Utah, S.J. Quinney College of Law.

Table of Contents

I. INTRODUCTION	. 1
II. THE CWA CONDUIT CASES: EXAMPLES OF STATUTORY ATOMIZATION	.6
A. "Navigable Waters"	8
B. "Point Source"	
C. "Addition" of a Pollutant	
D. "From" and "Into"	
III. A FUNCTIONAL, WHOLE STATUTE APPROACH TO THE CONDUIT ANALYSIS	
	. 26
A. The CWA Statutory Structure	. 27
1. The qualified discharge ban	
2. Permits for regulated sources of pollutants	
3. Controls imposed under section 402 permits	
B. Applying the Functional, Whole Statute Approach to the Conduit Cases	
1. Relevance of the term "point source"	
2. Relevance of the term "navigable waters"	
3. Relevance of the term "addition"	. 45
4. Consistency with overall statutory structure and goals	
<i>i.</i> Point source versus nonpoint source controls	
<i>ii.</i> Uniformity and efficacy of technology-based controls	
iii. Efficacy and equity in water quality-based controls	
iv. Additional control provisions	
IV. CONCLUSION: AVOIDING ATOMIZATION OF THE CWA AND OTHER LAWS.	. 60

"Words are chameleons, which reflect the color of their environment."

Learned Hand³

I. Introduction

The federal Clean Water Act $(CWA)^4$ is a definitional quagmire. As a result, the U.S. Supreme Court, the lower courts, and the two federal agencies charged with implementing the law⁵ have struggled to interpret its scope ever since its enactment in 1972. Indeed, as we approach the statute's half-century mark in just a few years, we still lack clarity about what would seem to be the most basic questions about its reach. That, in turn, has resulted in massive uncertainty for the federal and state agencies⁶ that implement the law, businesses and landowners regulated by the statute, and members of the public Congress intended to protect.⁷

Part of the problem lies in the fact that Congress drafted the CWA in ways that left both gaps and ambiguities in the statutory text, including the unexplained or poorly explained use of multiple terms for seemingly similar or identical issues.⁸ That has caused protracted confusion in

³ Commissioner of Internal Rev. v. National Carbide Corp., 167 F.2d 304, 306 (2d. Cir. 1948).

⁴ 33 U.S.C. §1251 et seq.

⁵ The principal federal agency charged with CWA implementation is the U.S. Environmental Protection Agency (EPA). *See* 33 U.S.C. §1361(a) (authorizing the Administrator of EPA to promulgate regulations to implement the statute). EPA shares responsibility for implementing the statute, particularly in definitional respects addressed in this article, with the U.S. Army Corps of Engineers (ACE) through the Secretary of the Army. *See id.* §1344.

⁶ Like many federal environmental statutes, in the CWA Congress embraced the strategy of cooperative federalism, with shared responsibility between the federal government and the states. *See, e.g., id.* §§1313 (providing for shared responsibility for adoption and implementation of water quality standards); 1342 (providing for shared responsibility for implementation of the National Pollutant Discharge Elimination System permitting program).

⁷ See Coral Davenport, *Trump Prepares to Unveil a Vast Reworking of Clean Water Protections*, N.Y. Times, Dec. 10, 2018, available at: https://www.nytimes.com/2018/12/10/climate/trump-clean-water-rollback.html (comparing interest group reaction to proposed revisions to EPA rules governing CWA jurisdiction).

⁸ For example, Congress established an overall objective to protection "the Nation's waters," 33 U.S.C. §1251(a), but then applied the Act's regulatory controls to "navigable waters, *id.* §§ 1311(a), 1362(12), which it then re-defined to "the waters of the United States." *Id.* § 1362(7).

the agencies and the courts about issues such as the scope of waters covered by the CWA,⁹ and what activities cause an "addition of pollutants" to those waters.¹⁰

Another part of the problem, however, is that the CWA's definitions can be so confusing that advocates and judges do not always agree even on how to articulate the issue to be decided. That sometimes prompts them to focus on discrete statutory terms without proper focus on the text of the statute as a whole. We call this "atomization" of the statute, in which excessive focus on individual words or phrases (the "atoms" or "molecules" in the text) prevents the reader from understanding how those words or phrases relate to the whole statute. That approach ignores Judge

⁹ The Supreme Court most recently addressed the scope issue in Rapanos v. United States, 547 U.S. 715 (2006), resulting in a 4-1-4 split decision. Justice Scalia's plurality opinion suggested that a regulated water body must be a "navigable water"—"a relatively permanent body of water connected to traditional interstate navigable waters." Id. at 724. Justice Kennedy's concurring opinion, generally considered under the Marks doctrine to be the Court's holding, found that a regulated water body must have a "significant nexus" with a traditionally navigable waterway. Id. at 779; see Marks v. United States, 430 U.S. 188, 193 ("When a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds"). In response, EPA and Army Corps of Engineers ("ACE") issued a joint rule adopting the "significant nexus" test for the definition of "navigable waters" (the "Clean Water Rule".) 80 Fed. Reg. 37054 (June 29, 2015) (codified at 40 C.F.R. § 328, 40 C.F.R. §§ 110, 112, 116, 117, 122, 230, 232, 300, 302, 401). But this rule may prove to be short-lived. In response to an Executive Order issued by President Trump, Exec. Order No. 13778, 82 Fed. Reg. 12497 (Feb. 28, 2017), the agencies proposed to rescind and replace the Clean Water rule. Revised Definition of "Waters of the United States," 84 Fed. Reg. 4154 (proposed Feb. 15, 2019). The new rule would define a jurisdictional "tributary" as "a river, stream, or similar naturally occurring surface water channel that contributes perennial or intermittent flow to a traditional navigable water or territorial sea in a typical year." Id. at 4155. Further, the rule would define "adjacent wetlands" covered by the CWA as "wetlands that abut or have a direct hydrological surface connection to other 'waters of the United States' in a typical year." Id.

¹⁰ For several decades, many courts recognized that water transfers may constitute an "addition" of pollutants from one water body to another, or from one portion of a water body to another, and therefore be subject to NPDES permitting requirements. *See* Dubois v. U.S. Dep't of Agric., 102 F.3d 1273 (1st Cir. 1996); Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York, 273 F.3d 481 (2d Cir. 2001) ("Catskill I"); Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York, 451 F.3d 77 (2d Cir. 2006) ("Catskill II"); *See also* S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe, 541 U.S. 95, 104, 107 (2004) (holding that a pump transferring polluted water into a purer wetland could be a "point source" which adds pollutants to the receiving water and disapproving of the "unitary waters" theory.) However, EPA in 2008 issued its "Water Transfer Rule," exempting from NPDES permitting requirements transfers that do not subject the water to intervening industrial, municipal, or commercial use. 73 Fed. Reg. 115 (June 13, 2008). The Second Circuit upheld this rule as a reasonable agency interpretation of the CWA. Catskill Mountains Chapter of Trout Unlimited, Inc. v. Envtl. Protection Agency, 846 F.3d 492, 508 (2d Cir. 2017) ("Catskill III").

Hand's sound advice that "words reflect the color of their environment,"¹¹ meaning they must be interpreted in full context rather than in isolation.

Focusing only on discrete, isolated words, in turn, can cause courts to ask and answer the wrong questions. This explains how different federal courts have approached very similar sets of facts with so many different analytical approaches.¹² To be clear, this problem of statutory interpretation has nothing to do with the debate between textualism¹³ and legislative intent¹⁴ in statutory construction. Proponents of both of those schools of statutory analysis agree that proper statutory construction demands that individual words be read *in pari materia* with the statute as a whole,¹⁵ or that microscopic analysis of the statutory atoms and molecules can obscure the shape and form of the whole statutory organism.¹⁶

¹¹ *See supra* note 3.

¹² See infra Part II.

¹³ See, e.g., Continental Can Co., Inc. v. Chicago Truck Drivers, Helpers and Warehouse Workers Union (Independent) Pension Fund, 916 F.2d 1154, 1157 (7th Cir. 1990) (Easterbrook, J.) ("The text of the statute, and not the private intent of the legislators, is the law.") A. SCALIA & B. GARNER, READING LAW: THE INTERPRETATION OF LEGAL TEXTS xxii (2012) (foreword by Frank H. Easterbrook) ("Legislative intent is a fiction, a back-formation from other and often undisclosed sources."); *id.* at 391-92 (explaining that an attempt to discover "authorial intent" is not appropriate when analyzing a document crafted by multiple authors, especially when those authors may have had different objectives in mind); Brett M. Kavanaugh, *Keynote Address: Two Challenges for the Judge as Umpire: Statutory Ambiguity and Constitutional Exceptions*, 92 NOTRE DAME L. REV. 1907, 1911 (2017) ("some judges never or rarely use legislative history in part because it is akin to picking out your friends at a party.")

¹⁴ See, e.g., Robert A Katzmann, *Response to Judge Kavanaugh's Review of "Judging Statutes"*, 129 HARV. L. REV. F. 388, 389 (2016) ("Legislative history can shed light on what the law means, and, in fact, Congress expects that its legislative history will be respected by courts. The Constitution, after all, largely vests Congress with the authority to determine its own procedures for the introduction, consideration, and approval of bills, and that includes how the legislative branch treats legislative history."); John Paul Stevens, *The Shakespeare Canon of Statutory Construction*, 140 U. PA. L. REV. 1373, 1381-82 (explaining that, while legislative history should not be used as a primary tool of statutory interpretation, "[t]he Court is sometimes skeptical about the meaning of a statute that appears to make a major change in the law when the legislative history reveals a deafening silence about any such intent."

¹⁵ See, e.g., K Mart Corp. v. Cartier, Inc., 486 U.S. 281, 291 (1988) ("In ascertaining the plain meaning of the statute, the court must look to the particular statutory language at issue, as well as the language and design of the statute as a whole.") (citing Bethesda Hospital Assn. v. Bowen, 485 U.S. 399, 403–405 (1988); Offshore Logistics, Inc. v. Tallentire, 477 U.S. 207, 220–221 (1986)); Dada v. Mukasey, 554 U.S. 1, 16 (2008) ("In reading a statute we must not look merely to a particular clause, but consider in connection with it the whole statute.") (citations omitted); Scalia & Garner, *supra* note 13, at 167 ("Perhaps no interpretive fault is more common than the failure to follow the whole-text canon, which calls on the judicial interpreter to consider the entire text, in view of its structure and of the physical and logical relation of its many parts.")

¹⁶ Some courts, of course, have relied on the more familiar metaphor of "losing the forest for the trees." *See, e.g.*, S.D. Warren Co. v. Maine Bd. of Envtl. Protection, 547 U.S. 370, 384 (2006) (explaining that petitioners' argument against

The most recent round of conflicting opinions exhibiting the tendency to atomize CWA statutory analysis, which the U.S. Supreme Court will attempt to resolve in the October 2019 term,¹⁷ involves the extent to which discharges to water bodies otherwise regulated by the statute require CWA permits if the pollutants are conveyed first through another medium, such as groundwater.¹⁸ (For brevity, we refer to this conflicting line of decisions as the "conduit cases.") In attempting to resolve that question, various parties or courts have cast the issue alternatively as whether groundwater can be a "water of the United States" subject to regulation,¹⁹ whether a conveying medium such as groundwater is a "point source,"²⁰ whether conveying pollutants through groundwater constitutes an "addition" of pollutants to the Waters of the United States,²¹ or whether the answer to the question lies buried in the separate definition of "effluent limitation," the vehicle through which permitted discharges are controlled.²² Interestingly, courts that ultimately ruled on both "sides" of the issue (to require or to prohibit regulation of particular

reading the term "discharge" in the CWA in its common sense would contravene the goals and objectives of the Act.); Riser v. Target Corp., 458 F.3d 817, 820-21 (8th Cir. 2006); Louisiana Wildlife Federation, Inc. v. York, 761 F.2d 1044, n. 50 (5th Cir. 1985).

¹⁷ Hawai'i Wildlife Fund v. County of Maui, 886 F.3d 737 (9th Cir. 2018), *cert. granted in part*, _ S.Ct. _, 2019 WL 659786 (Mem.) (Feb. 19, 2019) (No. 18-260).

¹⁸ The Ninth Circuit held that effluent from a wastewater treatment facility, which was discharged into groundwater and undisputedly reached the Pacific Ocean, required a CWA permit. *See id.* The Fourth Circuit similarly held that gasoline flowing from a ruptured underground pipeline, through groundwater and into nearby waterways, constituted a CWA violation. *See* Upstate Forever v. Kinder Morgan Energy Partners, L.P., 887 F.3d 637 (4th Cir. 2018). While petition for writ of certiorari to the Supreme Court was pending in both cases, the Sixth Circuit rejected the approach of the Fourth and Ninth Circuits. In the companion cases of Tennessee Clean Water Network v. Tennessee Valley Authority, 905 F.3d 436 (6th Cir. 2018) and Kentucky Waterways Alliance v. Kentucky Utilities Company, 905 F.3d 925 (6th Cir. 2018), the Sixth Circuit held that seepage of pollutants from coal ash impoundments, which migrated through groundwater and emerged in surface waterways, was not an unpermitted discharge of a pollutant under the CWA. The court expressly rejected the "conduit theory" of discharge, holding that a point source "must dump directly into" navigable waters to fall within the purview of the CWA. *Id.* at 961 (emphasis in original). The Supreme Court granted certiorari in *County of Maui*. See supra note 17.

¹⁹ See infra Part II.A.

²⁰ See infra Part II.B.

²¹ See infra Part II.C.

²² See infra Part II.D.

activities under the statute) have fallen into the trap of resolving the issues by reference to isolated statutory parts rather than interpreting all relevant statutory provisions in concert.²³

Reading the CWA as an integrated whole, with individual statutory components construed in that context, results in a more sensible approach to the issues posed by the conduit cases. To be sure, this requires scrutiny of individual statutory words and phrases to ensure that all of the relevant provisions are considered in light of applicable statutory definitions. To derive a consistent set of principles that makes sense under the whole statute, however, requires an effort to logically assemble the constituent parts. Reference to either statutory goals and objectives, or to legislative history, is not essential in this set of cases to resolve ambiguities in the statute. Adding consideration of those factors, however, confirms that the most sensible reading of the statutory text as a whole in fact effectuates the CWA's objective and subsidiary goals, and the most pertinent portions of its legislative history.

This article presents such an analysis, with the dual goals of suggesting the most sensible resolution to the conflicting line of conduit cases and of highlighting the danger of statutory atomization in the context of the CWA and other complex statutes. Part II describes the conflicting line of conduit cases attempting to discern the scope of activities regulated by the CWA when a point source does not discharge pollutants directly into navigable waters. That analysis will identify specific examples of statutory atomization in the cases and how that tendency has caused some courts to ask the wrong questions, leading to results that do not make sense when viewing the whole statute. Part III posits a method of reading the component statutory parts *in pari materia*, leading to a more sensible and consistent reading of the whole statute. In addition to helping

²³ See infra Part II.

resolve this particular line of cases, it suggests a mode of CWA analysis that might help to resolve some of the other jurisdictional debates that have impeded consistent and effective implementation of the CWA. Part IV concludes by arguing that, regardless of whether one adopts a mode of statutory construction that focuses exclusively on the statutory text or one that also relies on legislative history to ascertain legislative intent, the analysis should avoid atomization of statutes in favor of one that harmonizes discrete bits of statutory text with the language and structure of the statute as a whole.

II. The CWA Conduit Cases: Examples of Statutory Atomization

For almost fifty years, courts have struggled with a seemingly simple question: does the discharge of a pollutant through a non-navigable medium, and eventually into navigable waters, require a CWA permit? These cases have involved not only discharges through groundwater and intermittent streams, but also non-aquatic "conduits" such as a mine shaft drain tunnel system,²⁴ concentrated animal feeding operation fields,²⁵ leaks from a "closed" irrigation system,²⁶ and pesticide releases into the air.²⁷ Unfortunately, this growing body of case law has not yielded a

²⁴ See Sierra Club v. El Paso Gold Mines, Inc., 421 F.3d 1133, 1136, 1144-46 (10th Cir. 2005) (holding that snow melt and groundwater carrying zinc and manganese through six miles of a mine drainage tunnel, and eventually to surface waters, constituted an unpermitted discharge of a pollutant).

²⁵ See Concerned Area Residents for the Environment v. Southview Farms, 34 F.3d 114, 119 (2d Cir. 1994) ("The collection of liquid manure into tankers and their discharge on fields from which the manure directly flows into navigable waters are point source discharges"); Waterkeeper Alliance, Inc. v. U.S. E.P.A., 399 F.3d 486 (2d Cir. 2005) (because any discharge from a CAFO is defined as a "point source" discharge under the CWA, "[r]equiring that manure, litter, or process wastewater be separately channelized at the land application site before any runoff could be considered a 'point source discharge' would be, in effect, to impose a requirement not contemplated by the Act: that pollutants be channelized not once but twice before the EPA can regulate them.").

²⁶ See Headwater, Inc. v. Talent Irrigation District, 243 F.3d 526, 533-34 (9th Cir. 2001) (holding that alleged leaks from a "closed" irrigation system containing pesticide-laden agricultural runoff into adjacent tributaries of navigable waters could constitute the discharge of a pollutant).

²⁷ See Peconic Baykeeper v. Suffolk County, 600 F.3d 180, 188-189 (2d. Cir. 2010) (Pesticides discharged from trucks and helicopters that eventually reached navigable waters constituted a discharge "from" the vehicles and not from the air).

corresponding degree of clarity on the issue. This lack of consensus is clearly demonstrated by the current circuit split, with the Fourth and Ninth Circuits holding that discharges from a point source through groundwater into navigable waters require CWA permits,²⁸ and the Sixth Circuit holding the opposite.²⁹

Why has nearly five decades of CWA jurisprudence not led to consistent analysis of this issue? Just as the conduits have assumed different physical forms, the courts have applied multiple analytical techniques to resolve the question. A common theme, however, is the tendency to atomize the statute into discrete chunks in ways that do not account properly for the overall statutory text and structure.³⁰ Section 301(a) of the Act succinctly provides the core of the CWA's regulatory authority: except in compliance with various permitting and substantive control provisions, "the discharge of any pollutant by any person shall be unlawful."³¹ Inserting the statutory definition of "discharge of [a] pollutant,"³² the prohibition reads: "the [addition of any pollutant to navigable waters from any point source] by any person shall be unlawful." Thus, to determine whether CWA permitting jurisdiction applies, agencies and courts must address multiple interconnected issues: whether there is an "addition" of a "pollutant" from a "point source" to a "navigable water." Each of the key terms of this provision has, at times, featured prominently in judicial analysis of conduit-type discharges. Here we will show how undue focus on these individual terms, isolated from the text and structure of the statute as a whole, has led to disparate, and we believe sometimes incorrect, results.

²⁸ See infra Part II.A, D.

²⁹ See infra Part II.D.

³⁰ To be fair to these courts, this mode of analysis can be a consequence of the parties' framing of the issue. *See* infra Part II.A–D. ³¹ 33 U.S.C. § 1311(a).

³² 33 U.S.C. § 1362(12).

A. "Navigable Waters"

The most persistent and contested CWA jurisdictional battles have involved attempts by the Supreme Court and lower federal courts to define "navigable waters" in the context of the Army Corps of Engineers dredge and fill program.³³ Perhaps because this component of the CWA's jurisdictional test has been the focus of the most Supreme Court scrutiny, many courts have assumed that the key to unlocking the secrets of CWA jurisdiction lies within the meaning of the term "navigable waters," which Congress cryptically re-defined as "waters of the United States, including the territorial seas."³⁴ That may be true in some cases, where it is clear that pollutants are added to waters from point sources, but the parties dispute whether the receiving area is a navigable water. It is an errant assumption in other cases, however, where other terms in the chain of CWA jurisdiction are in dispute. This assumption has proven especially resilient in the line of conduit cases, with courts commonly basing their analysis on whether a medium that carries pollutants from a point source is itself a "navigable water."

In U.S. v. Earth Sciences, Inc., the Tenth Circuit determined whether unpermitted cyanidelaced discharges from a gold leaching operation's sump tank violated the CWA.³⁵ When rapid

³³ In United States v. Riverside Bayview Homes, 474 U.S. 121, 129-30 (1985), the Court upheld the Corps' assertion of jurisdiction over wetlands adjacent to traditionally navigable waterways. In Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers ("SWANCC"), however, the Court invalidated the Corps' assertion of jurisdiction based on its regulatory definition of "navigable waters" to include, inter alia, intrastate waters that provide habitat for migratory birds (the so-called "migratory bird rule"), 51 Fed. Reg. 41217 (Nov. 13, 1986). 531 U.S. 159, 174 (2001). In Rapanos v. United States, 547 U.S. 715 (2006), faced with the familiar issue of whether the Corps can require permits for the dredge and fill of "isolated" wetlands and other waters, the Court conspicuously bifurcated. The plurality opinion, authored by Justice Scalia, proposed that a regulated wetland must be a "navigable water"—"a relatively permanent body of water connected to traditional interstate navigable waters." *Id.* at 24. Justice Kennedy authored a concurring opinion, which is generally considered the Court's holding under the Marks doctrine. See Marks, *supra* note 9. Justice Kennedy rejected the plurality's bright-line approach and declared that wetlands may be considered a "navigable water" if there is a "significant nexus" between the wetland and a traditionally navigable water. Rapanos, 547 U.S. at 779. Four Justices dissented, suggesting the Court should give *Chevron* deference to the agency's decision. *Id.* at 788.

³⁴ 33 U.S.C. §1362(7).

³⁵ 599 F.2d 368, 370, 375 (10th Cir. 1979).

snowmelt caused the sump to overflow, pollutants flowed into a ditch, through a small creek, and into a downstream reservoir from which the water was used to irrigate crops sold in interstate commerce.³⁶ Citing the Act's legislative history, the court held that Congress defined "navigable waters" broadly (as "waters of the United States") to effectuate its intent "to regulate discharges made into every creek, stream, river or body of water that in any way may affect interstate commerce."³⁷

The court in *Earth Sciences* had to address the navigability issue because the defendantappellant directly challenged the applicability of CWA jurisdiction to a water body that was not itself navigable and was not used to transport interstate goods. The Tenth Circuit found the receiving water "navigable" under the broader meaning permissible under the full extent of Congress's Commerce Clause authority rather the "navigable-in-fact" test of *The Daniel Ball*, because the polluted receiving waters were used to irrigate crops sold in interstate commerce.³⁸ Other courts, however, have found it necessary to hold, regardless of whether pollutants ultimately reach undisputed navigable waters, that "navigable waters" also include such intermediaries as a "closed" irrigation system that may under certain circumstances discharge pollutants into tributaries of larger surface waters;³⁹ a submerged quarry from which water seeps through

³⁶ Id.

³⁷ See id. at 375.

³⁸ See id. at 374-375. Compare The Daniel Ball, 77 U.S. (10 Wall.) 557 (1870) (establishing the traditional test for Commerce Clause jurisdiction based on navigability) with United States v. Appalachian Elec. Power Co., 311 U.S. 377 (1940) (clarifying that navigability is only one of the uses of waters subject to Commerce Clause regulation. See, also, Robert W. Adler, *The Ancient Mariner of Constitutional Law: The Declining Role of Navigability*, 90 WASH. U. L. REV. 1643 (2013) (comparing the different legal tests for navigability for varying constitutional purposes).

³⁹ See Headwater, Inc. v. Talent Irrigation District, 243 F.3d 526, 533-34 (9th Cir. 2001) (holding that canals that receive waters from natural streams and lakes, and divert waters to streams and lakes, are tributaries of "navigable waters" so long as they "flow intermittently").

groundwater and adjacent wetlands into a navigable river;⁴⁰ and man-made stormwater ditches and canals that intermittently carry water to larger tributaries of undisputed navigable waters.⁴¹

Other courts have rejected the conduit theory of liability on the basis that groundwater is categorically *not* a navigable water. For example, in *Village of Oconomowoc Lake v. Dayton Hudson Corp.*, the developer of a large distribution center proposed to collect rainwater runoff from a large paved area in a retention pond, from which the water would seep into groundwater and eventually reach surface waters.⁴² Judge Easterbrook of the Seventh Circuit reasoned: "the Clean Water Act does not attempt to assert national power to the fullest. 'Waters *of the United States*' must be a subset of "water"; otherwise why insert the qualifying clause in the statute?"⁴³ The CWA does not exert jurisdiction over ground waters, Judge Easterbrook reasoned, "just because these may be hydrologically connected with surface waters."⁴⁴ He also noted that the Senate Committee on Public Works expressly rejected the idea of groundwater jurisdiction in the 1972 CWA.⁴⁵

Since *Oconomowoc Lake*, several other courts have followed suit in holding that groundwater is not a "navigable water" within the meaning of the CWA, even if it carries pollutants to navigable surface waters. In *Rice v. Harken Exploration Co.*, the Fifth Circuit unequivocally

⁴⁰ See Northern California River Watch v. City of Healdsburg, 496 F.3d 993, 996-1001 (9th Cir. 2007) (relying heavily on the Supreme Court's decisions in *Riverside Bayview, SWANCC, and Rapanos* and ultimately applying Justice Kennedy's "significant nexus" test from the latter case).

⁴¹ See United States v. Eidson, 108 F.3d 1336, 1341–42 (11th Cir. 1997) (*abrogated by* U.S. v. Robison, 505 F.3d 1208 (11th Cir. 2007), applying *Rapanos*).

⁴² 24 F.3d 962, 963 (7th Cir. 1994).

⁴³ *Id.* at 965.

⁴⁴ Id.

⁴⁵ "Several bills pending before the Committee provided authority to establish Federally approved standards for groundwaters which permeate rock, soil, and other subsurface formations. Because the jurisdiction regarding groundwaters is so complex and varied from State to State, the Committee did not adopt this recommendation."

S.Rep. No. 92-414, at 73 (1972). It is notable that even courts asserting CWA jurisdiction over groundwater do not dispute the significant of this legislative history; they differentiate *isolated* groundwater from groundwater that is hydrologically connected to surface waters. *See, e.g.*, Washington Wilderness Coalition v. Hecla Mining Co., 870 F.Supp. 983, 990 (E.D. Wash. 1994).

stated: "subsurface waters are not waters of the United States."⁴⁶ The Eastern District of North Carolina recently addressed the issue of whether polluted water from coal ash retention ponds that seeped into groundwater and eventually reached surface waters constituted an unpermitted discharge of a pollutant under the CWA.⁴⁷ Relying on *Oconomowoc Lake* and the Supreme Court's plurality opinion in *Rapanos v. U.S.*,⁴⁸ the court held groundwater does not fall within the meaning of "navigable waters," as it is not "open water' or a conventionally understood hydrographic or geographic 'feature."⁴⁹

In recent years, the majority of courts have applied Justice Kennedy's "hydrological connection" test from *Rapanos* to hold that discharges through groundwater into navigable waters fall within the Act's purview.⁵⁰ Several courts had indicated long before *Rapanos* that groundwater conveying pollutants to surface waters may itself be a "navigable water."⁵¹ The District of Hawai'i recently noted this possibility while granting summary judgment to the plaintiff in *Hawai'i Wildlife*

⁴⁶ 250 F.3d 264, 270 (5th Cir. 2001). *Rice* was brought under a claim of violation of the Oil Pollution Act (OPA). *Id.* at 265. However, the court reasoned that "[t]he legislative history of the OPA and the textually identical definitions of 'navigable waters' in the OPA and the CWA strongly indicate that Congress generally intended the term 'navigable waters' to have the same meaning in both the OPA and the CWA." *Id.* at 267. Therefore, application of case law interpreting the meaning of "navigable waters" under the CWA would inform its decision regarding the scope of "navigable waters" under the OPA. *Id.* at 267-68.

⁴⁷ Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc., 25 F. Supp. 3d 798, 801-02 (E.D.N.C. 2014).

⁴⁸ 547 U.S. 715 (2006).

⁴⁹ Id. at 810 (quoting Rapanos, 547 U.S. at 734-35, 126 S.Ct. 2208

⁵⁰ See, e.g. Flint Riverkeeper, Inc. v. Southern Mills, Inc., 276 F. Supp. 3d 1359, 1366-67 (M.D.Ga. 2017) (noting that a majority of districts courts have concluded that the CWA prohibits discharges through hydrologically connected groundwaters); Northern California River Watch, 496 F.3d at 1000; Tennessee Riverkeeper, Inc. v. Hensley-Grace Holdings, LLC, 2013 WL 12304022, at 6 (N.D. Ala. Aug. 20, 2013); Yadkin Riverkeeper, Inc. v. Duke Energy Carolinas, LLC, 141 F. Supp. 3d 428, 445 (M.D.N.C. 2015); Hernandez v. Esso Standard Oil Co. (P.R.), 599 F. Supp. 2d 175, 181 (D.P.R. 2009); Nw. Envtl. Def. Ctr. v. Grabhorn, Inc., 2009 WL 3672895, at 11 (D.Or. Oct. 30, 2009).
⁵¹ See Inland Steel Co. v. Envtl. Protection Agency, 901 F.2d 1419, 1422 (7th Cir.1990) (stating in dicta that "the legal concept of navigable waters might include ground waters connected to surface waters—though whether it does or not is an unresolved question") (citations omitted); Washington Wilderness Coalition v. Hecla Mining Co., 870 F.Supp. 983, 990 (E.D. Wash. 1994) (noting that while isolated groundwaters are not "waters of the United States," a circuit split exists as to whether groundwaters tributary to surface waters are within the scope of CWA regulation); Mutual Life Ins. Co. v. Mobil Corp., 1998 WL 160820, 2 (N.D.N.Y. 1998) ("Given the broad interpretation of navigable waters under the CWA, the general policy of the act to protect the quality of surface waters, and the preliminary stage of this litigation," the court will construe plaintiff's claim of an illegal discharge into an underground monitoring well as stating a valid CWA claim).

Fund v. County of Maui,⁵² a case that has since contributed to the current circuit split and will be heard by the Supreme Court.⁵³ In *Maui*, the County's wastewater treatment facility, on a daily basis and without a NPDES permit, pumped three to five million gallons of treated sewage effluent into a shallow groundwater aquifer underneath the facility.⁵⁴ The majority of this effluent migrated through the aquifer and eventually emerged through "submarine springs" in the Pacific Ocean off Kahekili Beach, allegedly damaging nearby coral reefs.⁵⁵ The district court held that a discharge of effluent through groundwater, with a clearly ascertainable path to the ocean, was the functional equivalent of a discharge into navigable waters.⁵⁶ However, the court also opined that "[a]n aquifer with a substantial nexus with navigable-in-fact water may itself be protected under the Clean Water Act even if it is not necessarily a conduit for pollutants."⁵⁷ The Ninth Circuit affirmed the decision⁵⁸ but did not decide whether groundwater is a "navigable water" under the statute.⁵⁹

⁵² 24 F. Supp. 3d 980, 998 (D. Hawai'i 2014).

⁵³ 02/19/19 Order List, Orders of the Court – Term Year 2018 (Feb. 29, 2019), https://www.supremecourt.gov/orders/courtorders/021919zor_758b.pdf.

⁵⁴ Maui, 24 F. Supp. 3d at 983-84.

⁵⁵ *Id.* at 984-85.

⁵⁶ Id. at 994.

⁵⁷ *Id.* The Ninth Circuit stated on appeal that: "The [district] court based its decision on three independent grounds: (1) the County 'indirectly discharge[d] a pollutant into the ocean through a groundwater conduit,' (2) the groundwater is a 'point source' under the CWA, and (3) the groundwater is a 'navigable water' under the Act. Hawai'i Wildlife Fund v. County of Maui, 886 F.3d 737, 743 (9th Cir. 2018) (citing County of Maui, 24 F. Supp. 3d at 993, 999, 1005). However, the district court did not expressly or impliedly hold that groundwater *is* a navigable water. The court held that liability attached by applying either the "conduit' theory" or the Ninth Circuit's test from Northern California River Watch v. City of Healdsburg, 496 F.3d 993 (9th Cir.2007), which requires that both (1) a "hydrological connection" exists between the groundwater and receiving waters, and (2) that "there are significant physical, chemical and biological impacts as a result of the connection." Maui, 24 F. Supp. 3d at 1005. Similarly, the district court also did not hold that groundwater is a point source. *See id.* at 999. The appellate court's confusion over the district court's holding demonstrates how: (1) courts have struggled to identify the appropriate method of approaching this complex issue and responded by compartmentalizing the analysis, and (2) the framing of the issue on appeal can either guide or prejudice the outcome.

⁵⁸ Maui, 886 F.3d 737 at 749 ("We hold the County liable under the CWA because (1) the County discharged pollutants from a point source, (2) the pollutants are fairly traceable from the point source to a navigable water such that the discharge is the functional equivalent of a discharge into the navigable water, and (3) the pollutant levels reaching navigable water are more than de minimis.")

⁵⁹ Id. at 748.

In sum, there may be cases such as *Earth Sciences* in which the court must determine whether a receiving water is subject to CWA jurisdiction under the terms of the CWA and within the bounds of Commerce Clause authority. Where there is no factual dispute that an intermediary conduit conveys pollutants into a navigable water downstream, however, it is misguided to focus on whether the conduit itself constitutes a navigable water, whether that analysis is used to uphold or to reject CWA jurisdiction.

B. "Point Source"

Other courts have focused their conduit analysis on the phrase "point source." The CWA defines "point source" as "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged."⁶⁰ Some courts have attempted to effectuate the goals of the CWA by deciding that a conduit is itself a point source if it carries pollutants from a traditional point source to navigable waters. Although this analysis reaches the opposite result from some cases construing the term "navigable waters" in isolation, finding rather than precluding liability, in some cases the analysis is similarly atomized.

The Fifth Circuit decided the relationship between the definition of point source and CWA permitting jurisdiction in *Sierra Club v. Abston Construction Co., Inc.*⁶¹ The defendant mining company was strip mining for coal.⁶² This involved the removal of overburden, which was pushed

⁶⁰ 33 U.S.C. § 1362(14). "This term does not include agricultural stormwater discharges and return flows from irrigated agriculture." *Id.* While this definition includes "conduit" as an example of a conveyance that may constitute a point source under the Act, we use the term "conduit" more broadly to represent any means by which a pollutant discharged from any "discernible, confined and discrete conveyance" may reach a water body that is universally recognized as navigable.

^{61 620} F.2d 41 (5th Cir. 1980).

⁶² *Id.* at 43.

aside into highly-erodible "spoil piles."⁶³ Rainwater runoff and water draining from within the mined pit then formed eroded ditches and gullies that conveyed silt and acids from the piles into a nearby creek.⁶⁴ The Fifth Circuit asserted "the issue is whether pollution carried in various ways into a creek from defendant coal miners' strip mines is 'point source' pollution controlled by the Act."⁶⁵ The court answered its question in the affirmative, stating that "[g]ravity flow, resulting in a discharge into a navigable body of water, may be part of a point source discharge if the miner at least initially collected or channeled the water and other materials."⁶⁶ Further, this definition would apply "even if the miners ha[d] done nothing beyond the mere collection of rock and other materials," and the resulting erosion from rainwater runoff formed the ditches and gullies that channeled the water to the creek.⁶⁷

Subsequent courts have utilized the "collected or channeled" test in similar contexts to determine that a medium that conveys pollutants is a point source from which pollutants are discharged. In *Concerned Area Residents for the Environment v. Southview Farm*, plaintiffs claimed that the defendant concentrated animal feeding operation (CAFO) violated the CWA by discharging liquid manure onto surrounding fields because the manure drained off the fields and was eventually carried through a swale connected to an underground pipe, into a ditch, and to a nearby stream.⁶⁸ Noting that "the definition of a point source is to be broadly interpreted," the Second Circuit found that the swale and pipe constituted a "point source" because the liquid manure was "collected and channelized" through the swale.⁶⁹ The Second Circuit later re-affirmed

- ⁶⁵ *Id.* at 43.
- ⁶⁶ *Id.* at 45. ⁶⁷ *Id.*

⁶³ Id.

⁶⁴ *Id.* at 43, 46.

^{°&#}x27; Ia.

⁶⁸ 34 F.3d 114, 118-19 (2d Cir. 1994).

⁶⁹ *Id.* at 119.

Southview Farm's logic in different factual circumstances, indicating that pollutants collected and discharged onto a field from which they "*directly flow[s]*" into navigable waters are point source discharges.⁷⁰

These cases were not wrong in focusing on the definition of point source, particularly where defendants denied CWA jurisdiction by arguing that the pollution in question constituted nonpoint source rather than point source pollution. For section 301(a) to apply, a discharge must originate from a point source. Once there is a point source, however, there is no need for additional point sources at each link in the chain of conveyance of pollutants to a navigable water. A focus on the definition of point source out of context, therefore, can lead to an inappropriately atomistic analysis, and some conduit cases fell into this definitional trap.

In the realm of groundwater discharges, for example, several courts have expressly ruled that groundwater either is or is not a "point source" from which pollutants are added to a navigable water, even where the pollutants clearly were discharged by a point source initially.⁷¹ In *Maui*, the district court explained that "point source" is defined very broadly under the CWA but specifically excludes "agricultural stormwater discharges and return flows from irrigated agriculture."⁷² Therefore, "it 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."⁷³

⁷⁰ *See* Simsbury-Avon Preservation Club, Inc. v. Metacon Gun Club, Inc., 575 F.3d 199, 223 (2d Cir. 2009) (emphasis in original) (holding that plaintiff's claim of lead leaching from spent munitions into groundwater and eventually to nearby wetlands was not sustainable because there was no evidence that the leachate directly flowed from the ground into the wetlands).

⁷¹ See Raritan Baykeeper, Inc. v. NL Industries, Inc., 2013 WL 103880, 15 (D.N.J. 2013) ("Plaintiffs have sufficiently pleaded that groundwater is a point source because it is hydrologically connected to the river); Cf Tri-Realty Company v. Ursinus College, 124 F. Supp. 3d 418 (E.D.Pa. 2015) ("diffuse groundwater migration is not point source pollution").

⁷² 24 F. Supp. 3d at 995 (citing 33 U.S.C. § 1362(14)).

⁷³ Id.

Although the court also upheld its ruling directly under the conduit theory of liability⁷⁴, it noted: "[t]here is nothing inherent about groundwater conveyances and surface water conveyances that requires distinguishing ... under the Clean Water Act."⁷⁵ Thus, the district court found CWA liability not because there was a discharge from the sewage treatment plant—which is clearly a point source—through groundwater and into a navigable water (the Pacific Ocean); but rather because the groundwater conduit was a point source.

In a trio of significant 2018 opinions, the Fourth and Sixth Circuits relied on the definition of "point source" to reject the conduit theory of liability as applied to pollutants seeping from coal ash impoundments. In *Sierra Club v. Virginia Electric & Power Company*, the Fourth Circuit recognized the conduit theory of discharge,⁷⁶ but its decision turned on the word "conveyance" in the definition of "point source."⁷⁷ Although arsenic from the coal ash stored in defendant's impoundments reached navigable waters via groundwater seepage, "that simple causal link does not fulfill the Clean Water Act's requirement that the discharge be *from a point source*."⁷⁸ The definition of "point source," the Court explained, requires at its core that some facility must function as a discrete, not generalized, "conveyance."⁷⁹ But the Court noted that the ponds were not built to convey the pollutants or anything else; they functioned as storage, not a conveyance.⁸⁰

⁷⁴ See id. at 995-97.

⁷⁵ *Id.* at 995

⁷⁶ The court had recognized the conduit theory of liability a mere 6 months earlier in Upstate Forever v. Kinder Morgan Energy Partners, L.P., 887 F.3d 637 (4th Cir. 2018). The court found that a discharge of gasoline from a broken pipeline into groundwater which in turn reached navigable waters constituted an ongoing CWA violation. *See Id.* at 649. The ruptured pipeline was a point source within the meaning of the Act, and the "discharge need not be channeled by a point source until it reaches navigable waters."

⁷⁷ 903 F.3d 403 (4th Cir. 2018).

⁷⁸ *Id.* at 410 (emphasis in original).

⁷⁹ Id.

⁸⁰ *Id.* at 411.

diffusely through the soil," and this generalized, site-wide seepage did not constitute a point source.⁸¹

The Sixth Circuit followed a similar line of reasoning in the companion cases of *Tennessee Clean Water Network v. Tennessee Valley Authority*⁸² and *Kentucky Waterways Alliance v. Kentucky Utilities Company.*⁸³ There, the defendant operators of coal-fired power plants had for decades pumped coal ash into unlined impounds.⁸⁴ The impoundments were constructed over porous karst terrain, from which pollutants leached into nearby lakes or rivers,⁸⁵ causing proven elevated levels of selenium in a nearby lake in at least one case.⁸⁶

This Sixth Circuit rejected two theories of liability put forth by the plaintiffs. First, plaintiffs argued that groundwater flowing through fissures in the karst terrain constituted a point source.⁸⁷ The Court responded that although groundwater may be a "conveyance" of pollutants, it is not "discernible," "confined," or "discrete". Rather, the court reasoned, groundwater is a "diffuse medium that seeps in all directions"⁸⁸ Groundwater is not a point source because "[o]ne cannot look at groundwater and discern its precise contours as can be done with traditional point sources like pipes, ditches, or tunnels."⁸⁹ Second, plaintiffs argued in the alternative that the coal ash ponds were point sources that discharged pollutants *through* hydrologically connected groundwater into navigable waters. While not necessarily essential to its holding,⁹⁰ the court

⁸¹ *Id.* (emphasis in original).

^{82 905} F.3d 436 (6th Cir. 2018)

⁸³ 905 F.3d 925 (6th Cir. 2018)

 ⁸⁴ See Tennessee Clean Water Network, 905 F.3d at 439-40; Kentucky Waterways Alliance, 905 F.3d at 930-31.
 ⁸⁵ Id.

⁸⁶ Kentucky Waterways Alliance, 905 F.3d at 931.

⁸⁷ *Id.* at 933.

⁸⁸ *Id.* (internal quotations omitted) (citations omitted).

⁸⁹ Id.

⁹⁰ The court ultimately rejected the conduit theory outright on the basis that an "effluent limitation" requires a discharge *into* a navigable water. *See* infra Part II.D.

opined that the coal ash ponds themselves likely were not point sources; they were not "conveyances," and in fact they were designed to perform the opposite function—to store pollutants.⁹¹

Thus, as with the issue of whether pollutants ultimately reach navigable waters, courts that found CWA jurisdiction based solely on the question of whether the discharge originated from a point source did not necessarily reach the wrong result, but only if there was also an addition of pollutants from those sources into navigable waters. The analysis simply led later litigants and courts astray in their analysis. Courts that rejected CWA liability despite the existence of an upstream point source, on grounds that the conveying medium was not also a point source, arguably did reach an incorrect result through an atomized analysis.

C. "Addition" of a Pollutant

A third category of decisions in which some courts relied on construction of a single statutory term is the "addition"⁹² line of cases. These cases have typically focused on the transfer of polluted water from one water body to another, or from one segment of a water body to another. In many respects, this is functionally not so different from a discharge of pollutants into a terminal water body occurring as a result of migration through groundwater. The result either way is the transfer of pollutants and a resulting impairment of water quality in the receiving waters. However, in these "addition" cases, there exists the possibility that the original discharge of pollutants into the "upstream" water body was already subject to regulation.

⁹¹ *Id.* at n.8.

⁹² "The term "discharge of a pollutant" and the term "discharge of pollutants" each means (A) *any addition* of any pollutant to navigable waters from any point source, (B) *any addition* of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft." 33 U.S.C. § 1362(12) (emphasis added).

Although a number of lower courts had addressed this issue earlier,⁹³ the seminal Supreme Court case interpreting "addition" is *South Florida Water Management Dist. v. Miccosukee Tribe of Indians.* The Court addressed the issue of whether pumping phosphorus-laden water, collected in a canal adjacent to developed areas, into a nearby water conservation area (wetland) constituted an "addition" of a pollutant.⁹⁴ In its opening brief, the Water District argued that an addition can occur only when a pollutant originates from a point source.⁹⁵ The Court quickly disposed of this hypothesis; a point source is by definition a *conveyance*, and examples include pipes, ditches, tunnels, and other objects that do not themselves generate pollutants but merely transport them.⁹⁶ Thus, the pump through which the pollutants were conveyed constituted a point source.

The Court then addressed the so-called "unitary waters" theory briefed by the Government as *amicus curiae*.⁹⁷ This theory also relied on the definition of "addition of a pollutant" and suggested that all "navigable waters" are to be viewed unitarily for the purposes of NPDES permitting. ⁹⁸ Stated simply, a pollutant can only be "added" to navigable waters once. Therefore, any discharge or transfer of water from one navigable water to another would not require such a permit, "even if one water body were polluted and the other pristine, and the two would not otherwise mix."⁹⁹ The Court declined to reach the issue because it was not raised below¹⁰⁰ but indicated that several provisions within the Act do not support the theory.¹⁰¹ For example, a State

⁹³ See infra notes 102-05 and accompanying text.

⁹⁴ 541 U.S. 95, 100-01 (2004).

⁹⁵ Id. at 104.

⁹⁶ *Id.* (citing 33 U.S.C. § 1364(14)).

⁹⁷ *Id.* at 105.

⁹⁸ Id.

⁹⁹ *Id.* at 106 (citing Catskill Mountains Chapter of Trout Unlimited, Inc. v. New York, 273 F.3d 481, 492 (C.A.2 2001); Dubois v. United States Dept. of Agriculture, 102 F.3d 1273 (C.A.1 1996)).

¹⁰⁰ See Id. at 109.

¹⁰¹ See Id. at 107.

may establish a designated use¹⁰² and a corresponding total maximum daily load (TMDL)¹⁰³ for a particular water body. This approach protects not only the "waters of the United States" as a whole but also individual water bodies.¹⁰⁴ Although a majority of courts rejected the "unitary waters" theory during this time period,¹⁰⁵ EPA ultimately adopted this approach by rule in 2008,¹⁰⁶ and it has since been upheld under the *Chevron* deference doctrine.¹⁰⁷

Several early court decisions also rejected the premise that the transfer of polluted waters from one water body to another, or from one portion of a water body to another, constitutes an "addition" of a pollutant. For example, permits were not required for discharges from a dam contributing to lowered downstream water quality¹⁰⁸ or the discharge of fish parts from hydroelectric generators through which the same water and formerly-living fish had been drawn.¹⁰⁹ The Second Circuit later explained these holdings with a frequently-cited metaphor:

¹⁰² 33 U.S.C. § 1313(c)(2)(A).

¹⁰³ *Id.* § 1313(d).

¹⁰⁴ Miccosukee, 541 U.S. at 107.

¹⁰⁵ See Friends of Everglades v. South Florida Water Management Dist., 570 F.3d 1210, 1218 ("In sum, all of the existing precedent and the statements in our own vacated decision are against the unitary waters theory."); see also Catskill Mountains Ch. of Trout Unlimited, Inc. v. City of New York, 273 F.3d 481, 491 (2d Cir. 2001) ("[T]he transfer of water containing pollutants from one body of water to another, distinct body of water is plainly an addition and thus a 'discharge' that demands an NPDES permit."); Dague v. City of Burlington, 935 F.2d 1343, 1354–55 (2d Cir. 1991) (holding that a culvert conveying water from a polluted beaver pond into a nearby wetland need not itself "add" pollutants to the water); Dubois v. U.S. Dep't of Agric., 102 F.3d 1273, 1296 (1st Cir. 1996) ("[T]here is no basis in law or fact for the district court's [unitary waters] theory.")

¹⁰⁶ The new regulation included the following exclusion for purposes of NPDES permitting: "Discharges from a water transfer. Water transfer means an activity that conveys or connects waters of the United States without subjecting the transferred water to intervening industrial, municipal, or commercial use. This exclusion does not apply to pollutants introduced by the water transfer activity itself to the water being transferred." NPDES Water Transfers Rule, 73 Fed.Reg. 33,697, 33,708 (June 13, 2008) (codified at 40 C.F.R. § 122.3(i)).

¹⁰⁷ See Friends of Everglades, 570 F.3d at 1219 (explaining that the regulation must be upheld if it is "a reasonable construction of an ambiguous statute.") (citing Chevron, U.S.A., Inc. v. Natural Res. Defense Council, Inc., 467 U.S. at 842–43 ("If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.")).

¹⁰⁸ See National Wildlife Federation v. Gorsuch, 693 F.2d 156, 161-64, 175 (D.C. Cir. 1982) (deferring to EPA's interpretation that "addition from a point source occurs only if the point source itself physically introduces a pollutant into water from the outside world.").

¹⁰⁹ See National Wildlife Federation v. Consumers Power Co., 862 F.2d 580, 585-86 (6th Cir. 1988) (The [hydroelectric generator], in the process of generating electricity, transforms water containing live fish into water containing live and dead fish. The fish originate in Lake Michigan, and any resulting pollution in the form of entrained fish is, as in Gorsuch, an inherent result of dam operation.").

The Gorsuch and Consumers Power decisions comport with the plain meaning of "addition," assuming that the water from which the discharges came is the same as that to which they go. If one takes a ladle of soup from a pot, lifts it above the pot, and pours it back into the pot, one has not "added" soup or anything else to the pot....¹¹⁰

Other courts differentiated from these early holdings in circumstances where the terminal water body otherwise would not naturally receive water from the discharging water body. In *Dubois v. U.S. Dept. of Agriculture*, a ski resort pumped water from nearby waterways through its snowmaking equipment, discharging the excess polluted water into Loon Pond, a pristine mountain lake designated by the state as a class A waterway.¹¹¹ The First Circuit found this to be an "addition" of pollutants because: (1) as Loon Pond is uphill of the waterways, water would not naturally flow from them into the pond – therefore the water bodies are not "hydrologically connected" in a directional sense; and (2) the two water bodies were not of "like quality" – pollutants not present in Loon Pond exist in the discharging waterways.¹¹²

The Second Circuit has also distinguished between water bodies of dissimilar quality. In *Dague v. City of Burlington*, the court implicitly upheld the conduit theory of discharge where a city landfill polluted a beaver pond, and these pollutants were conveyed through a culvert into nearby wetlands.¹¹³ In so doing, the court rejected the city's claim that the culvert was not a point source because it did not "add" pollutants to navigable waters.¹¹⁴ Ten years later, the Second Circuit again found a CWA violation where New York City diverted water from a reservoir,

¹¹⁰ Catskill Mountains Ch. of Trout Unlimited, 273 F.3d at 492 (quotations in original).

¹¹¹ 102 F.3d 1273, 1277 (1st Cir. 1996).

¹¹² See Id. at 1298-99.

¹¹³ 935 F.3d 1343, 1347-48.

¹¹⁴ See Id. at 1354-55.

through a tunnel several miles long, and into a clear and cool creek within a different watershed.¹¹⁵ The court explained that no person could reasonably find the reservoir and the creek to be "in any sense the 'same,' such that 'addition' of one to the other is a logical impossibility."¹¹⁶

As was true for the terms "navigable waters" and "point source," the key issue in a CWA case may be whether a point source in fact cases an "addition" of pollutants to navigable waters. By atomizing the issue, however, courts can lose focus on the overall question of whether there is an identifiable—hence controllable—point source from which pollutants are added to a navigable water, or a portion of a navigable water that would not have received those pollutants but for the point source discharge. As discussed below, that requires attention to the functions the CWA permitting scheme serves, not single terms construed in isolation.

D. "From" and "Into"

As a subset of the two previously discussed categories of analysis, some courts have focused narrowly on the requirement that a discharge be *from* a point source, or on the fact that an effluent limitation restricts the amount of pollutants which may be discharged *into* a navigable water. Reliance on the plain meaning of "from" has often led courts to uphold conduit discharge liability. This has been especially true since *Rapanos*, in which Justice Scalia's plurality opinion noted: "The Act does not forbid the 'addition of any pollutant *directly* to navigable waters from any point source,' but rather the 'addition of any pollutant *to* navigable waters."¹¹⁷ Although *Rapanos* was a Section 404 permit discharge issue and not a section 402 conduit discharge situation, Justice Scalia's opinion validated this method of analysis.

¹¹⁵ Catskill Mountains Ch. of Trout Unlimited, 273 F.3d at 484-85.

¹¹⁶ *Id.* at 492.

¹¹⁷ Rapanos v. U.S., 547 U.S. 715, 743 (U.S. 2006) (emphasis in original).

For example, in *Waterkeeper Alliance, Inc. v. U.S. E.P.A.*, farming industry groups challenged EPA regulations relevant to concentrated animal feeding operations (CAFOs).¹¹⁸ The rule required CAFOs to implement a nutrient management plan that, *inter alia*, regulated runoff of liquid manure applied to fields.¹¹⁹ The petitioners challenged the rule's validity under the CWA because it regulated "uncollected" discharges.¹²⁰ The Second Circuit disagreed. CAFOs are indisputably a "point source,"¹²¹ and thus any discharge "from" a CAFO is necessarily a discharge from a point source, regardless of whether the liquid manure is "collected or channelized" before leaving the land application site. To hold otherwise "would be, in effect, to impose a requirement not contemplated by the Act: that pollutants be channelized not once but twice before the EPA can regulate them."¹²²

Five years later, the court doubled-down on this analysis in *Peconic Baykeeper v. Suffolk County*.¹²³ In an attempt to curb mosquito populations, the County sprayed from trucks and helicopters¹²⁴ industrial pesticides¹²⁵ that allegedly reached surface waters.¹²⁶ The district court held that because these vehicles discharged the pesticides into the air, not waters, any discharge was indirect and thus not from a point source.¹²⁷ The appellate court reversed, explaining that the "definition of a point source is to be broadly interpreted and embrac[es] the broadest possible

¹¹⁸ 399 F.3d 486 (2d Cir. 2005).

¹¹⁹ See id. at 495-96.

¹²⁰ *Id.* at 510.

¹²¹ "The term 'point source' means any discernible, confined and discrete conveyance, including but not limited to any ... concentrated animal feeding operation ... from which pollutants are or may be discharged." 33 U.S.C. § 1362(14).

¹²² Waterkeeper Alliance, Inc., 399 F.3d at 511.

¹²³ 600 F.3d 180 (2d Cir. 2010).

¹²⁴ *Id.* at 183.

¹²⁵ The pesticides, Scourge and Anvil, were approved under the Federal Insecticide, Fungicide and Rodenticide Act and, when sprayed as an ultra-low volume aerosol mist, created a "fog cloud" that enveloped and killed mosquitos. *Id.* at 183. The Scourge label warned to "[a]void direct application over lakes, ponds and streams," while the Anvil restricted application "directly to water, or to areas where surface water is present or to intertidal areas …." *Id.* at 183-84.

¹²⁶ See id.

¹²⁷ *Id.* at 188.

definition of any identifiable conveyance from which pollutants might enter waters of the United States."¹²⁸ Further, the word "from" indicates a starting point and denotes the source of something.¹²⁹ In the case at hand, the vehicles' spray apparatus was the source of the discharge, and the pesticides were discharged "from" these sources, not from the air.¹³⁰

The Fourth Circuit expressly endorsed the *Waterkeeper Alliance* court's rationale in *Upstate Forever v. Kinder Morgan Energy Partners, L.P.*¹³¹ The case involved a rupture of defendant's underground pipeline, causing nearly 400,000 gallons of gasoline to spill underground.¹³² Plaintiffs alleged that the gasoline was migrating through groundwater and surfacing into navigable waterways and adjacent wetlands less than 1,000 feet downgradient from the spill site.¹³³ In determining that a "discharge need not be channeled by a point source until it reaches navigable waters",¹³⁴ the court also engaged in its own prepositional analysis. Just as the Act does not require a discharge directly to navigable waters,¹³⁵ neither does it require a discharge *directly* "from" a point source.¹³⁶ "The word 'from' indicates 'a starting point: as (1) a point or place where an actual physical movement … has its beginning.' Under this plain meaning, a point source is the starting point or cause of a discharge under the CWA, but that starting point need not convey the discharge directly to navigable waters."¹³⁷

¹²⁸ *Id.* (citing Cordiano v. Metacon Gun Club, Inc., 575 F.3d 199, 219 (2d Cir.2009) (quoting Dague v. City of Burlington, 935 F.2d 1343, 1354-55 (2d Cir.1991))).

¹²⁹ *Id.* (citing Webster's Third International Dictionary Unabridged 913 (2002)).

¹³⁰ Id.

^{131 887} F.3d 637 (4th Cir. 2018)

¹³² *Id.* at 643.

¹³³ Id.

¹³⁴ *Id*. at 651.

¹³⁵ *Id.* at 650 (citing Rapanos, 547 U.S. at 743).

¹³⁶ *Id.* (emphasis added).

¹³⁷ *Id.* (citing Webster's Third New International Dictionary 913 (Philip Babcock Gove et al. eds., 2002)) (emphasis added in original) (citations omitted).

Five months later, however, the Sixth Circuit relied on the plain meaning of "into" to reach an entirely different conclusion. The court indicated in *Kentucky Waterways* and *Tennessee Clean Water Network* that a coal ash pond could not be a point source because it discharged pollutants through groundwater and not directly *into* navigable waters.¹³⁸ More importantly, the Court based its decision not on the component terms in the chain of section 301(a) analysis, but on the separate definition of "effluent limitation." The court described this term as "the heart of the CWA's regulatory power"—a restriction on the quantity of a pollutant that may be "discharged from point sources *into* navigable waters."¹³⁹ The preposition "into", the court reasoned, "indicates directness. It refers to a point of entry."¹⁴⁰ The Court concluded: "Thus, for a point source to discharge *into* navigable waters, it must dump *directly* into those navigable waters—the phrase "into" leaves no room for intermediary mediums to carry the pollutants."¹⁴¹ In so holding, the court acknowledged its direct contradiction with the Fourth and Ninth Circuits¹⁴² and created the current circuit split regarding conduit discharge liability.

The *Kentucky Waterways* and *Tennessee Clean Water Network* opinions were accompanied by a vehement dissent in which Circuit Judge Stranch attacked the majority's compartmentalized analytical approach. First, the majority's reliance on the dictionary definition of "into" was misplaced because a contravention of Section 301 is not limited to violation of an "effluent limitation."¹⁴³ If the majority were to rely on the interpretation of a single preposition,

¹³⁸ See supra text accompanying note 91.

¹³⁹ Kentucky Waterways Alliance, 905 F.3d at 961 (citing 33 U.S.C. § 1362(11) (emphasis in original).

¹⁴⁰ Id. (citing Into, WEBSTER THIRD NEW INTERNATIONAL DICTIONARY, UNABRIDGED. 2018. Web.21 Aug. 2018 ("[E]ntry, introduction, insertion."); Into, OXFORD ENGLISH DICTIONARY (2d ed. 1989) ("Expressing motion to a position within a space or thing: To point within the limits of; to the interior of; so as to enter.") (emphasis added in original))

¹⁴¹ *Id.* (emphasis in original). The proceeding analysis was cited and also utilized by the court in Tennessee Clean Water Network, 905 F.3d at 444.

 ¹⁴² "In so holding, we disagree with the decisions from our sister circuits in Upstate Forever v. Kinder Morgan Energy Partners and Hawai'i Wildlife Fund v. Cty. of Maui." *Id.* at 933 (citations omitted).
 ¹⁴³ See id. at 943.

wrote Judge Stranch, it should at least choose the proper word and analyze the requirement that an addition be "*to*" navigable waters from a point source.¹⁴⁴ Second, the court's interpretation of "into" opens a massive regulatory loophole in contradiction of Congressional intent.¹⁴⁵ "Congress 'does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes."¹⁴⁶

The Sixth Circuit's reliance on a single preposition without considering the full statutory context of the provision in which it occurs is perhaps the most extreme example of atomization in the conduit series of cases. Section III contextualizes all of the terms discussed above in an effort to illustrate the importance of interpreting individual statutory words and phrases in light of the overall statutory text and structure.

III. A Functional, Whole Statute Approach to the Conduit Analysis

As shown in Part II, courts have taken very different analytical approaches to the same basic question: whether an activity that releases pollutants into a water body regulated by the CWA through another medium, rather than directly, is lawful without a permit issued pursuant to section 402 or 404 of the Act? Some courts analyzed this issue by asking whether the initial medium through which the pollutants initially traveled must be "navigable waters?"¹⁴⁷ Others queried whether the medium through which the pollutants reach the water body is a "point source?"¹⁴⁸ A third group of courts asked whether such a discharge constitutes an "addition" of pollutants to

¹⁴⁴ *Id*.

¹⁴⁵ *Id*.

¹⁴⁶ *Id.* (citing Epic Sys. Corp. v. Lewis, 138 S. Ct. 1612, 1626–27 (2018) (quoting Whitman v. Am. Trucking Assns., Inc., 531 U.S. 457, 468, 121 S.Ct. 903 (2001)).

¹⁴⁷ See supra Part II.A.

¹⁴⁸ See supra Part II.B.

navigable waters.¹⁴⁹The narrowest inquiry probed whether the discharge of pollutants "to" rather than "into" navigable waters was subject to an "effluent limitation" as defined by the Act?¹⁵⁰

This confusion poses a problem for the U.S. Supreme Court in resolving the circuit split, but also highlights generally the problems caused by interpretive atomization of a statute. To decide which courts below decided the issue correctly, the Court must determine initially which courts cast the issue properly. This conduit cases provide a good example of how the issue becomes clearer by starting with the operative structure of the statutory scheme and interpreting individual definitions and other terms in light of that structure, rather than by focusing solely on one or more discrete words or phrases "downstream" in the statutory scheme.

A. The CWA Statutory Structure

The CWA is an exceedingly long and complex statute, with multiple regulatory and other programs. Many courts and commentators begin their analysis of the CWA by invoking its national objective "to restore and maintain the chemical, physical and biological integrity of the Nation's waters."¹⁵¹ Some courts cite this text as the "guiding star" of the statute.¹⁵² Although goals and objectives guide statutory implementation generally, statements of intent do not control the meaning of other statutory provisions¹⁵³ unless expressly incorporated in operative provisions of the statute.¹⁵⁴ Moreover, in the case of the CWA, the opening objective itself begs several

¹⁴⁹ See supra Part II.C.

¹⁵⁰ See supra Part II.D.

¹⁵¹ 33 U.S.C. §1251(a).

¹⁵² See, e.g., Citizens Coal Council v. U.S. E.P.A., 447 F.3d 879, 907 (6th Cir. 2006) ("The guiding star [of the Clean Water Act] is the intent of Congress to improve and preserve the quality of the Nation's waters.") (quoting Am. Petroleum Institute v. EPA, 540 F.2d 1023, 1028 (10th Cir.1976)).

¹⁵³ See, e.g., A. SCALIA & B. GARNER, *supra* note 13, at 217–20 (2012) (explaining that while a preamble or purpose clause is a permissible indicator of meaning, "[t]he purpose clause cannot override the operative language"); Sturgeon v. Frost, No. 17-949, 2019 WL 1333260, at *15 (U.S. Mar. 26, 2019) (Statements of purpose, by their nature, "cannot override [a statute's] operative language.") (quoting *id.* at 220).

¹⁵⁴ The CWA includes one such example, although one that is not relevant to the issues analyzed in this article. Section 303(c) requires states to adopt water quality standards (WQS) that "serve the purposes of" the Act. 33 U.S.C. §1313(c). EPA has interpreted this to require WQS to meet, at a minimum, some of the statutory goals. *See* Miss. Comm'n on Natural Resources v. Costle, 625 F.2d 1269 (5th Cir. 1980).

important questions,¹⁵⁵ and applies to the full range of the Act's regulatory and nonregulatory programs. It may be useful to use the CWA's objective and subsidiary goals to confirm that a particular statutory construction makes sense, but it is not the best starting point for the analysis.

The conduit issue illustrates why a more precise mode of statutory construction is to begin with the key operative statutory provision that governs the issue, and then to interpret the meaning of that provision in light of applicable definitions and other related statutory terms and provisions. A functional, whole statute analysis should also ensure that, as between competing potential interpretations of particular provisions, the best meaning is one that does not generate inconsistencies across statutory sections or programs, and that avoids illogical loopholes or other flaws that Congress would not likely have intended. In the case of the CWA, atomistic interpretations that confer unintended exemptions to some dischargers have two distinct but related flaws. They thwart the comprehensive approach to water pollution Congress devised and also confer unfair competitive advantages to some facilities at the expense of others.

1. The qualified discharge ban

The key operative provision governing the conduit line of cases—and the central CWA regulatory provision through which other sections operate—is the qualified discharge prohibition in CWA §301(a).¹⁵⁶ This provision is central to the federal permitting and associated regulatory

¹⁵⁵ For example, what did Congress mean by the "Nation's Waters," relative to "navigable waters" or "Waters of the United States," the latter two of which appear in the statutory definitions? 33 U.S.C. §§1362(7), (12).

¹⁵⁶ 33 U.S.C. §1311(a). Although it may seem counterintuitive that the pivotal section of the CWA is in the middle of the statute, that is deceptive for structural reasons. Title I of the CWA, labeled "Research and Related Programs," establishes the law's objective, goals, and policies, and includes a range of study and planning provisions, as well as some programs specific to particular water bodies. *See id.* §§1251-1274. Title II is called "Grants for Construction of Treatment Works," and established and governed the "construction grants" program for publicly owned sewage and other treatment works and related planning and other provisions. *See id.* §§1281-1301. Title III is labeled "Standards and Enforcement," and established the key regulatory control provisions of the Act, of which section 301(a) is the first. *See id.* §§1311-1330.

mechanisms governing the category of water pollution sources known as "point sources."¹⁵⁷ It is therefore the logical starting point for any analysis of which pollution sources are subject to federally-mandated permits and pollution controls.¹⁵⁸

Section 301(a) provides: "Except as in compliance with this section [section 301] and sections 302, 306, 307, 318, 402, and 404, the discharge of any pollutant by any person shall be unlawful."¹⁵⁹ For sources covered by section 301(a), this provision is absolute. It bans the discharge of *any* pollutant by *any* person absent a permit issued under section 402¹⁶⁰ or 404¹⁶¹ of the Act, and unless that permit imposes, and the permittee complies with, the pollution control requirements prescribed by the other listed provisions. Permits thus transform the absolute discharge ban into a qualified ban. The ban itself does not prohibit discharges altogether,¹⁶² but ensures that the "discharge of any pollutant" is prohibited unless subject to the substantive control requirements specified in other provisions of the CWA and its implementing regulations.

The next logical question, then, is which pollution sources are subject to the qualified discharge ban? That question turns on the meaning of the term "discharge of any pollutant." The CWA defines "discharge of a pollutant" and "discharge of pollutants"¹⁶³ to mean "(A) any addition

¹⁵⁷ See 33 U.S.C. §1362(14).

¹⁵⁸ The CWA distinguishes between point sources subject to the Act's permit scheme and nonpoint sources that contribute to water pollution but are subject to state regulation pursuant to other provisions of the statute. *See id.* §§ 1288, 1329.

¹⁵⁹ *Id.* §1331(a).

¹⁶⁰ *Id.* §1342 (authorizing EPA or delegated states to issue National Pollutant Discharge Elimination System (NPDES) permits governing the discharge of pollutants subject to strict control requirements).

¹⁶¹ *Id.* §1344 (authorizing the U.S. Army Corps of Engineers or delegated states to issue permits governing the discharge of a subset of pollutants known as "dredge or fill material" subject to strict control requirements).

¹⁶² As described below, however, several of the substantive controls imposed by those permits are supposed to move toward "zero discharge" wherever possible. *See, e.g.*, 33 U.S.C. §§ 1251(a)(1) (establishing a statutory goal that the discharge of pollutants be eliminated"), 1311(b)(2)(A) (requiring, for certain pollutants, "the elimination of discharges [where] technologically and economically achievable"); 1316(a)(1) (requiring "no discharge of pollutants" from new sources "where practicable").

¹⁶³ There is no indication in the statute or legislative history that the grammatical distinction between these two phrases and the words "discharge of *any* pollutant" in section 301(a) is meaningful.

of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft."¹⁶⁴

Inserting the definition of "discharge of a pollutant" into the text of section 301(a), then, produces the following rephrasing of the qualified discharge ban: "Except as in compliance with this section [section 301] and sections 302, 306, 307, 318, 402, and 404, the addition of any pollutant to navigable waters [or the waters of the contiguous zone or the ocean] from any point source by any person shall be unlawful." Coverage by the qualified discharge ban, then, requires three elements: (1) a "point source" from which there is (2) an "addition of any pollutant to" (3) "navigable waters" [or the contiguous zone or the ocean] by any person. Congress further defined "pollutant", ¹⁶⁵ point source, "¹⁶⁶ and "navigable waters,"¹⁶⁷ but not the term "addition".

Therein lies the interpretive issue for the conduit cases. Where pollutants from a point source flow directly into the navigable waters, there is clearly an "addition of pollutants" to those waters,¹⁶⁸ triggering the permitting and regulatory controls listed in section 301(a). As explained below,¹⁶⁹ those provisions serve carefully designed, logical functions consistent with the overall structure and goals of the statute. What does "addition … to" mean, however, when applied to a discharge that adds pollutants to navigable waters but through an intermediate medium? Although

¹⁶⁴ *Id.* §1362(12). The exception for "a vessel or other floating craft" is not relevant to any of the conduit cases.

¹⁶⁵ *Id.* §1362(6).

¹⁶⁶ *Id.* §1362(14).

¹⁶⁷ *Id.* §1362(7).

¹⁶⁸ Besides the conduit cases, the "addition" of a pollutant has been challenged in the "water transfer" cases, *see supra* note 10. As these cases addressed the specific issue of whether the transfer of already polluted water from one water body to another is subject to NPDES permitting requirements, they are not relevant to this assertion. ¹⁶⁹ See infra Part III.A.2.

that issue is not quite so pellucid, it is equally logical to construe the term "addition" in light of the whole statutory scheme, and the functions served by the Act's regulatory controls.

2. Permits for regulated sources of pollutants

Despite the seemingly absolutist phrase "the discharge of any pollutant shall be unlawful," section 301(a) does not serve as an unqualified ban on discharges to navigable waters. Rather, by prohibiting discharges "[e]xcept as in compliance with" other specified provisions of the CWA, section 301(a) serves two important and related functions. It ensures that all additions of pollutants to navigable waters from point sources are allowed only subject to properly issued permits from an authorized government agency. The permit process helps to ensure that authorized pollutant releases are subject to the monitoring and substantive controls prescribed in the Act. Understanding the functions of those permits and control provisions provides the context necessary to interpret the proper scope of discharges subject to section 301(a).

First, section 301(a) prohibits discharges unless allowed pursuant to a permit issued under either section 402 or 404. In plain language, section 301(a) serves the pivotal function of bringing those discharges into the CWA's regulatory "system" and using permits as the vehicle to implement applicable regulatory controls. It ensures that the responsible government agencies know who is releasing pollutants, to what water bodies, and of what characteristics and amount, so they can be monitored, assessed, and properly controlled.

The next question is which of the two permit schemes applies? Section 402 governs most pollutant discharges, through permits issued by EPA or states with delegated NPDES authority.¹⁷⁰

^{170 33} U.S.C. §1342.

Section 404 governs permits issued by ACE or states with delegated authority for a discrete subset of pollutant discharges, *i.e.*, discharges of "dredged or fill material."¹⁷¹

Section 404 primarily governs disposal of material dredged from rivers or harbors for purposes of navigation and shipping safety and convenience,¹⁷² or the use of material to fill wetlands and other areas on which a landowner wants to build or use for other purposes.¹⁷³ The line of CWA jurisdictional cases in which the U.S. Supreme Court has been most heavily involved, culminating thus far in the Court's divided opinion in *Rapanos*,¹⁷⁴ has involved section 404 permits because the disputes involved which water bodies, or which transitional areas in the continuum between land and water,¹⁷⁵ Congress included¹⁷⁶ in section 301(a)'s qualified discharge ban. The

Riverside Bayview Homes, 747 U.S. at 132.

¹⁷¹ *Id.* §1344.

¹⁷² See 33 U.S.C. § 1344(b) (permitted disposal sites for dredge and fill material shall be specified through, *inter alia*, the application of the economic impact of the site on navigation and anchorage); *id.* at § 1344(h)(1)(F) (A State administration program shall issue no permit if anchorage and navigation of any of the navigable waters would be substantially impaired thereby.)

¹⁷³ The original text of Section 404 referred only to the discharge of dredged or fill material "into the navigable waters" and made no mention of "wetlands." *see* Pub.L. 92-500, § 2, Oct. 18, 1972, 86 Stat. 884. However, in 1975, the Corps issued interim final regulations redefining "the waters of the United States" to include, *inter alia*, "freshwater wetlands" that are contiguous or adjacent to other navigable waters. 40 Fed. Reg. 31320, 31324 (July 25, 1975). Congress confirmed this interpretation in its 1977 amendments to the CWA, providing that a state may administer its own Section 404 permit program for the discharge of dredged or fill material into the navigable waters, "including wetlands adjacent thereto." 33 U.S.C. § 1344(g)(1). The Supreme Court later recognized that these amendments "reflect[] congressional recognition that wetlands are a concern of the Clean Water Act and support[] the conclusion that in defining the waters covered by the Act to include wetlands, the Corps is 'implementing congressional policy rather than embarking on a frolic of its own.' Riverside Bayview Homes, 474 U.S. at 139.

¹⁷⁵ Justice White addressed the complexity of this question in *Riverside Bayview Homes*:

On a purely linguistic level, it may appear unreasonable to classify "lands," wet or otherwise, as "waters." Such a simplistic response, however, does justice neither to the problem faced by the Corps in defining the scope of its authority under § 404(a) nor to the realities of the problem of water pollution that the Clean Water Act was intended to combat. In determining the limits of its power to regulate discharges under the Act, the Corps must necessarily choose some point at which water ends and land begins. Our common experience tells us that this is often no easy task: the transition from water to solid ground is not necessarily or even typically an abrupt one. Rather, between open waters and dry land may lie shallows, marshes, mudflats, swamps, bogs—in short, a huge array of areas that are not wholly aquatic but nevertheless fall far short of being dry land. Where on this continuum to find the limit of "waters" is far from obvious.

¹⁷⁶ Ultimately, there is also the question of which water bodies are properly subject to federal regulation under the Commerce Clause. U.S. CONST. art. I., §8, cl. 3. Thus far, the Supreme Court has interpreted the CWA in ways that have avoided the need to locate that jurisdictional limit. *See* SWANCC, 531 U.S. at 174 (noting that the Corps' assertion of jurisdiction over isolated wetlands under the "Migratory Bird Rule" "raises "significant constitutional

focal point of those disputes has been which waters comprise the "Waters of the United States" subject to the qualified discharge ban in section 301(a).¹⁷⁷

In the conduit cases, by contrast, the parties have not disputed whether water bodies into which the pollutants at issue in those cases ultimately flowed were Waters of the United States.¹⁷⁸ Rather, the issue has been the path through which those pollutants move before arriving in the receiving water, and therefore whether they qualify as an "addition of pollutants to" those waters. Because none of the cases involve disposal or use of dredged or fill material into wetlands or other water bodies,¹⁷⁹ section 402 permits would apply to those discharges. Therefore, the regulatory controls prescribed by section 402 inform the proper scope of sources covered.

3. Controls imposed under section 402 permits

Just as the qualified discharge ban imposed by section 301(a) brings dischargers within the regulatory system, the real function of a permit transcends that bureaucratic transaction. The permit is the vehicle through which the issuing agency articulates and imposes the regulatory conditions dictated in other portions of the CWA, and through which any violations of those requirements can be detected and redressed. These include "effluent limitations," the definition of

questions \dots and yet we find nothing approaching a clear statement from Congress that it intended § 404(a) to reach an abandoned sand and gravel pit such as we have here." Therefore, "[w]e thus read the statute as written to avoid the significant constitutional and federalism questions raised by respondents' interpretation and therefore reject the request for administrative deference.")

¹⁷⁷ *See supra*, note 33.

¹⁷⁸ See County of Maui, 24 F. Supp. 3d at 984 (effluent undisputedly flowed into the Pacific Ocean); Upstate Forever, 887 F.3d 643–44 (pollutants allegedly emerged in tributaries of the Savannah River, Browns Creek and Cupboard Creek and their adjacent wetlands and eventually seeped into Broadway Lake, Lake Secession, and Lake Russell); Kentucky Waterways Alliance, 905 F.3d at 930–31 (coal ash residue allegedly seeped into Herrington Lake, a large reservoir formed by the impoundment of the Dix River); Tennessee Clean Water Network, 905 F.3d at 440–41 (coal ash residue seeped into Old Hickory Lake along the Cumberland River).

¹⁷⁹ See County of Maui, 24 F. Supp. 3d at 983–84 (treated sewage effluent discharged into groundwater); Upstate Forever, 887 F.3d 643–44 (gasoline discharged into groundwater); Kentucky Waterways Alliance, 905 F.3d at 930–31, and Tennessee Clean Water Network, 905 F.3d at 440–41 (coal ash residue seeping into groundwater).

which the Sixth Circuit focused on in its analysis,¹⁸⁰ but permits serve other key functions and impose important additional requirements as well.

Section 402 authorizes the EPA Administrator to issue permits for discharges otherwise prohibited by section 301(a):

upon condition that such discharge will meet either (A) all applicable requirements under sections 1311, 1312, 1316, 1317, 1318 and 1343 of this title,¹⁸¹ or (B) prior to the taking of necessary implementing actions relating to all such requirements, such conditions as the Administrator determines are necessary to carry out the provisions of this chapter.¹⁸²

EPA has adopted detailed regulations prescribing the conditions that must be included in NPDES permits.¹⁸³ Section 402 also authorizes EPA to delegate authority to issue NPDES permits to states with approved programs.¹⁸⁴ To obtain such program delegation, however, a state must demonstrate that its permits will ensure compliance with the same list of other statutory provisions as apply to EPA-issued permits.¹⁸⁵ Notably, however, particularly with regard to the County of Maui facts, states with delegated NPDES permit programs also must have authority to issue permits to "control the disposal of pollutants into wells."¹⁸⁶

¹⁸⁰ See supra Part II(D).

¹⁸¹ This list translates to sections 301, 302, 306, 307, 308, and 403 of the uncodified version of the CWA (footnote not in original).

¹⁸² 33 U.S.C. \$1342(a)(1). To underscore the mandatory nature of all of those requirements, section 402 further specifies that the Administrator "shall prescribe conditions for such permits to assure compliance with the requirements of [the preceding paragraph] including conditions on data and information collection, reporting, and such other requirements as he deems appropriate." *Id* \$1342(a)(2).

¹⁸³ See 40 C.F.R. Pts. 122 - 125.

¹⁸⁴ 33 U.S.C. §1342(b).

¹⁸⁵ *Id.* §§1342(b)(1)(A) (requiring state permits to ensure compliance with applicable requirements of sections 301, 302, 306, 307, and 403); 1342(b)(2) (requiring state permits to ensure compliance with applicable requirements of section 308).

¹⁸⁶ *Id.* §1342(b)(1)(D). Presumably, this requirement was included in the state delegation program to ensure that the states, in cooperation with federal agencies, "prepare or develop comprehensive programs for preventing, reducing,

NPDES permits, therefore, serve a number of critical functions in the CWA statutory scheme. Most fundamentally, they ensure that no discharges of pollutants into waters covered by the Act occur "off the record" or without public notice and attention. All discharges must be known to the appropriate government agencies so they can determine which controls are necessary or appropriate under the applicable provisions of the CWA, its implementing rules, and other applicable legal requirements. That analysis is subject to public notice and comment so that affected members of the public and downstream states can comment on the proposed permit and the sufficiency of its pollution control provisions.¹⁸⁷ An unknown source of any "addition" of pollutants to waters covered by the Act cannot even be evaluated to determine whether, or how, the Act's control provisions apply.

Likewise, including all sources of pollutant "additions" into the NPDES permitting scheme triggers the monitoring and reporting requirements of section 308¹⁸⁸ and its implementing regulations.¹⁸⁹ Those requirements allow the permitting agency to obtain the information necessary to determine the nature and magnitude of the pollutant discharges, the extent to which they are controllable under the Act and its regulations, and the impacts they might have on receiving waters.

Most pointedly from a pollution control perspective, NPDES permits are the vehicles through which EPA and delegated states articulate and enforce pollution reduction, treatment and

or eliminating the pollution of the navigable waters and ground waters and improving the sanitary condition of surface and underground waters." *Id.* § 1252(a). During the House debate of the 1972 amendments, Representative Clausen explained that, due to lack of information, the committee decided not to afford ground waters the same level of regulatory protection as navigable waters. *House Debate on H.R. 11896*, 92 Cong. Rec. 10,667 (Mar. 28, 1972). However, state controls over disposals into wells are necessary to achieve the CWA's statutory goal of protecting "the Nation's waters." *Id.*, citing *33 U.S.C.* § 1251(a).

¹⁸⁷ See id. §§ 1251(e) (requiring public participation in all federal and state programs under the CWA); 1342(b)(5) requiring states with delegated NPDES programs to provide notice to downstream states that may be affected by any discharge of pollutants).

¹⁸⁸ *Id.* §1318.

¹⁸⁹ See, e.g., 40 C.F.R.§§ 122.21, 122.48, Pt. 122 App.D (establishing information and monitoring requirements for NPDES permits and applications).

control requirements. The first variety of those controls are effluent limitations that require levels of effluent reduction defined by reference to EPA's determination of the "best" technology available to treat pollution from particular categories of sources.¹⁹⁰ Treatment levels vary according to the category of discharger,¹⁹¹ but generally speaking, control requirements are designed to work toward the statutory goals¹⁹² while spreading the necessary pollution control obligations evenhandedly among similarly situated industrial and municipal facilities.¹⁹³ This prevents the unintended consequences of unfair competitive advantages that CWA control requirements otherwise might impose on some facilities through unintended loopholes in the statute. This principle of equitable allocation of pollution control obligations is underscored by section 301(e), which demands that "[e]ffluent limitations established pursuant to this section or section [302] shall be applied to all point sources of discharge of pollutants"¹⁹⁴

Congress designed technology-based controls to serve as an interim step toward one of the ultimate goals of the Act, that "the discharge of pollutants into the navigable waters be eliminated."¹⁹⁵ The operative control provisions of the Act, however, indicate that the "best

¹⁹⁰ See, e.g., 33 U.S.C. § 1311(b)(2)(A) (Effluent limitations for categories and classes of point sources shall require application of the best available technology economically achievable for such category or class, as determined by the Administrator pursuant to section 1412(b)(2).); *id.* § 1314(b)(2) (The Administrator shall issue regulations that "identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best control measures and practices achievable.") ¹⁹¹ For example, the CWA instructs EPA to publish a list of industrial categories of point sources. 33 U.S.C. § 1316(b)(1)(A). EPA is further instructed to establish by regulation "Federal standards of performance for new sources within such category." Id. § 1316(b)(1)(B). These regulations are specified in 40 C.F.R. §§ 401.10–471.106.

¹⁹³ See Weyerhaeuser v. Costle, 590 F.2d 1011, 1025 (D.C. Cir. 1978) (describing "the [CWA] drafters' insistence on industry-by-industry uniformity of effluent limitations and control techniques" and "cross-industry applicability despite the geographical, technological, and economic diversity that characterizes almost every discrete sector of manufacturing and agriculture in this country.") Any variation among obligations applied to individual sources is through specific statutory variances, *see id.* at 1031 *et seq.*, and not by excluding some sources entirely from the NPDES permit scheme. *See, also*, E.I. du Pont de Nemours & Co. v. Train, 430 U.S. 112 (1977) (upholding EPA's system of promulgating nationwide regulations governing classes and categories of industrial sources, subject to prescribed variance provisions).

¹⁹⁴ 33 U.S.C. §1311(e).

¹⁹⁵ 33 U.S.C. §1251(a)(1). Strictly speaking, Congress intended that goal to be met by 1985, *see id.*, but that "zero discharge" goal has obviously been elusive.

technology" treatment requirements are supposed to implement that goal as pollution control technologies improve. The "best available technology" treatment standards, for example, are supposed to "result in reasonable further progress toward the national goal of eliminating the discharge of pollutants."¹⁹⁶ Likewise, the version of best technology treatment requirements applicable to new sources of water pollution must include "where practicable, a standard permitting no discharge of pollutants."¹⁹⁷ Exempting some similarly situated sources that add pollutants to navigable waters would thwart this set of requirements designed to move steadily toward the statutory zero discharge goal, and simultaneously create significant inequities among similarly situated sources of pollutants.

The CWA mandates additional water pollution control requirements to ensure attainment of water quality standards that define the acceptable level of water quality needed to protect individual water bodies and their beneficial uses.¹⁹⁸ This occurs when discharges from one or more sources—even if complying with all applicable technology-based effluent limitations—exceed the capacity of that water body to assimilate those pollutant loads.¹⁹⁹ To implement this "water quality-based" component of the Act, section 301 requires "any more stringent limitation, including those necessary to meet water quality standards … or required to implement any applicable water quality standard established pursuant to this [Act]."²⁰⁰

These supplemental "water quality-based" control provisions reflect a classic zero-sum game in which pollution controls avoided by some dischargers are at the expense of others whose control obligations will expand proportionately. In order to attain their water quality standards, the

¹⁹⁶ *Id.* §1311(b)(2)(A). *See, also, id.* §§1314(b)(3), 1314(c).

¹⁹⁷ *Id.* §1316(a)(1).

¹⁹⁸ See 33 U.S.C. §1313(c); 40 C.F.R. Pts. 103, c131.

¹⁹⁹ See id. §1313(d).

²⁰⁰ Id. §1311(b)(1)(C); see, also, id. §§1312, 1313(e)(3)(A), (F).

CWA requires states to identify and list all water bodies for which implementation of technologybased controls will not result in attainment of applicable water quality standards.²⁰¹ For each such water, states must adopt a "total maximum daily load" (TMDL) for pollutants responsible for the violations of water quality standards.²⁰² TMDLs must be included in the state's continuous planning process to control water pollution and to be incorporated into permits and other applicable control strategies, in a process designed to ensure that aggregate reductions from all sources of the offending pollutant suffice to bring the water body into attainment with the applicable water quality standards.²⁰³ If the Act exempted some point sources that add pollutants to a listed water body, other sources would face proportionately higher pollution control obligations.

Under section 402, EPA or state permit-writers also must ensure that NPDES permits require compliance with sections 307 and 403 of the Act. Section 307(a) provides for supplemental effluent *standards* for selected toxic pollutants²⁰⁴ in addition to the technology-based and water quality-based effluent *limitations* required by section 301(b). Those standards may ban pollutant discharges entirely for particularly dangerous pollutants.²⁰⁵ Section 307(b), in turn, requires implementation of pretreatment standards for industrial sources that discharge pollutants into public sewage treatment plants, in part because those pollutants might pass through the treatment plant and into receiving waters.²⁰⁶ Significantly with respect to the *County of Maui* case, section 403 prohibits the issuance of NPDES permits for any discharge into the "territorial sea, the waters

²⁰¹ See id. §1313(d)(1)(A); see, also, id. §1314(l) (imposing similar requirements for waters impaired by discharges of toxic pollutants in particular). EPA must fulfil this role where a state fails to do so, or to do so properly. See id. §1313(d)(2).

²⁰² See id. §1313(d)(1)(C); see, also, id. §1314(1)(1)(D) (imposing similar requirements for states to adopt individual control strategies for dischargers of toxic pollutants).

²⁰³ See id. §1313(e)(3)(C); 40 C.F.R. § 130.7.

²⁰⁴ See 33 U.S.C. §1317(a).

²⁰⁵ See id.; Envtl. Defense Fund v. Envtl. Protection Agency, 598 F.2d 62, 90 (D.C. Cir. 1978) (upholding EPA effluent standards banning all discharges of PCBs).

²⁰⁶ See 33 U.S.C. §1317(b).

of the contiguous zone, or the oceans,"²⁰⁷ absent compliance with guidelines designed to protect those environments in particular.²⁰⁸ Again, these conditions augment any effluent limitations adopted pursuant to section 301 of the CWA.

In short, the qualified discharge ban imposed by section 301(a) serves primarily to ensure that all additions of pollutants to navigable waters are brought within the Act's permitting regime, allowing them to be monitored, evaluated, and controlled pursuant to a comprehensive set of statutory programs and specific conditions and limitations. Those requirements include, but are by no means limited to, effluent limitations required by section 301(b). The comprehensive nature of the requirements imposed by section 402 permits is reinforced by the enforcement authority provided in section 309 of the CWA, which authorizes EPA to exercise various enforcement tools (administrative, civil, or criminal liability) whenever "any person is in violation of *any condition or limitation* which implements sections 1311, 1312, 1316, 1317, 1318, 1328, or 1345 of this title" in an NPDES permit.²⁰⁹

To be sure, pollutants can be "added" to navigable waters from sources other than "point sources," and the Act governs those pollution sources pursuant to an entirely different set of programs guided by EPA but designed and implemented largely by individual states.²¹⁰ By definition, however, those "nonpoint source pollution" programs apply to pollutants added from sources other than point sources. Moreover, to effectuate a comprehensive approach to water pollution control, which must account for all sources of pollutants to a water body that violates

²⁰⁷ See id. §1343(a).

²⁰⁸ See id. §1343(c). Permits for discharges of dredged or fill material into specified disposal sites must comply with comparable guidelines to protect receiving waters. *See id.* §1344(b). ²⁰⁹ *Id.* §1319(a).

²¹⁰ See 33 U.S.C. §1329. Section 319 was adopted as part of the Water Quality Act of 1987 due to the widespread perceived failure of its predecessor, in part of CWA section 208, *id.* §1288, to redress the problem of nonpoint source pollution.

applicable water quality standards, the Act's nonpoint source pollution control programs also must be integrated into the Act's comprehensive approach.²¹¹ If any pollutants added to navigable waters from point sources are addressed neither as point source discharges nor as nonpoint sources, they would escape this comprehensive approach designed to ensure that all pollution sources bear their proportionate share of control obligations.

B. Applying the Functional, Whole Statute Approach to the Conduit Cases

Analyzing the conduit cases in light of the overall text and structure of the CWA facilitates a more sensible approach to statutory construction that avoids consequences Congress clearly did not intend while still remaining faithful to the precise statutory language. It still allows courts to focus on the precise issues presented to them by the parties, but in proper context. It helps courts to escape the problem of atomization, that is, to avoid deciding cases involving a complex and integrated statutory scheme by reference to isolated terms in a logical chain of statutory construction.

1. *Relevance of the term "point source"*

Some courts attempted to resolve the conduit issue by focusing on whether the intermediate medium (such as groundwater) through which pollutants reach a navigable water itself constitutes a point source. Nothing in the overall statutory scheme, however, requires that every link in the chain of section 301(a) analysis—or in the path through which pollutants reach a navigable water —must independently qualify as a point source. As Justice Scalia noted in *Rapanos*, neither

²¹¹ See 33 U.S.C. §1313(e)(3)(A) (requiring the incorporation of the Act's original section 208 plans into the state's continuing planning process); 40 C.F.R. §130.7(b)(1)(iii) (requiring states to account for both point source and nonpoint source contributions in required TMDLs).

the text nor the structure of section 301(a) requires that a point source discharge *directly* into a navigable water to be subject to the qualified discharge ban.²¹²

To be sure, the pivotal term "point source" remains relevant to the conduit cases because section 301(a) applies only if there is some point source from which a discharge originates. Once a point source origin is identified, however, any intermediary through which the pollutants pass need not also meet the definition of point source. Another way to conceptualize the problem is to ask whether section 301(a) would apply if the discharge in question flowed directly to the navigable water. If so, the presence of an intermediary through which the pollutants travel does not eliminate the original point source.

In each of the conduit cases that generated the current circuit split, pollutants emanated initially from a point source.²¹³ Yet the court in *Kentucky Waterways* and *Tennessee Clean Water Network* rejected liability because it held that the groundwater through which the pollutants flowed was not a point source, without considering that issue in the overall statutory context.²¹⁴

²¹²In *Kentucky Waterways Alliance*, the Sixth Circuit concluded that Justice Scalia's analysis only applied to discharges which are continuously channeled, by point sources, from the originating point source to the ultimate navigable waterway. 905 F.3d at 936 (citing Rapanos, 547 U.S. at 743 ("[T]he discharge into intermittent channels of any pollutant that naturally washes downstream likely violates [the CWA], even if the pollutants discharged from a point source do not emit 'directly into' covered waters, but pass 'through conveyances' in between." (emphasis omitted)). Because "conveyance" is included in the definition of "point source," the Sixth Circuit reasoned, the *Rapanos* logic of indirect discharges does not apply to discharges through nonpoint source conduits. But this analysis ignores the specific definition of point source under the Act, which is "any *discernible, confined and discrete* conveyance." 33 U.S.C. § 1362(14) (emphasis added). Thus, "conveyances" as used by Justice Scalia presumably has a broader scope than "point source."

²¹³ In the Fourth and Ninth Circuit cases, the pollutants emanated from undisputed point sources. *See* County of Maui, 24 F. Supp. 3d at 744 ("Neither side here disputes that each of the four [underground injection] wells constitutes a 'point source' under the CWA"); Upstate Forever, 887 F.3d at 647 ("Kinder Morgan's [underground] gasoline pipeline unambiguously qualifies as a point source."). In the Sixth Circuit cases, plaintiffs argued that coal ash retention ponds from which pollutants seeped into groundwater constituted point sources. *See* Kentucky Waterways, 905 F.3d at n. 8. While the court expressed doubt over this argument, *see id.*, it did not reach the issue, as its holding rested on an express rejection of the conduit theory of discharge. *See id.* at 934.

²¹⁴ See Kentucky Waterways Alliance, 905 F.3d at 933 ("Plaintiffs' point source theory fails because neither groundwater nor the karst through which it travels is a point source under these definitions."); Tennessee Clean Water Network ("But groundwater is not a point source. Thus, when the pollutants are discharged to the river, they are not coming from a point source; they are coming from groundwater which is a nonpoint-source conveyance. The CWA has no say over that conduct.") (quoting *id.* at 934).

2. *Relevance of the term "navigable waters"*

Other courts have analyzed the conduit issue by asking whether groundwater or artificial water bodies (such as stormwater or irrigation conveyance systems) through which pollutants travel between a point source and a navigable water themselves constitute a "navigable water." This approach is equally myopic and unnecessary to find liability under section 301(a). Just as there is no need to find multiple point sources in the physical or analytical chain established by section 301(a) and its definitions, nothing in the statutory text or structure requires multiple navigable waters in the chain of liability (although discharged pollutants often do reach multiple navigable waters as they move downstream through hydrologic systems).

This aspect of the conduit line of cases is the area in which courts are most likely to have been misled by the relevance of the Supreme Court cases analyzing which water bodies are subject to the permit requirements of CWA section 404. In all three of the Supreme Court decisions addressing this issue, the parties disputed whether the terminal water body into which fill material was discharged was a navigable water as defined by the CWA.²¹⁵ Because the fill material would eliminate the subject water bodies entirely to allow building on now-solid ground, there was no downstream flow of pollutants into another downstream water body. The real issue in those cases was the impact of the discharge on the immediate receiving water body, not its status as a link in a chain to a clearly navigable water downstream. Thus, in those cases the Supreme Court properly focused on the jurisdictional status of the receiving water. The same focus is not necessary when the discharge of pollutants into an intermediary water body—whether groundwater or surface

²¹⁵ See Riverside Bayview Homes, 474 U.S. at 124–25 (ACE identified portions of petitioner's low-lying, marshy land near the shores of Lake St. Clair in Macomb County, Michigan, as "adjacent wetlands" and enjoined the discharge of fill materials into the site.); SWANCC, 531 U.S. at 163 (Petitioner sought ACE approval under Section 404 of the CWA to utilize as a solid waste landfill an abandoned sand and gravel mining pit which had evolved into a series of permanent and seasonal ponds varying in size from under one-tenth of an acre to several acres.); Rapanos, 547 U.S. at 729 (Petitioner filled, without ACE approval, three wetlands sites of varying distance and degrees of connectivity to traditionally navigable waters.)

water—transmits those pollutants to a downstream water body that is indisputably navigable, as is true for all of the conduit cases.²¹⁶

A second reason courts may have been misled into evaluating whether an intermediary receiving water is independently subject to CWA jurisdiction is the constitutional line of reasoning used by the Supreme Court in *United States v. Appalachian Electric Power Co.*,²¹⁷ and Congress's implicit illusion to that analysis in the CWA legislative history. In *Appalachian Electric Power Co.*, the Supreme Court held that Congress did not exceed its authority under the Commerce Clause by regulating non-navigable tributaries to waters that met the traditional "navigable in fact" test of *The Daniel Ball*,²¹⁸ so long as the use or impairment of the regulated waters had an effect on navigable waters.²¹⁹ In the legislative history of the CWA, the bill's sponsors in both Congressional chambers explained the redefinition of the term "navigable waters" as the "waters of the United States" as reflecting an intent to exercise authority over waters to the maximum extent permissible under the Commerce Clause.²²⁰

²¹⁶ See supra note 181.

²¹⁷ 311 U.S. 377 (1940).

²¹⁸ See id. at 406–08.

²¹⁹ See id. at 426 (holding that Commerce Clause authority over navigable waters includes, but is not limited to, protection of those waters for navigability, and also includes such functions as flood control, watershed development, and power generation).

²²⁰ The Senate conference report stated: "The conferees fully intend that the term "navigable waters" be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes." S. Rep. No. 92-1236, at 144 (1972) (Conf. Rep.). During Senate consideration of the conference report, bill sponsor Edmund Muskie explained:

One matter of importance throughout the legislation is the meaning of the term "navigable waters of the United States." The conference agreement does not define the term. The Conference fully intend at the term "navigable waters" be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes. Based on the history of consideration of this legislation, it is obvious that its provisions and the extent of application should be construed broadly. It is intended that the term "navigable waters" include all water bodies, such as lakes, streams, and rivers, regarded as public navigable waters in law which are navigable in fact. It is further intended that such waters shall be considered to be navigable in fact when they form, in their ordinary condition by themselves or by uniting with other waters or other systems of transportation, such as highways or railroads, a continuing highway over which commerce is or may be carried on with other States or with foreign countries

⁹² Cong. Rec. 33699 (October 4, 1972). John Dingell, floor manager of the bill in the House, made similar comments during the House consideration of the conference report.

For discharges into non-navigable tributaries to navigable waters, a court may need to determine where that line should be drawn as a statutory or, if necessary, constitutional matter. Moreover, EPA and ACE have indeed relied on the *Appalachian Electric* Power reasoning to define the scope of water bodies potentially subject to CWA jurisdiction.²²¹ Where pollutants are discharged from a point source, through a non-navigable water body, and into a clearly navigable water, however, this analysis is again unnecessary.

In short, so long as the pollutants in question are discharged from a point source, and so long as they reach a navigable water, it is artificially atomistic to ask whether those terms apply independently to a conduit through which the pollutants flow. The real question in these cases is whether the presence of an intermediary region through which the pollutants flow interrupts the chain of statutory liability. The key to that analysis is the meaning of an "addition of pollutants" to a navigable water. Unlike the terms "point source" and "navigable water," however, Congress

[[]T]he conference bill defines the term "navigable waters" broadly for water quality purposes. It means all "the waters of the United States" in a geographical sense. It does not mean "navigable waters of the United States" in the technical sense as we sometimes see in some laws

The U.S. Constitution contains no mention of navigable waters. The authority of Congress over navigable waters is based on the Constitution's grant to Congress of "Power ... To regulate commerce with Foreign Nations and among the several States" Although most interstate commerce 150 years ago was accomplished on waterways, there is no requirement in the Constitution that the waterway must cross a State boundary in order to be within the interstate commerce power of the Federal Government. Rather, it is enough that the waterway serves as a link in the chain of commerce among the States as it flows in the various channels of transportation—highways, railroads, air traffic, radio and postal communication, waterways, et cetera. The "gist of the Federal test" is the waterway's use "as a highway," not whether it is "part of a navigable interstate or international commercial highway."

Thus, this new definition clearly encompasses all water bodies, including main streams and their tributaries, for water quality purposes. No longer are the old, narrow definitions of navigability,

as determined by the Corps of Engineers, going to govern matters covered by this bill.

⁹² Cong. Rec. 33757 (Oct. 4, 1972) (citations omitted).

²²¹ See, e.g., Definition of "Waters of the United States" Under the Clean Water Act, 79 Fed. Reg. 22,188, 22,253 (proposed Apr. 21, 2014) (to be codified at 40 C.F.R. parts 110, 112, 116, 117, 122, 230, 232, 300, 302, and 401) (explaining that *Appalachian Electric* and other Supreme Court precedent have extended the definition of "navigable waters" beyond the traditional *Daniel Ball* test); *see also* Revised Definition of "Waters of the United States," 84 Fed. Reg. 4,154, 4,170 (proposed Feb. 14, 2019) (to be codified at 40 C.F.R. parts 110, 112, 116, 117, 122, 230, 232, 300, 302 and 401); Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States," 68 Fed. Reg. 1,991, 1998 (proposed Jan. 15, 2003) (to be codified at 40 C.F.R. parts 110, 112, 116, 117, 122, 110, 112, 116, 117, 122, 230, 232, 300, and 401).

did not further define the meaning of "addition". It is this key term, therefore, that must be construed in the context of the whole statutory test governing the qualified discharge ban of section 301(a), and in the context of the regulatory provisions that provision implements.

3. Relevance of the term "addition"

As discussed above, CWA section 301(a) prohibits the discharge of any pollutant absent a permit implementing applicable substantive controls. Section 502 defines the "discharge of a pollutant" to mean "any addition of any pollutant to navigable waters from any point source."²²² Thus, at least where it is clear that a discharge originates from a point source and ultimately reaches a navigable water, the conduit line of cases most clearly implicates the meaning of the term "addition". To be subject to section 301(a), does the discharge need to reach the navigable water directly, or is it sufficient that the pollutants reach a jurisdictional water body through intermediate channels?

In his plurality opinion in *Rapanos*, Justice Scalia suggested that an "addition" of a pollutant need not add pollutants *directly* into a navigable water, thus providing support for the conduit theory.²²³ To be clear, this pronouncement does not have the force of *stare decisis*. It did not command the support of a majority of the Court,²²⁴ and most lower courts have held that Justice

²²² See supra Part III.A.1.

²²³ Several courts in the current conduit cases and many of their predecessors utilized this rationale in upholding the conduit theory of liability. *See, e.g.*, County of Maui, 886 F.3d at 748 (discharge of sewage effluent from underground injection wells into groundwater); Upstate Forever, 887 F.3d at 650 (discharge of gasoline from a ruptured pipeline into groundwater); Friends of Maha'ulepu, Inc. v. Hawai'i Dairy Farms, LLC., 224 F.Supp.3d 1094, 1109–10 (discharge of rainwater runoff from a large construction site through natural drainageways and eventually into the Pacific Ocean); Tri-Realty Company v. Ursinus College, 124 F.Supp.3d 418, 462 (E.D. Pen. 2015) (applying Scalia's observations in *Rapanos* to hold that "a party may be liable due to the 'addition of any pollutant to navigable waters from any point source,' not due to the 'addition of any pollutant to navigable waters from any point source, 'not due to the 'addition of any pollutant to navigable waters from any point source,' not due to the 'addition of any pollutant to navigable waters from any point source that directly receives pollutants.") (citations omitted) (emphasis in original); Humane Soc. of U.S. v. HVFG, LLC., 2010 WL 1837785, 10–11, n. 18 (S.D. N.Y. 2010) (utilizing the *Rapanos* logic to enforce a State NPDES permit regulating discharges into a tributary of a navigable river: "Congress did not merely pass legislation that required 'no dumping' signs posted along the waters of the United States, and whether a party is liable for a violation under the Clean Water Act is often not as simple as where a party discharged pollutants into a navigable waterway.").

²²⁴ Chief Justice Roberts and Justices Thomas and Alito joined in this opinion. See Rapanos, 547 U.S. at 718.

Kennedy's concurring opinion is the controlling decision in the case because it decided the case on narrower grounds.²²⁵ Moreover, the statement is dictum to the extent that it was not essential to the holding Justice Scalia would have reached had it been a majority opinion, and more properly should be understood as part of the reasoning of the opinion.

Justice Scalia was responding to the assertion that Congress intended as generous a scope as constitutionally permissible to the waters subject to the CWA's qualified discharge ban and permitting provisions. One major reason for that claim is congressional intent to control water pollution at the source, including upstream discharges that ultimately reach waters that are navigable in fact via intermediate, non-navigable waters and other conduits.²²⁶ Rather than treating those conduits themselves as navigable waters for purposes of section 404 permits, Justice Scalia

²²⁵ The *Marks* doctrine explains: "When a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, 'the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds." Marks v. United States, 430 U.S. 188, 193 (1977) (quoting Gregg v. Georgia, 428 U.S. 153, 169 n. 15 (1979)). Since *Rapanos*, the Seventh, Ninth, and Eleventh Circuits have concluded that Justice Kennedy's "significant nexus" test constituted the holding of the Court under *Marks. See* U.S. v. Gerke Excavating, Inc., 464 F.3d 723, 725 (7th Cir. 2006) ("as a practical matter the Kennedy concurrence is the least common denominator"); Northern California River Watch v. City of Healdsburg, 496 F.3d 993, 2019 (9th Cir. 2007) ("Justice Kennedy, constituting the fifth vote for reversal, concurred only in the judgment and, therefore, provides the controlling rule of law."); U.S. v. Robison, 505 f.3d 1208 (11th Cir. 2007) (explaining that Justice Kennedy's test was the "least far reaching" under *Marks* because it is less restrictive of CWA jurisdiction than the plurality test) (citing Marks, 430 U.S. at 193).

In U.S. v. Johnson, 467 F.3d 63–64 (1st Cir. 2006), the First Circuit held that *Marks* is applicable only when one concurring opinion is a logical subset of another, broader opinion. However, this is not the case in *Rapanos. Id.* at 64. For example, when there exists a small surface water connection to a stream or brook, the plurality test would find CWA jurisdiction, whereas the "significant nexus" test may not. *Id.* The First Circuit therefore decided to heed Justice Stevens' dissenting suggestion that a court may apply either test. *Id.* (citing Rapanos, 547 U.S. n. 14).

Other circuits have avoided a commitment to any particular test under *Rapanos*. In *U.S. v. Cundiff*, the Sixth Circuit also noted that *Marks* doctrine is ill-suited to the holdings in *Rapanos* and declined to resolve the question of which test was holding, as jurisdiction could be established under either the Kennedy test or the plurality test. 555 F.3d 200, 210. In *Simsbury-Avon Preservation Club, Inc. v. Metacon Gun Club, Inc.*, the district court applied the "significant nexus" test "[b]ecause the parties assume that the Rapanos plurality is controlling," 472 F. Supp. 2d 219, 229 (D. Conn. 2007), but the Second Circuit found jurisdiction inappropriate due to a lack of material issue of fact. 575 F.3d 199, 215 (2d Cir. 2009). In *Precon Development Corp. v. Army Corps Engineers*, the Fourth Circuit applied the Kennedy test pursuant to agreement between the parties that such test was controlling and thus declined to "address the issue of whether the plurality's 'continuous surface connection' test provides an alternate ground upon which CWA jurisdiction can be established." 633 F.3d 278, 288 (4th Cir. 2011).

²²⁶ See, e.g., Senate Debate on S.2700, 117 Cong. Rec. 38,00 (Nov. 2, 1971) (statement of Sen. Muskie) ("Where the Administrator can identify a direct link between a polluter and water quality, the Administrator is authorized to tighten controls on the polluter.")

argued that the function of section 402 permits, *i.e.*, protecting downstream navigable waters from upstream pollutant release, is ensured by the fact that an "addition to" navigable waters includes indirect releases through intermediary conduits.²²⁷ Thus, he reasoned, it is not necessary to extend CWA jurisdiction to upstream conduits in order to protect downstream navigable waters from the flow of pollutants from point sources.

As evaluated extensively elsewhere, Justice Scalia's assessment of which waters are subject to CWA jurisdiction was incomplete because it failed to take into account the full extent to which the destruction or impairment of non-navigable wetlands and other waters adversely affect downstream navigable waters.²²⁸ His logic about the full text and structure of section 301(a), however, supports CWA jurisdiction over point source discharges that reach navigable waters through intermediate water bodies or other channels, including groundwater. Rather than isolating each discrete definitional component, it evaluates the term "addition to" in the context of the overall text of section 301(a) and its component definitions read together, and in light of the function of section 301(a) to protect navigable waters from all discharges of pollutants.

²²⁷ Justice Scalia explained:

Though we do not decide this issue, there is no reason to suppose that our construction today significantly affects the enforcement of § 1342, inasmuch as lower courts applying § 1342 have not characterized intermittent channels as "waters of the United States." The Act does not forbid the "addition of any pollutant *directly to* navigable waters from any point source," but rather the "addition of any pollutant *to* navigable waters." § 1362(12)(A) (emphasis added); § 1311(a). Thus, from the time of the CWA's enactment, 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.

[[]Noting that several courts have found an intervening conduit to itself be a "point source,"] [s]ome courts have even adopted both the "indirect discharge" rationale and the "point source" rationale in the alternative, applied to the same facts. See, e.g., Concerned Area Residents for Environment v. Southview Farm, 34 F.3d 114, 118–119 (C.A.2 1994). On either view, however, the lower courts have seen no need to classify the intervening conduits as "waters of the United States." Rapanos, 547 U.S. at 743–44 (citations omitted).

²²⁸ See, e.g., Jamison E. Colburn, Waters of the United States: Theory, Practice, and Integrity at the Supreme Court, 34 FLA. ST. U. L. REV. 183 (2007).

This conclusion is supported by the distinct line of "addition" cases that has assessed section 301(a) jurisdiction over discharges of pollutants from point sources, but either from one portion of a water body to another,²²⁹ or from a water body and released back into the same water body in different form,²³⁰ or from one water body to another connected²³¹ or unconnected²³² body of water. Courts divided significantly in this line of cases, just as they did in the conduit cases.²³³ The Supreme Court evaluated but declined to decide the issue due to the factual context in which the issue reached the Court, which elected to remand the case for further factual analysis.²³⁴ EPA later addressed the issue through rulemaking,²³⁵ and although circuit courts upheld that rule in an exercise of *Chevron* deference, the issue never returned to the Supreme Court.

²³⁵ See supra note 105.

²²⁹ See, e.g., National Wildlife Federation v. Gorsuch, 693 F.2d 156 (D.C. Cir. 1982) (rejecting section 301(a) applicability to a discharge of pollutants from an upstream reservoir into the downstream river).

²³⁰ See, e.g., National Wildlife Federation v. Consumers Power Co., 862 F.2d 580 (6th Cir. 1988) (rejecting section 301(a) applicability to a discharge of pollutants extracted from a lake and released back into the lake in altered form). It should be noted that the *Consumer Power* court may have been guilty of atomization in another way. In that case, the pumped power facility imported live fish—which do not qualify as pollutants—and converted them into pollutants in the form of dead, chopped up fish parts before releasing them back into the lake. Taken in full statutory context, therefore, this case more properly should have been evaluated by reference to whether there was an "addition of [new] pollutants" from the point source into the navigable water.

²³¹ See Catskill Mountains Ch. of Trout Unlimited, Inc. v. City of New York, 273 F.3d 481, 484–85 (2d Cir. 2001) (upholding Section 301(a) jurisdiction for a discharge of water from a reservoir, through several miles of tunnel, and eventually into a creek and reservoir in a different watershed). The court reasoned:

The EPA's position, upheld by the Gorsuch and Consumers Power courts, is that for there to be an "addition," a "point source must introduce the pollutant into navigable water from the outside world." We agree with this view provided that "outside world" is construed as any place outside the particular water body to which pollutants are introduced. Given that understanding of "addition," the transfer of water containing pollutants from one body of water to another, distinct body of water is plainly an addition and thus a "discharge" that demands an NPDES permit.

Id. at 491 (citation omitted).

²³² See supra Part II.C (discussing Dubois v. U.S. Dept. of Agriculture, 102 F.3d 1273 (1st Cir. 1996)).

²³³ *Compare* National Wildlife Fund v. Gorsuch, 693 F.2d 156 (*supra* note 235) *with* Dubois, 102 F.3d 1273. It may be possible to reconcile some of these disparate holdings based on their differing factual contexts, but it is not necessary to do so for purposes of ascertaining their relevance to the conduit cases. *See supra* Part II.C.

²³⁴ In South Florida Water Management Dist. v. Miccosukee Tribe of Indians, 541 U.S. 95 (2004), the Court addressed the issue of whether the CWA requires a NPDES permit for the pumping of polluted water from one water body to a nearby wetland. However, the Court remanded the case for additional factual determinations of whether the two water bodies were indeed distinct, *id.* at 109–12, and for consideration of the "unitary waters" theory, which was only briefed by on appeal by the District and the Government, *see supra* Part II.C.

Even the reasoning of those courts that rejected jurisdiction over the "water transfer" cases, however, supports the idea that section 301(a) applies to an addition of pollutants from a point source, through a conduit, and then into a navigable water. Those courts that rejected CWA jurisdiction over water transfers did so because of the view that section 301(a) applies only to an addition of pollutants from the outside world.²³⁶ The rationale is that the CWA is designed to regulate discharges of new pollutants, not pollutants already present in the water body. As discussed in the next section, this analysis is atomistic in another way, because it ignores those aspects of the CWA regulatory scheme focused on ambient water quality. At a minimum, however, it suggests that any addition of pollutants from a point source and from the outside world are regulated under section 301(a). Otherwise, the perverse *Goldilocks* result would be to exclude from section 301(a) liability and regulation some pollutants because they reach the water body too directly (the water transfer pollutants), and others because they reach the water body too indirectly (the conduit pollutants). This would leave section 301(a) regulation only of those pollutants discharged directly from point sources into navigable waters. That is precisely the logic that Justice Scalia correctly noted was inconsistent with the statute as a whole.

In perhaps the most extreme example of atomization of the conduit issue, however, in *Kentucky Waterways* and *Tennessee Clean Water Network* the Sixth Circuit grounded its analysis in the separate definition of "effluent limitation."²³⁷ The Sixth Circuit's logic is flawed for two independent but related reasons. First, although one function of permits issued under CWA section 402 is to implement and enforce effluent limitations, that term is not part of the structural sequence of terms that trigger section 301(a) liability, which require instead an addition of a pollutant from

²³⁶ See supra, note 237.

²³⁷ See supra Part II.D.

a point source *to* a navigable water. Even if one accepts the idea that "into" is narrower than "to",²³⁸ the argument proves too much because it is the broader of the two prepositions that actually triggers section 301(a) liability. At most, although this would conflict with other aspects of the statutory structure and function, it would suggest that CWA permits could not apply effluent limitations to indirect discharges to navigable waters.

Second, and relatedly, the implementation and enforcement of effluent limitations is one of many functions of permits issued under CWA section 402. Moreover, section 301(a) requires permits under either section 402 or section 404, and effluent limitations are entirely irrelevant to section 404 permits. Thus, it makes no sense whatsoever to interpret the meaning of section 301(a) by reference to another statutory definition in complete isolation from the rest of the statutory text and structure. Rather, it makes more sense to consider the meaning of section 301(a) in the context of its place and function in the whole statutory scheme. That is the subject of the following analysis.

4. Consistency with overall statutory structure and goals

As discussed in Part III.A, section 301(a) is the pivotal section around which much of the CWA statutory scheme revolves. But it does not rotate in isolation. It is the hub to which several of the key statutory spokes attach, and its interpretation must account for those statutory functions. Otherwise, some spokes might remain attached and function properly, while others remain severed and therefore impaired or entirely dysfunctional.

²³⁸ There is no indication in the CWA legislative history that Congress intended or even focused on this distinction. It is notable that Congress invariably used the preposition "to" in connection with "addition", and invariably used the preposition "into" in connection with "discharge", but this distinction is not explained elsewhere in the statute or legislative history. Moreover, because the Act defines "discharge of a pollutant" to mean "any addition of any pollutant to navigable waters," the term "discharge of a pollutant into" would translate to the grammatically nonsensical "addition of any pollutant to into navigable waters."

a. Point versus nonpoint source controls

Congress intentionally distinguished between point sources and nonpoint sources of pollution and subjected them to differing regulatory regimes. Point sources are subject to the uniform, mandatory federal permitting provisions of sections 402 and 404 and the mandatory associated control obligations.²³⁹ Congress was equally earnest about the need to control nonpoint sources of pollution as part of a comprehensive water pollution control regime. Because those pollution sources are so dispersed and less amenable to discrete identification and measurement, however, and because they implicate land use factors and vary more widely from state to state, Congress believed it more appropriate to give states the lead role in nonpoint source pollution planning and management, subject to less stringent federal oversight.²⁴⁰

Point sources are discrete and therefore readily identifiable. They can be monitored, characterized in pollutant type and quantity, and therefore assessed for controllability and predicted or measured impacts to receiving waters.²⁴¹ The waste stream from a point source is collected and channelized, making it amenable to whatever treatment options are available and appropriate for the facility in question. Permits can establish precise point source control

 $^{^{239}}$ EPA shall identify the "the degree of effluent reduction attainable through the application of the best control measures and practices achievable" for each source category, 33 U.S.C. § 1314(b)(2)(A), and promulgate effluent limitations for each regulated pollutant by each such category, *id.* § 1311(2). Established effluent limitations must "result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants" or require the elimination of discharge of all pollutants if technologically and economically achievable for a category of point sources. *Id.* § 1311(2)(A). A State may assume responsibility for the administration of Section 402 or Section 404 permits, or both, provided that such State program meet federal program standards. *See* id. § 1342(b), 1344(g).

²⁴⁰ 33 U.S.C. § 1329 provides guidelines and federal funding assistance for state-administered nonpoint source programs. Each state must identify waters that will be unable to attain water quality standards without further action to control nonpoint source pollution and categories of sources that significantly contribute such pollution to these waters. *Id.* § 1329(a)(1)(A), (B). The state must also identify state and local programs for controlling nonpoint source pollution and identify best practices for the control and management of such sources. *Id.* § 1329(a)(1)(C), (D). The state shall then submit to EPA for approval a nonpoint source management program. *Id.* § 1329(b). Upon approval, the state will qualify for a federal grant for up to sixty percent of the cost incurred by the state in administering the program. *See id.* § 1329(h).

²⁴¹ See William H. Rodgers, Jr., Environmental Law 306–08 (2d ed. 1994).

requirements that can be monitored for compliance at the "end of the pipe" and subject to uniform enforcement procedures.

Exempting point source pollutant discharges that share all of these characteristics from the CWA permit and control scheme simply because they discharge to navigable waters through an intermediate conduit thwarts this carefully considered partition of pollution sources based on their characteristics and suitability to different kinds of regulation. At best, it would subject those point sources to inappropriate nonpoint source control strategies designed for entirely different kinds of pollution, such as runoff from farm fields or other sources of land disturbance. In short, that would force a round point source peg into an ill-fitting, square nonpoint source hole.

At worst, it would leave indirect point discharges in an indeterminate limbo, in which the point source controls most appropriate to that pollution source did not apply due to a perceived technical gap in the statute, and none of the nonpoint source control strategies adopted by the state fit at all. Then, these sources would fit into neither shape hole, exempting some important pollution sources entirely from a system Congress intended to be comprehensive. It would also allow a source that would otherwise be subject to the Act's stringent control requirements to evade regulation and its fair share of pollution control obligations simply by releasing its pollutants into a sandy beach immediately adjacent to a navigable water or some similar conduit through which the pollutants travel before reaching the navigable water.

Indeed, for at least one kind of indirect discharge, discharges from industrial point sources into public sewage treatment plants, Congress expressly provided specific control provisions designed to ensure sufficient "pretreatment" of those discharges.²⁴² Pretreatment requirements are designed to prevent damage to the sewage treatment process or to prevent uncontrolled "pass

²⁴² See 33 U.S.C. §1317(b); 40 C.F.R. §§ 403.1–20.

through" of pollutants into receiving waters or into sewage sludge, from which those pollutants might contaminate land or groundwater following sludge disposal, or might render the sewage treatment residuals unsuitable for reuse as a fertilizer.²⁴³

One might argue that the fact that Congress provided specifically for this kind of indirect discharge suggests that other indirect discharges are exempt from the CWA permit requirements entirely. That would be an illogical conclusion. First, because industrial discharges jeopardize various aspects of an extremely expensive public investment in sewage treatment collection and treatment infrastructure,²⁴⁴ Congress and EPA saw the need to adopt specific control provisions to prevent or reduce those problems. Second, it would suggest that by adopting a very specific set of controls for one particularly common and problematic source of indirect discharges, Congress modified the plain language of section 301(a) and its associated definitions. Courts are traditionally warty of finding such a repeal by implication.²⁴⁵

b. Uniformity and efficacy of technology-based controls

²⁴³ The CWA requires EPA to promulgate pretreatment standards for discharges into publicly owned treatment works ("POTW") of pollutants that are not susceptible to treatment or would interfere with the operation of such treatment works. 33 U.S.C. §1317(b)(1). EPA has further specified that "A user may not introduce into a POTW any pollutant(s) which cause Pass Through or Interference." 40 C.F.R. §403.5(a). "Pass Through" means a discharge which, alone or in combination with other discharges from other sources, causes the POTW to violate any requirement of its own NPDES permit. *Id.*. §403.3(p). "Interference" means any discharge which, alone or in combination with other discharges from other sources, "[i]nhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal" and therefore causes the POTW to violate its NPDES permit. *id.* §403.3(k).

²⁴⁴ EPA's guidance explains: "POTWs are not designed to treat most toxic or non-conventional pollutants that are present in industrial waste." U.S. Envt'l Protection Agency, Office of Wastewater Mgmt., EPA 833-B-11-001, Introduction to the National Pretreatment Program, 1-2 (2011). Toxic pollutants can pass through treatment works and degrade receiving waters, in direct opposition to the goals of the CWA, and interfere with the biological activity of the POTW, causing discharges of inadequately treated or untreated sewage. *Id.* at 1-3. Even if the POTW can remove the toxic pollutants, such removal may limit the plants options for disposal of its sewage sludge. *Id.* For example, many municipalities use treated sewage sludge as fertilizer for pasture land or parkland. *Id.* Gases or vapors from volatile organic compounds can accumulate in sewers, increasing risk of explosion and damage to the infrastructure. *Id.* Toxic organics discharged into sewer works can produce poisonous gases which are hazardous to POTW employees. *Id.*

²⁴⁵ See Tennessee Valley Authority v. Hill, 437 U.S. 153, 189 (U.S. 1978) (It is a "cardinal rule . . . that repeals by implication are not favored.") (citing Morton v. Mancari, 417 U.S. 535, 549, (1974), quoting Posadas v. National City Bank, 296 U.S. 497, 503, (1936)); Posadas, 296 U.S. at 503 ("the intention of the legislature to repeal must be clear and manifest.")

The mandatory, technology-based controls established in CWA sections 301, 304, 306, and 307²⁴⁶ serve multiple purposes. First, Congress expressly determined that its primary strategy for ameliorating water pollution was to require mandatory, across-the-board pollution reductions based on the best technology suited to entire classes and categories of discharger.²⁴⁷ Importantly, Congress intended EPA to ratchet down those requirements as technology improves, with a goal of eliminating point source discharges entirely.²⁴⁸

Second, by imposing the same technology-based pollution controls on all similarly designed and operated point source dischargers,²⁴⁹ Congress sought to avoid imposing disproportionate control obligations—hence competitive disadvantages—on some facilities at the expense of others.²⁵⁰ Although differences among facilities will inevitably generate some differences in control costs and efficiencies between otherwise similar facilities, some of which

²⁴⁶ 33 U.S.C. §§ 1311, 1314, 1316, 1317.

²⁴⁷ The CWA requires the categorization of industrial discharge sources, *see supra* note 247, and set an initial deadline that all dischargers employ "the best practicable control technology currently available" by July 1, 1977. 33 U.S.C. § 1311(b)(1)(A). Currently, effluent limitations for each category or class of point source "shall require application of the best available technology economically achievable for such category or class." *Id.* § 1311(b)(2)(A).

²⁴⁸ See 33 U.S.C. § 1311(b)(2)(A) (Effluent limitations shall require application of the best available technology "which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants" and shall require the elimination of discharges of all pollutants if such elimination is technologically and economically achievable.) Although the original statutory goal of achieving zero discharge by 1983 has long passed, *see id.* §1251(a)(1), Congress has repealed neither the overall goal nor the specific operative provisions through which Congress directed EPA to attain that goal.

 $^{^{249}}$ EPA is required to publish a list of no less than twenty-seven discrete categories of point source dischargers, *see supra* note 196, 33 U.S.C. § 1316(b)(1)(A), and federal standards of performance for new sources within each category. *Id.* § 1316(b)(1)(B). EPA is further allowed to "sub-categorize" by distinguishing among classes, types, and sizes within categories and "shall consider the type of process involved (including whether batch or continuous.)" *Id.* § 1316(b)(1)(B)(2).

²⁵⁰ See, e.g., Weyerhaeuser v. Costle, 590 F.2d 1011, 1059–60 (D.C. Cir. 1978) (explaining that effluent limitations for paper mills, by regulating only total pollution discharged per ton of goods produced, do not discriminate between mills based on the amount of water available for operational use and thus do not place any particular mill at a competitive advantage or disadvantage based on physical circumstances); E.I. du Pont de Nemours & Co. v. Train, 430 U.S. 112, 128–30 (U.S. 1977) (upholding EPA's establishment of industry-wide effluent limitations for categories of point sources due to the CWA's emphasis on uniformity of pollution control across classes or categories of sources).

are addressed in statutory variances,²⁵¹ Congress intended technology-based controls as a whole to apply in a reasonably even-handed manner.

Neither of these statutory functions and attributes would work properly if section 301(a) is interpreted in a way that allows some dischargers to avoid technology-based control obligations due to an intentional or unintentional distinction between whether the discharge reaches a navigable water directly or through a conduit. It would impair the efficacy of the statutory design, and result in severe, unintended inequities and potentially significant competitive imbalances among dischargers.

c. Efficacy and equity in water quality-based controls

The water quality-based regulatory scheme of the CWA would similarly be impaired in both efficacy and equity if conduit discharges to navigable waters were not subject to section 301(a). That program is designed to ensure that aggregate pollution from all sources combined des not result in violation of ambient (instream) state water quality standards (WQS).²⁵² NPDES permits are the mechanism through which states or EPA impose and enforce additional treatment or control requirements on individual dischargers to comply with TMDLs²⁵³ and to ensure compliance with WQS.²⁵⁴

²⁵¹ A discharger may obtain a variance from NPDES effluent standards in the following circumstances: the modified effluent limitations represent the maximum use of technology within the economic capability of the owner or operator and will result in further progress toward the no discharge goal, *see* 33 U.S.C. § 1311(c); the discharger cannot satisfy the effluent limitations for certain nonconventional pollutants due to localized environmental factors, *see id.* § 1311(g); the discharger is a POTW that discharges into marine waters and the modified requirements do not interfere with the attainment or maintenance of water quality, *see id.* § 1311(h); the discharger can show that it is fundamentally different with respect to the factors, other than cost, established in 33 U.S.C. 1314(b) or 1314(g), *see id.* § 1311(n); or the thermal discharge component of any effluent limitation is more stringent than necessary to maintain water quality, *see id.* § 1326(a).

²⁵² See supra Part III.A.3.

²⁵³ 33 U.S.C. §1313(d); 40 C.F.R. §§ 131.10–15, 130.7.

²⁵⁴ 33 U.S.C. §1311(b)(1)(c); 40 C.F.R. § 130.7.

Interpreting section 301(a) and its component definitions narrowly to exclude point source discharges of pollutants to navigable waters because those pollutants traveled through an intermediary conduit would omit some components of this zero-sum game.²⁵⁵ That would either make it more difficult to achieve the statutory requirement that all waters should, at a minimum, attain state WQS,²⁵⁶ or it would unfairly require other pollution sources to meet even stricter water quality-based requirements to compensate for the omission.

This makes no sense in the overall statutory scheme given that point sources that discharge pollutants through conduits possess all of the other attributes that render them amenable to point source control requirements. They discharge pollutants through discrete, readily identifiable conveyances that can be monitored and assessed for compliance with applicable treatment standards. Their waste stream is collected and channelized in one place, making it amenable to the same kinds of treatment methods available to other point sources.

It is true that some of the pollutants discharged into conduits might not reach the navigable water body in question for purposes of calculating water-quality based discharge requirements. That is a question of technical water quality modeling and monitoring, however, rather than a legal distinction so long as some pollutants reach, or are likely to reach, the navigable water. It is not dissimilar to water quality modeling issues even for direct dischargers, which must take into account such issues as pollutant degradation, precipitation, and volatilization.²⁵⁷

²⁵⁵40 C.F.R. § 130.2(i) defines "TMDL" as "The sum of the individual WLAs [wasteload allocations] for point sources and LAs [load allocations] for nonpoint sources and natural background." "Wasteload allocation" is further defined as "[t]he portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution," and "load allocation" is "[t]he portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources." *id.*

²⁵⁶ Indeed, Congress set a goal that all waters should meet WQS by 1983. 33 U.S.C. §1251(a)(3).

²⁵⁷ EPA maintains a broad spectrum of guidance documents, example TMDL calculations, and computer modeling tools for use in developing and reviewing TMDLs. *See, e.g., TMDL Support Documents*, United States Environmental Protection Agency, https://www.epa.gov/tmdl/tmdl-support-documents (last updated Sep. 14, 2018); *Total Maximum Daily Load (TMDL) Models and Tools to Assess Exposures*, United States Environmental Protection Agency,

At some point, of course, a release of pollutants to land or another conduit might be so remote from the navigable waters into which those pollutants might flow that it is unreasonable to conclude that there is an "addition" of pollutants to those waters. The clearest example is a discharge through groundwater. In *County of Maui*, monitoring data showed clearly, as a matter of fact, that pollutants discharged into coastal wells reached the Pacific Ocean in significant amounts.²⁵⁸ Treating this issue purely as a matter of fact, however, requires regulators to wait to see whether a discharge causes problems rather than to adopt the preventive approach required by the statute, which is to impose permit conditions on a discharge from the outset. The predecessor to the 1972 CWA required pollution remediation only after a showing of harm,²⁵⁹ but the entire function of the section 301(a) qualified discharge ban is to prohibit the discharge of pollutants from the outset unless subject to a permit and appropriate controls.

To address this issue, some courts have borrowed Justice Kennedy's "significant nexus" test regarding wetlands jurisdiction under the CWA.²⁶⁰ Other courts have required permits for any discharge into a conduit with a "direct"²⁶¹ or "direct, immediate"²⁶² hydrological connection between the point source to the receiving water. In *County of Maui*, the Ninth Circuit articulated

https://www.epa.gov/ceam/total-maximum-daily-load-tmdl-models-and-tools-assess-exposures (last updated May 25, 2018).

²⁵⁸ 24 F.Supp.3d at 984.

²⁵⁹ The Federal Water Pollution Control Act of 1948 declared the pollution of interstate waters, which endangers the health or welfare of any person in any State other than the State in which the pollution originates, to be a public nuisance. Pub.L. 80-758, § 2(d), June 30, 1948, 62 Stat. 115. When the Surgeon General determines that such a public nuisance "is occurring," he may recommend reasonable and equitable remedial measures and, in the event that the pollution is not abated, initiate a civil suit on behalf of the United States Government to enjoin the polluting activity. *See id. See, also*, Environmental Protection Agency v. California ex rel. State Water Pollution Control Bd., 426 U.S. 200, (1976) (explaining that Congress replaced the earlier federal water pollution legislation because it "focused on the tolerable effects rather than the preventable causes of water pollution," and the awkward and cumbersome implementation procedures that approach demanded).

²⁶⁰ See, e.g., U.S. v. Robison, 505 F.3d 1208, 1221–23 (11th Cir. 2007) Northern California River Watch v. City of Healdsburg, 496 F.3d 993, 995, 1001 (9th Cir. 2007); Tennessee Riverkeeper, Inc. v. Hensley-Grace Holdings, LLC., 2013 WL 12304022, at 6 (N.D. Al. 2013)

²⁶¹ See, e.g., Ass'n Concerned Over Res. & Nature, Inc. v. Tenn. Aluminum Processors, Inc., 2011 WL 1357690, at 17 (M.D. Tenn. 2011) (citing Idaho Rural Council v. Bosma, 143 F.Supp.2d 1169, 1179, 1180 (D.Idaho 2001)); Northwest Envtl. Defense Center v. Grabhorn, Inc., 2009 WL 3672895, at 13 (D. Or. 2009)

²⁶² See Tennessee Clean Water Network, 273 F.Supp.3d at 827.

the test as requiring a connection between the discharge and the receiving water that is "fairly traceable," such that the discharge is the "functional equivalent" of a discharge into a navigable water.²⁶³ The district court in *Upstate Forever* seems to have combined the latter two tests, requiring a "direct hydrological connection" between the point source and the receiving water and noting that traceability is an "important factor" in establishing such a connection.²⁶⁴

Given the overall design of the water quality-based program in the CWA, a reasonable approach to this issue might be an either-or test. Because it is important to ensure that all dischargers that contribute to water quality impairment contribute their fair share of reductions to help attain the WQS, any discharges to groundwater or other conduits that are directly connected to the navigable water, *or* discharges from which are traceable to those waters as a matter of fact, should be subject to the permitting and other requirements prescribed by section 301(a).

Whatever test ultimately prevails in deciding which indirect discharges are covered by section 301(a), the key point is that Justice Scalia's insight that a point source need not discharge directly into a navigable water to be subject to the qualified discharge ban of section 301(a) is entirely consistent with the structure and function of the Act's water quality-based program.

d. Additional control provisions

The example of atomistic interpretation reflected in the Sixth Circuit's decision in *Tennessee Clean Water Network*, based on the statutory definition of "effluent limitation," and even if correct as far as it goes,²⁶⁵ also ignores the fact that the required NPDES permits require more than the imposition of effluent limitations. They require monitoring so EPA and state water quality agencies have a full understanding of what pollutants are being released into what waters,

²⁶³ 886 F.3d at 749.

²⁶⁴ See 887 F.3d at 651–52.

²⁶⁵ As discussed above, given that the statute redefines "discharge" as an "addition to" navigable waters, the Sixth Circuit's interpretation results in a logical and grammatical impossibility. *See supra* note 246.

from what sources, and in what amounts.²⁶⁶ They require new source performance standards for new sources,²⁶⁷ and they require publicly owned treatment works like that subject to the *County of Maui* case to design and implement pretreatment programs for industrial discharges into their sewer systems.²⁶⁸

Also relevant to the *County of Maui* case are the ocean protection requirements of CWA section 403, which must be imposed by NPDES permits entirely independent of any technology-based or water quality-based effluent limitations. This provision creates an extra layer of pollution control for discharges into the ocean by requiring the EPA to promulgate additional guidelines to which any permit authorizing such discharges must conform.²⁶⁹ Current regulations prohibit the issuance of an NPDES permit for ocean discharges that "will cause unreasonable degradation of the marine environment" after application of all possible permit conditions.²⁷⁰ The fact that different discharges to different aquatic ecosystems are subject to such varied permit conditions illustrates the fallacy of interpreting the pivotal implementing provision of the statutes—section 301(a)—by reference to an isolated definition taken out of context with the full statutory text and design.

²⁶⁶ 33 U.S.C. §1315(b).

²⁶⁷ Id

²⁶⁸ Id. §1317(b); 40 C.F.R. Pt. 403.

²⁶⁹ "The Administrator shall, within one hundred and eighty days after October 18, 1972 (and from time to time thereafter), promulgate guidelines for determining the degradation of the waters of the territorial seas, the contiguous zone, and the oceans, which shall include: (A) the effect of disposal of pollutants on human health or welfare, including but not limited to plankton, fish, shellfish, wildlife, shorelines, and beaches; (B) the effect of disposal of pollutants on marine life including the transfer, concentration, and dispersal of pollutants or their byproducts through biological, physical, and chemical processes; changes in marine ecosystem diversity, productivity, and stability; and species and community population changes; (C) the effect of disposal of pollutants on esthetic, recreation, and economic values; (D) the persistence and permanence of the effects of disposal of pollutants; (E) the effect of the disposal of varying rates, of particular volumes and concentrations of pollutants; (F) other possible locations and methods of disposal or recycling of pollutants including land-based alternatives; and (G) the effect on alternate uses of the oceans, such as mineral exploitation and scientific study." 33 U.S.C. § 1343(c).

IV. Conclusion: Avoiding Atomization of the CWA and Other Laws

The function of courts is to resolve the specific issues presented to them by the parties. Thus, there is nothing presumptively wrong when a court focuses on precise issues of statutory construction (or other legal or factual issues) presented to them. Judges must be astute in recognizing, however, when parties attempt to focus them on inappropriately narrow formulations of those issues. In the case of statutory construction, courts sometimes fall into the trap of "atomization", by which we mean undue focus on individual words and phrases taken out of context in the overall statutory scheme.

Each of the lines of cases addressing a particular problem of CWA scope has developed somewhat in isolation, despite the overlapping nature and substance of the issues. For example, one line of cases asks what it means to cause an "addition" of pollutants to the "waters of the United States,"²⁷¹ while another asks what kind of water bodies are included in that category.²⁷² One line of cases asks when pollutants have been added *from* a "point source,"²⁷³ while another asks whether they have been added *to* a "water of the United States" in a sufficiently direct fashion.²⁷⁴ At other times, however, the Court has resorted to its own statutory "gap filling," most notably in Justice Kennedy's formulation of a "significant nexus" test to delineate the scope of isolated water bodies included in the scope of the "waters of the United States" subject to regulation under section 301(a) of the Act.²⁷⁵ Given the multiplicity of "messages" Congress sent

²⁷¹ See supra Part II.C

²⁷² See supra Part II.A

²⁷³ See, supra Part II.B

²⁷⁴ See, supra Part II.D

²⁷⁵ Rapanos v. United States, 547 U.S. 715, 780 (U.S. 2006) ("Accordingly, wetlands possess the requisite nexus, and thus come within the statutory phrase 'navigable waters,' if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.'") (Kennedy, J., concurring).

in articulating the statutory focus of the CWA, however, this traditionally narrow approach may have contributed to the overall difficulty the courts have experienced in divining legislative intent about the reach of the statute in a satisfactory, and therefore lasting, way.

This article illustrated this phenomenon by analyzing the most recent line of CWA jurisdictional cases headed to the Supreme Court—the so-called conduit cases. Undue focus on specific statutory words and phrases has led courts to different results and even different formulations of the issues to be decided. Considering the issue to be decided through the lens of the whole statute, and how individual words and phrases fit into the statutory structure and regulatory scheme, leads to a far more consistent and logical set of results.

Our goal has not been to resolve the longstanding debate about the appropriate use of legislative history, or the related debate about the relative importance of statutory text and statutory purpose in resolving complex issues of statutory interpretation. Rather, it has been to illustrate that, in many instances, courts can avoid those debates altogether by construing statutory text in light of the full text and structure of the statute.