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Ripple Effect: A Look at *Sackett v. EPA* and the Non-Water Quality Values That the Clean Water Act Protects, in *Environmental Law Before the Courts: A US-EU Narrative*

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Abstract This chapter first explains how the federal Clean Water Act is linked with the implementation of other major environmental laws in the United States. That is, while the Clean Water Act serves an overarching goal “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters,” it often does much more than that. Since its enactment in 1972, the Clean Water Act has consistently—and positively—helped to vindicate other public interest values that are not obviously connected to water quality, such as the preservation of historic resources or ensuring environmental justice. Critically, the protection of these non-water quality benefits occurs by congressional design. Issuance of a Clean Water Act permit often triggers other necessary reviews under the National Environmental Policy Act, the National Historic Preservation Act, and the Endangered Species Act, among other laws. We refer to this regulatory interplay as the Clean Water Act’s ‘ripple effect.’

This chapter’s second contribution is to document how holistic environmental reviews engendered by the ‘ripple effect’ are now at risk, as the Supreme Court of the United States reconsiders the jurisdictional reach of the Clean Water Act. With *Sackett v. Environmental Protection Agency*, the Court is reassessing the question of which aquatic resources are covered as “waters of the United States.” A new line “at which water ends and land begins” is being drawn. Historically, the Clean Water Act has safeguarded wetlands, marshes, streams, and tributaries that have a “significant nexus” to a navigable waterway. But if wetlands or tributaries are found to be

A ruling from the Supreme Court of the United States in *Sackett, et ux., v. U.S. Environmental Protection Agency, et al.*, No. 21-454, had not been issued at the time this chapter was submitted for publication. Our analysis of *Sackett* therefore relies on our review of all briefs that had been filed in the case and our assessment of oral argument before the Court, which took place on October 3, 2022.

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outside of the Clean Water Act's purview pursuant to a new ruling in *Sackett*, then the 'ripple effect' never occurs. The impact here may be profound. The interconnectivity of the Clean Water Act with other federal statutes, after all, reflects the interconnectedness of the resources these laws seek to protect.

1 Introduction

The Federal Water Pollution Control Act Amendments of 1972, better known as the Clean Water Act, are a core pillar of modern environmental law in the United States. The Act serves an overarching goal "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" and focuses protection efforts on "navigable waters," which are defined expansively as "the waters of the United States, including the territorial seas."¹ These "navigable waters" have long included aquatic resources that are not navigable-in-fact: wetlands, marshes, bogs, and streams. Given the interinfluence of various waters—*e.g.*, wetlands drain to tributaries which drain to navigable rivers and lakes—this broad interpretation of the Clean Water Act's jurisdictional scope has proven essential to advancing water pollution reduction efforts.

And the law does much more than remedy water pollution. For over half a century, proceedings under the Clean Water Act have consistently—and positively—affected *other* public interest values that might appear unrelated to water quality: preservation of historic resources; providing access to recreation; protecting endangered species; promoting public health and welfare; ensuring environmental justice. Most importantly, defense of these far-reaching, non-water quality benefits occurs by congressional design. Issuance of a Clean Water Act permit often triggers other necessary reviews under the National Environmental Policy Act, the National Historic Preservation Act, the Endangered Species Act, and the Fish and Wildlife Coordination Act, among other laws. Thus, the Clean Water Act's "ripple effect" compels permitting agencies and developers to evaluate a broad range of impacts.

This is the result of interconnected statutes that ensure federally governed activities receive a comprehensive review, providing decision-makers with a clear picture of the real-world impacts of any proposed activity. Indeed, the interconnectivity of the Clean Water Act and other federal statutes reflects the interconnectedness of the things they regulate.

The future of these holistic reviews, however, is now in flux following a ruling from the Supreme Court of the United States in *Sackett v. Environmental Protection Agency*, a case limiting the jurisdictional reach of the Clean Water Act.² At the same time, the Biden Administration has finalized its own interpretation of "waters of the

¹ 33 U.S.C § 1362(7).

² Michael Sackett, et ux., v. Environmental Protection Agency, et al., No. 21-454, (argued October, 3, 2022), <https://www.supremecourt.gov/docket/docketfiles/html/public/21-454.html>.

United States,” which is the key, jurisdictional term in the Act.³ As lower courts and federal agencies work to interpret a ruling from the Supreme Court in *Sackett*—and apply that ruling in challenges to the Biden Administration’s Final Rule—other environmental regimes that depend on Clean Water Act enforcement will be impacted. This is because other environmental reviews are purposefully daisy-chained together with the Clean Water Act.

This Chapter explores the origins, application, and future of this daisy chain. First, Sect. 2 provides a background on the history of the Clean Water Act. Section 3 then documents the nature of holistic analyses under the Clean Water Act by looking at federal regulations used to implement the law and by highlighting a few “ripple effect” cases from the lower U.S. federal courts. With these cases, we show how the requirement to obtain a Clean Water Act permit has led to federal protection of historic resources and other non-water quality related values. Finally, Sect. 4 concludes with a look to the future. It summarizes how the *Sackett* case could alter the “ripple effect” in the coming years.

2 The Origins of the “Ripple Effect”

Section 101 of the Clean Water Act outlines several intuitive goals and policies that are essential to clean water.⁴ These include:

- 1) The elimination of “the discharge of pollutants into the navigable waters;”
- 2) The protection of “fish, shellfish, and wildlife” and providing for “recreation in an on the water;”
- 3) Providing for financial assistance “to construct publicly owned waste [water] treatment works;”

These goals might fairly be called the water-quality related values that Congress sought to protect, and much has been written about their history.⁵ The enactment of the Clean Water Act in 1972 was seen as an urgent response to an unmitigated crisis of water contamination.⁶

In 1969, the public’s imagination was captured by images of the Cuyahoga River in Cleveland catching on fire. A nearly omnipresent oil slick on the water’s surface due to unregulated discharges from Cleveland’s manufacturing sector provided fuel

³U.S. Army Corps of Engineers & U.S. Environmental Protection Agency, Pre-Publication Final Rule Notice: Revised Definition of “Waters of the United States,” Docket ID No. EPA-HQ-OW-2021-0602, (Dec. 30, 2022), at <https://www.epa.gov/wotus/revising-definition-waters-united-states>.

⁴33 U.S.C. § 1251(a).

⁵See, e.g. Houck and Rolland (1995), p. 1243 (1995); Jaffe (2001), pp. 339–341 (2001); Drelich (2009), pp. 304–307 (2009) Congressional Research Service (2016); Percival et al. (2021), chpt 6.

⁶See 118 Cong. Rec. 36879 (Senate vote of 52 to 12 to override veto of the 1972 bill); id. at 37060-61 (House vote of 247 to 23).

for the fire.⁷ National news coverage of the event led singer/songwriter Randy Newman to record “Burn On,” with the lyrics: “Now, the Lord can make you tumble/The Lord can make you turn/The Lord can make you overflow/But the Lord can’t make you burn.”⁸ The fire is often credited with inspiring the first Earth Day protests in the United States.

The Cuyahoga River fire was not an isolated incident. Rather, it was emblematic of similar environmental catastrophes in waterways across the country. A *New York Times* article from July 1970 vividly described daily life along the Potomac River in Washington, D.C., prior to enactment of the Clean Water Act:

The heat of summer is enveloping the nation’s capital, and with it has come the annual resurgence of a problem residents have come increasingly to dread: A stomach-turning miasma rising from the Potomac River ... Under the bridges that link the capital with Virginia, the 1,500-foot-wide ribbon of water is a repellent, opaque gray brown, so laden with silt, intestinal bacteria and other pollutants that an official of the water quality agency called it ‘a severe threat to the health of anyone coming in contact with it.’ ... ‘Floating sludge masses, lifted by gases of decomposition, add to other debris on the water’s surface.’⁹

As litigants before the Supreme Court recently observed, “Presidents Johnson and Nixon both made efforts at leveraging the Rivers and Harbors Act of 1899 to address this water contamination crisis, first through the Water Quality Act of 1965 and then via the Refuse Act of 1970. Neither proved successful.”¹⁰

Senator Edmund Muskie (D-Maine), chief sponsor of the Clean Water Act, laid bare the problem:

The cancer of water pollution was engendered by our abuse of our lakes, streams, rivers, and oceans... We have ignored this cancer for so long that the romance of environmental concern is already fading in the shadow of grim realities of lakes, river, and bays where all forms of life have been smothered by untreated wastes, and oceans which no longer provide us with food.¹¹

Senator Muskie’s statement captures the heartland of concerns that Congress sought to address in the Clean Water Act—*i.e.*, that the nation’s waters would once again be fishable and swimmable.¹² But the Clean Water Act’s statutory structure, legislative history, and regulatory framework confirm that the it actually protects much more.

⁷ Boissoneault (2019).

⁸ Randy Newman, *Burn On, Sail Away* (Reprise Records 1972).

⁹ Hill (1970).

¹⁰ Brief of Amicus Curiae Idaho Conservation League in Support of Respondents, Sackett, et ux., v. U.S. Environmental Protection Agency, et al., No. 21-454, (filed June 17, 2022) (Professor Jaffe served as counsel of record to the Idaho Conservation League on that brief).

¹¹ See Sapp et al. (2006), pp. 10198–10199 (quoting Senator Muskie’s statement as reprinted in 1 CRS, *Legislative History of the Water Pollution Control Act Amendments of 1972*, at 161 (1973)).

¹² *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 156 (4th Cir. 2000) (“One of the well-recognized aims of the Act [was] to ensure that the nation’s waters are ‘fishable and swimmable.’”).

Predating the Clean Water Act itself, the U.S. Army Corps of Engineers' ("Corps") 1968 Rivers and Harbors Act regulations included a directive for explicit and far-reaching public interest analyses. The Corps added a requirement that permit decisions must rest on 'an evaluation of all relevant factors, including the effect of the proposed work on navigation, fish and wildlife, conservation, pollution, aesthetics, ecology, and the general public interest.'"¹³ That review process was buttressed by the Fish and Wildlife Coordination Act, which compelled the Corps to first consult with the U.S. Fish and Wildlife Service before issuing any permit for an impoundment or water-diversion project, "with a view to the conservation of wildlife resources by preventing loss of and damage to such resources..."¹⁴ All of these holistic reviews were expanded further in 1969 with passage of the National Environmental Policy Act ("NEPA") and its mandate that federal agencies adopt an "interdisciplinary approach" to ensure that "presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations."¹⁵

NEPA was authored in response to concern that many federal agencies, without a conservation-oriented mission statement, had been racing to complete projects without regard to adverse environmental impacts. NEPA forced these agencies to quantify environmental harms so that destructive projects could be "nipped in the bud."¹⁶ Interpreting the statute, the U.S. Court of Appeals for the D.C. Circuit observed that the "sweep of NEPA is extraordinarily broad, compelling consideration of any and all types of environmental impact of federal action."¹⁷

The co-development of public interest reviews under 1968 Rivers and Harbors Act regulations and the National Environmental Policy Act of 1969 suggest that federal agencies would be endowed with the authority and the obligation to consider a broad range of factors beyond their narrow areas of expertise.¹⁸ In short, an expansive approach to assessing pollution-causing activities had begun to take hold even before the Clean Water Act of 1972 was enacted.

Today, the real-world impact of these holistic reviews is seen most clearly in Section 404 of the Clean Water Act, which mandates the acquisition of a permit, usually issued by the Corps, "for the discharge of dredged or fill material into the *navigable waters*."¹⁹ Many development projects—whether for a home, a shopping mall, or a road—first require dredging and filling wetlands to create firm ground on which to begin construction. To assist the Corps with its permitting process, the

¹³ Flournoy (2008), p. 544. 33 Fed. Reg. 18,670, 18,671 (Dec. 18, 1968)).

¹⁴ 16 U.S.C. § 662(a).

¹⁵ 42 U.S.C. § 4332.

¹⁶ Tarlock (2005), pp. 77–108.

¹⁷ *Calvert Cliffs' Coordinating Committee, Inc. v. U. S. Atomic Energy Commission*, 449 F.2d 1109, 1122 (D.C. Cir. 1971).

¹⁸ 33 Fed. Reg. 18,670 (1968); 42 U.S.C. § 4332; 33 U.S.C. § 403.

¹⁹ 33 U.S.C. § 1344(a).

Environmental Protection Agency (“EPA”) is granted the power under the statute to develop “guidelines” that prevent the degradation of waters under § 404(b).²⁰

Section 404(b) also mandates a far-reaching review of non-water quality related values. It cross-references 33 U.S.C. § 1343(c), which specifies that “Guidelines for determining degradation of waters” shall account for the “effect of disposal” on “human health or welfare, ... marine life, ... and aesthetic, recreation, and economic values,” among other concerns. If the EPA becomes convinced that the Corps has erred in issuing a permit, the Agency can veto the Corps’ approval under § 404(c), thereby preventing an “unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.”²¹ One clear takeaway from the text of Section 404 is that it encourages the Corps and EPA to work together in service of broad, public-interest goals.

In 1977, Congress amended the Act to further refine the Section 404 program. It added a handful of exemptions to the regulatory process (*e.g.*, for “normal farming” work like “plowing, seeding, cultivating”), and added a general permit process for the Corps to efficiently manage categories of activities that would have only a “minimal cumulative adverse effect on the environment.”²² But it left in place a broad understanding of the Clean Water Act’s jurisdictional reach. As the Senate Committee report on the 1977 Amendments explained:

The objective of the 1972 act is to protect the physical, chemical, and biological integrity of the Nation’s waters. Restriction of jurisdiction to those relatively few waterways that are used or are susceptible to use for navigation would render this purpose impossible to achieve. Discharges of dredged or fill material into lakes and tributaries of these waters can physically disrupt the chemical and biological integrity of the Nation’s waters and adversely affect their quality. ... To limit the jurisdiction of the Federal Water Pollution Control Act with reference to discharges of the pollutants of dredged or fill material would cripple efforts to achieve the act’s objectives.²³

The 1977 amendments also added text to assert exclusive federal control over some waters used “as a means to transport interstate or foreign commerce ... *including wetlands adjacent thereto.*”²⁴ This section of the statute, 33 U.S.C. § 1344(g), made it explicit that non-navigable but “adjacent” wetlands would be federally protected.

One motivation for Congress’s acceptance of a broad, jurisdictional purview for the Corps and the EPA under the Clean Water Act was a profound understanding of

²⁰ 33 U.S.C. § 1344(b).

²¹ 33 U.S.C. § 1344(c).

²² 33 U.S.C. § 1344(e)(1).

²³ S. REP. NO. 95-370, at 75. See also *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159, 183 n.11 (2001) (Stevens, J., dissenting) (“The House Committee on Government Operations noted the disagreement between the EPA and the Corps over the meaning of ‘navigable waters’ and ultimately expressed its agreement with the EPA’s broader reading of the statute. H.R. Rep. No. 93-1396, pp. 23-27 (1974).”).

²⁴ 33 U.S.C. § 1344(g) (emphasis added).

wetlands as interconnected with the health and integrity of the broader environment.²⁵ William L. Want, author of a treatise on the Law of Wetlands Regulation, has noted that wetlands might “appear to the untrained eye to be simply an upland field,” but that view misses the interconnection between wetlands protection and wildlife conservation, water quality, and flood mitigation.²⁶ “Two-thirds of the commercially important fish and shellfish harvested along the Atlantic and Gulf coasts depend on coastal estuaries and their wetlands for food sources, spawning grounds, or nurseries for their young; almost one half of Pacific coast fish and shellfish are dependent on wetlands.”²⁷ When a hurricane hits, wetlands play a vital role in reducing the storm surge—an impact that can literally mean the difference between the preservation of historic communities and their devastation.²⁸ Thus, the Clean Water Act’s jurisdiction over adjacent wetlands is integral to its aim of protecting the quality and integrity of the Nation’s waters.

3 The “Ripple Effect” in Practice

What starts with the Clean Water Act does not necessarily stay with the Clean Water Act. The regulations that the Corps and the EPA have developed (*e.g.*, guidance to permit applicants on how the statutory text of the Clean Water Act will be applied) ensure a holistic review process.

EPA has drafted Section 404(b)(1) Guidelines to provide that “the proposed fill material will not cause any significantly adverse effects on human health or welfare, aquatic life, aquatic ecosystems, or recreational, aesthetic, or economic values.”²⁹ The EPA’s Guidelines require that the Corps consider a wide range of impacts that a proposed activity might have and reference impacts to aesthetic concerns, including “the perception of beauty by one or a combination of the senses of sight, hearing, touch, and smell.”³⁰ They compel consideration of impacts to “Parks, national

²⁵ See Senate Debate August 4, 1977: Clean Water Act of 1977 at 920–923 (“A fundamental element of the Water Act is broad jurisdiction over water for pollution control purposes. Several Federal courts have endorsed the wisdom, and constitutionality, of this committee’s observation that: Water moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source... The once seemingly separable types of aquatic systems are, we now know, inter-related and interdependent. We cannot expect to preserve the remaining qualities of our water resources without providing appropriate protection for the entire resource.”).

²⁶ William L. Want, *L. of Wetlands Reg.* para 2:1 (Thomson Reuters 2022).

²⁷ *Id.*, para 2:3.

²⁸ See Houck (2006), pp. 27–29.

²⁹ *Altamaha Riverkeeper v. United States Army Corps Of’ Eng’rs*, 2020 U.S. Dist. LEXIS 180987, *2-3; 2020 WL 5837650 (citing 40 C.F.R. §230.10(c)(1)-(4)).

³⁰ 40 C.F.R. § 230.53(a).

and historical monuments, national seashores, wilderness areas, research sites, and similar preserves.”³¹ They obligate analysis of threats posed to endangered species.³²

The EPA’s 404(b)(1) Guidelines also reflect the view that a permit should only be granted if the regulator determines, after analyzing various individual and cumulative effects, that a proposed activity will not have an unacceptable adverse impact.³³ This precept produces a generalized instruction that the Corps should consider information regarding a range of impacts and values beyond those affecting water quality. For example, under Section 230.10(b), the EPA’s guidance instructs the Corps not to grant a permit if the proposed activity would violate other law, such as the Endangered Species Act. Coordination with the U.S. Fish and Wildlife Service is required. In short, the EPA Guidelines direct the Corps to account for the full ramifications of a proposed project.

To be sure, the Corps initially resisted a broad application of its authority under Section 404 of the Clean Water Act. But in 1975, an environmental group, the Natural Resources Defense Council, challenged that institutional restraint in court and won.³⁴ A U.S. District Court in Washington, D.C. confirmed that the term “navigable waters” was “not limited to the traditional tests of navigability.”³⁵ Two years later, the Corps amended its regulations to cover “discharges into intermittent waterways and wetlands if they were necessary ‘for the protection of water quality,’ even if not adjacent to traditionally navigable waterways.”³⁶

Under its current regulations, the Corps further commits to weighing a range of “public interest” factors: “conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values ... energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.”³⁷ Such reviews “reflect the national concern for both protection and utilization of important resources,” not merely water-quality related values.³⁸

Further underscoring the multifactor nature of its process, the Corps has pledged to consult with relevant state and federal agencies such as the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the Environmental Protection

³¹ 40 C.F.R. § 230.54.

³² 40 C.F.R. § 230.30.

³³ 40 C.F.R. § 230.10(c)(2007).

³⁴ See *Natural Resources Defense Council v. Callaway*, 392 F. Supp. 685, 686 (D.D.C. 1975) (holding that the Corps’ 1974 Clean Water Act regulations “unlawfully” failed to protect nonnavigable waters).

³⁵ *Id.*

³⁶ Brief of Former EPA Administrators William K. Reilly and Carol M. Browner as Amici Curiae in Support of Respondents, *Sackett v. EPA*, No. 21-454, at 8–9 (filed June 17, 2022) (citing 40 Fed. Reg. 31,320, 31,324-25 (July 25, 1975)).

³⁷ 33 C.F.R. § 320.4(a).

³⁸ 33 C.F.R. § 320.4(a).

Agency, and the U.S.D.A.'s Natural Resources Conservation Service (previously the Soil Conservation Service).³⁹

All of which is to say that while the statute focuses on water quality, the agencies implementing the Act have long required the evaluation of *non-water quality related values* before issuing any permit. It is a remarkable story in the legacy of the Clean Water Act; the protection of water quality “ripples out” to support other public-interest goals.

And as we explain throughout this chapter, this “ripple effect” is by congressional design. That is, it flows from interconnected, statutory directives to federal agencies. A permit proceeding under Section 404 is deemed a “major Federal action” that initiates review under NEPA, and thus requires federal agencies to comprehensively evaluate project impacts beyond those directly related to water quality.⁴⁰ NEPA regulations, developed by the Council on Environmental Quality, have long specified that the “effects” to be evaluated include: “ecological [effects] (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health [effects], whether direct, indirect, or cumulative.” The regulations implementing NEPA also mandate evaluation of “reasonable alternatives” to mitigate harm to these values.⁴¹ All of these impacts may be incorporated into a Clean Water Act permitting proceeding.⁴²

Other federal conservation laws have similar triggers. Section 7(a)(2) of the Endangered Species Act (“ESA”) requires federal agencies to consult with the U.S. Fish & Wildlife Service to “insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species which is determined ... to be critical...”⁴³ The Corps’ determination on a Section 404 permit application can thus trigger consultation under the ESA and require the U.S. Fish and Wildlife Service to prepare a Biological Opinion outlining harms to protected flora and fauna.

Similarly, Section 106 of the National Historic Preservation Act (“NHPA”) requires that “prior to the approval of the expenditure of any Federal funds” and “prior to the issuance of any license,” federal agencies must “take into account the effect of the undertaking on any historic property.”⁴⁴ The Fish and Wildlife Coordination Act likewise provides that “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, ... or

³⁹ 33 C.F.R. § 320.4(b)(3).

⁴⁰ 42 U.S.C. § 4332(2)(C); 33 C.F.R. § 330.5(b)(3).

⁴¹ 40 C.F.R. § 1502.14(a).

⁴² 40 C.F.R. § 1508.8; 43 Fed. Reg. 55978, 56004 (Nov. 29, 1978).

⁴³ 16 U.S.C. §§ 1531–1544. See § 7(a)(2) of the ESA stating that federal agencies must assure that all actions they conduct, authorize, or fund are “not likely to jeopardize the continued existence of any listed species or threatened species or result in the destruction or adverse modification of designated critical habitat.” 16 U.S.C. § 1536(a)(2).

⁴⁴ 54 U.S.C. § 306108.

modified ... under Federal permit or license, such department or agency [issuing the permit] first shall consult with the United States Fish and Wildlife Service ... with a view to the conservation of wildlife resources....⁴⁵

The foray into these non-water quality related values may seem perplexing, but they are caused by the very structure of the Clean Water Act (requiring a federal permit) and other conservation-minded statutes (requiring further assessments before the issuance of a federal permit). The cases discussed below document how this daisy chain of federal regulation works in practice.

In a 2011 case, *Sierra Club v. United States Army Corps of Engineers*, the U.S. Court of Appeals for the 8th Circuit upheld an injunction halting construction of the John W. Turk, Jr. coal-fired power plant.⁴⁶ The Sierra Club's challenge was grounded in NEPA, which had been triggered by a power company's application for a Clean Water Act Section 404 permit to fill wetlands. The environmental group uncovered a wide array of failures in the NEPA analysis—failures that were tied to significant public interest values not directly related to water quality. For example, the Corps' public interest review mistakenly relied on the power company's assertion that the coal plant needed to be located in Arkansas because the electricity would serve Arkansas citizens. As the court noted, "this is simply wrong.... none of the electricity generated by the plant will go to Arkansas ratepayers."⁴⁷

While the Sierra Club has advocated to preserve wetlands and protect water quality in other contexts, those concerns did not seem to be driving the organization's involvement in this particular case. The Sierra Club's core concern here centered on the smog, soot, and global warming pollution that would be generated through the operation of a massive coal-fired power plant.⁴⁸ Indeed, the Sierra Club had brought a wide-ranging series of challenges to the coal plant, with litigation on the air permit at the state level, the Clean Water Act permit at the federal level, and cost concerns addressed before the Arkansas Public Service Commission.⁴⁹

The failure to properly assess the alleged need for a coal plant was a dramatic error in the Corps' NEPA analysis. The Corps, after all, is required to select the "least environmentally damaging practicable alternative"⁵⁰ under its regulations and the electric utility's own selection study had identified a site in Texas that "would fill fewer wetlands."⁵¹ But, the Corps had rejected the Texas site because it wrongly believed that the coal plant needed to be on the ground in Arkansas. The Section 404 permitting process thus forced the Corps to account for a material factor, not directly tied to water quality, which it had previously overlooked.

⁴⁵ 16 U.S.C. § 662(a).

⁴⁶ *Sierra Club v. United States Army Corps of Eng'rs*, 645 F.3d 978, 985 (8th Cir. 2011).

⁴⁷ *Id.*, p. 990 (internal citation omitted).

⁴⁸ Smith (2011) (discussing related challenge to the air permit in state court).

⁴⁹ Guter (2011) (noting that "there have been quite a few twists and turns in the fight against Turk, the 600 MW proposed coal-fired plant in Hempstead County.").

⁵⁰ *Sierra Club*, 645 F.3d at 984.

⁵¹ *Id.*, p. 990.

Another example of Section 404's ripple effect comes out of the Fifth Circuit. In *O'Reilly v. United States Army Corps of Engineers*, the court assessed the sufficiency of an Environmental Assessment (also known as an "EA") under NEPA by looking at increases in non-point source pollution and the "total and complete loss of wetland function," all of which were firmly within the ambit of the Clean Water Act. Yet the court also reviewed—as part of the same analysis—harms to "non-aquatic wildlife" and impacts on traffic, transportation, and public safety.⁵² Evaluating the totality of these impacts, the court concluded:

The EA before us lists the potentially significant adverse impacts, and describes, in broad terms, the types of mitigation measures that will be employed. As is evident from our above review of the Corps' treatment of each individual potential impact, however, the EA provides only cursory detail as to what those measures are and how they serve to reduce those impacts to a less-than-significant level. Because the feasibility of the mitigation measures is not self-evident, we agree with the district court that the EA does not provide a rational basis for determining that the Corps has adequately complied with NEPA.⁵³

The case provides a great example of the breadth of issues worthy of concern and consideration that are captured under a Section 404 permitting process. Many of these impacts are directly tied to water quality values, but some unquestionably are not.

This daisy chain of federal reviews can also arise in unexpected ways. In *United States v. Land, 62.50 Acres of Land More or Less*, federal authorities sought to condemn coastal marshland in Louisiana as part of an expansion of Jean Lafitte National Historic Park and Preserve. The private landowner, OKC Limited Partnership, believed the National Park Service had undervalued the property and ignored the land's potential development for a commercial shell-harvesting operation.⁵⁴ The shells might be resold "for road paving material and seeding oyster beds." The U.S. Court of Appeals sided with the government in rejecting OKC's overly optimistic valuation, which ignored the challenges of obtaining a Section 404 permit. The Court explained, "The shell mining project would not only threaten a wetlands habitat and pose a substantial risk of shoreline erosion but also destroy native American and prehistoric artifacts of interest to archaeologists and historians."⁵⁵ All of these factors would be evaluated in the Clean Water Act permitting process, and collectively they would make it far less likely that a shell-harvesting operation would ever see the light of day.

Finally, *Hough v. Marsh*⁵⁶ provides an especially strong illustration of how the Clean Water Act and NEPA have worked together for decades to expand the range of impacts that the Corps must consider in administering Section 404. In *Hough*, two individuals applied for a Section 404 permit to fill tidal wetlands sandwiched

⁵² *O'Reilly v. United States Army Corps of Eng'rs*, 477 F.3d 225 (5th Cir. 2007).

⁵³ *Id.*, p. 234.

⁵⁴ *United States v. Land, 62.50 Acres of Land More or Less*, 953 F.2d 886 (5th Cir. 1992).

⁵⁵ *Id.*, pp. 892–893.

⁵⁶ *Hough v. Marsh*, 557 F. Supp. 74 (D. Mass 1982).

between a marina and a beachfront on Martha's Vineyard. They proposed to fill this spit of marshland to build a tennis court and two luxury residences.⁵⁷ The Corps solicited comments from the EPA, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service.⁵⁸ Two of those agencies, the National Marine Fisheries Service and the U.S. Fish and Wildlife Service, highlighted heartland water-quality concerns about harms to "nutrients and habitat to the surrounding ecosystem" and harm to wetlands that served as a "storage area for storm and flood water." Nevertheless, the Corps granted a permit to fill in the wetlands.⁵⁹

But a district court disagreed with the Corps' decision and ruled for challengers that the permit should never have been issued. The court's holding did not rest solely on the water-quality related impacts from developing a project on the edge of the ocean. Rather, the court found error in a wide array of non-water-quality related factors. Specifically, the court zeroed in on "two additional factors that the Corps failed to address properly in connection with the public interest review Those dealing with 'economics' and 'cumulative effects.'" In evaluating these effects, the court went on to discuss impacts of the proposed development on the adjacent, historic Edgartown Lighthouse.

A lighthouse was built on the site in Edgartown in 1828, on an artificial island just off the coast. Over time, a manmade causeway and the natural accretion of sand connected the lighthouse to the main island of Martha's Vineyard.⁶⁰ It soon became a beloved destination for "promenade and pleasure."⁶¹ In 1938, the U.S. Lighthouse Service determined that a taller structure was needed to better aid navigation.⁶² An 1881-era cast iron lighthouse tower was thus relocated from Ipswich, Massachusetts to the site in Edgartown on Martha's Vineyard.⁶³

Flash forward to 1982 and the permitting controversy at issue in *Hough*: the NHPA, along with regulations promulgated by the Advisory Council on Historic Preservation, required review of the "adverse effect on any property listed in or eligible for inclusion in the National Register of Historic Places." The NHPA mandated that the "head of any Federal agency ... having authority to license any undertaking, ... prior to the issuance of any license, shall take into account the effect of the undertaking on any historic property."⁶⁴ The harm to the lighthouse, along with the economic loss of tourism to the lighthouse (which had been "on the itinerary of sightseeing buses") convinced the court to remand the matter to the Corps for additional analyses.

⁵⁷ Id, p. 76.

⁵⁸ Id, p. 77.

⁵⁹ Id.

⁶⁰ Martha's Vineyard Museum (2022b).

⁶¹ Id.

⁶² Martha's Vineyard Museum (2022a).

⁶³ United States Coast Guard: U.S. Department of Homeland Security (2016).

⁶⁴ 54 U.S.C. § 306108 (formerly 16 U.S.C. § 470f (1982), as cited in *Hough*).

Hough emphasizes the real-world impact of accounting for non-water quality values in Clean Water Act permitting processes. The case demonstrates the protective “ripple effect” of Clean Water Act jurisdiction. The amount of wetlands to be filled was surprisingly small: just one-quarter of an acre on a three-acre parcel. Yet those wetlands were enough to trigger evaluation of the historic lighthouse on Martha’s Vineyard. If those aquatic resources had not been protected by the Clean Water Act, impacts to the lighthouse might never have been considered.

4 An Uncertain Future for the “Ripple Effect”

O’Reilly, *Sierra Club*, *Hough*, and the Louisiana condemnation case all highlight how real harm to historic and environmental resources can be overlooked. The communities most directly affected in each of those cases would not have had their concerns considered by federal regulators were it not for the Section 404 permitting process. The jurisdictional reach of the Clean Water Act thus ensures that these broad, holistic reviews take place.

The current focus in Clean Water Act litigation, however, is on *Sackett v. EPA* and assessing the jurisdictional question of which aquatic resources are covered as “waters of the United States.” That question is distinct from the issue of whether non-water quality related values are protected by the Clean Water Act, but the two queries are inextricably intertwined. If wetlands or tributaries impacted by a future project are found to be outside of the Corps’ jurisdiction, then the “ripple effect” never occurs.

To place *Sackett* in context, it is essential to first understand the cases that preceded it. The Supreme Court’s seminal precedent on the jurisdictional question is *United States v. Riverside Bayview Homes*, a decision issued in 1985. In that case, the Court largely deferred to the Corps’ expertise in defining the scope of waters to be covered. The Court listed several aquatic features that might be protected as navigable waters—“shallows, marshes, mudflats, swamps, bogs”—and remarked, “Where on this continuum to find the limit of ‘waters’ is far from obvious.”⁶⁵

Sixteen years later, the Court began to reign in the deference given to federal regulators. In *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, it ruled that there must be some hydrological connection to navigability for a wetland, pond, or stream to benefit from the protections of the Clean Water Act. Then-Chief Justice Rehnquist famously explained, “It was the significant nexus between the wetlands and ‘navigable waters’ that informed our reading of the [Clean Water Act] in *Riverside Bayview Homes*.”⁶⁶

The phrase “significant nexus” had driven debate over Clean Water Act jurisdiction—and it dominated the Biden Administration’s new rule on “waters of the

⁶⁵United States v. Riverside Bayview Homes, 474 U.S. 121, 132 (1985).

⁶⁶SWANCC v. U.S. Army Corps of Engineers, 531 U.S. 159, 167 (2001).

United States,” appearing nearly 500 times in the pre-publication text.⁶⁷ Yet in the 2006 case of *Rapanos v. United States*, Justice Scalia—writing for himself, Justice Thomas, Justice Alito, and Chief Justice Roberts—would have rejected the significant nexus test and limited Clean Water Act jurisdiction only to wetlands that maintained a continuous, surface water connection to navigable-in-fact waters. Justice Scalia’s proposal was not adopted by a majority of the Court in *Rapanos*. Justice Kennedy, while agreeing that the Corps of Engineers had failed to prove its case, would have sent the issue back to the lower courts “for consideration whether the specific wetlands at issue possess a significant nexus with navigable waters.”⁶⁸ Kennedy’s solo concurrence provided the guiding criteria for agencies seeking to apply *Rapanos* until recently. The applicability of Justice Kennedy’s opinion, of course, has now largely been ended given the way that the Supreme Court has reconsidered the jurisdictional issue in *Sackett*.

Oral argument was heard on October 3, 2022 in *Sackett v. EPA*, a case that began when Michael and Chantell Sackett dumped sand and gravel into wetlands to shore up a “housing pad” for a water-view home sitting roughly 300 linear feet from the edge of Priest Lake, Idaho—a 23,000-acre water body that serves as an international tourist destination.⁶⁹ The Sackett property sits adjacent to Kalispell Creek’s inflow to the western shores of Priest Lake and is part of the broader Kalispell Bay Fen, an aquatic wetland resource. Wetlands at the building site drain via groundwater into Priest Lake.⁷⁰ What is more, a creek adjacent to the Sackett property supports a population of native westslope cutthroat trout,⁷¹ and the EPA has documented the presence of trout and trout-spawning habitat in the wetlands above the Sackett site.⁷²

Notwithstanding the multiple surface and groundwater connections between these aquatic resources and Priest Lake, the Sacketts succeeded in arguing that their wetlands fell outside the reach of the Clean Water Act. That is, they claimed that their wetlands were not sufficiently adjacent to “navigable waters” to be treated as part of the “waters of the United States.”

In addition to the jurisdictional challenges at issue in *Sackett*, the Clean Water Act’s ripple effect might also be challenged by Major Questions Doctrine, which posits that federal agencies will often lack the leeway to interpret ambiguous statutory commands.⁷³ The doctrine, which is a form of “clear statement rule,” is in tension with the Supreme Court’s longstanding deference to agencies under *Chevron v.*

⁶⁷U.S. Army Corps of Engineers & U.S. Environmental Protection Agency, Pre-Publication Final Rule Notice: Revised Definition of “Waters of the United States,” Docket ID No. EPA-HQ-OW-2021-0602, (Dec. 30, 2022), at <https://www.epa.gov/system/files/documents/2022-12/Pre-Publication%20Final%20Rule%20Notice.pdf>.

⁶⁸*Rapanos v. United States*, 547 U.S. 715, 787 (2006) (Kennedy, J., concurring in the judgment).

⁶⁹Amicus Brief of Idaho Conservation League, *Sackett v. EPA*, at 6–7, 11.

⁷⁰Freeman (1995), p. 43.

⁷¹Idaho Dep’t of Fish and Game, Fisheries Bureau (2013).

⁷²Amicus Brief of Idaho Conservation League, *Sackett v. EPA*, at 16–17.

⁷³*West Virginia v. EPA*, 142 S. Ct. 2587, 2616 (2022) (Gorsuch, J., concurring).

Natural Resources Defense Council.⁷⁴ That 1984 decision has achieved canonical status. It holds that if a statute is ambiguous—*i.e.*, if “Congress has not directly addressed the precise question at issue”—then “the court does not simply impose its own construction on the statute....” Rather, “the question for the court is whether the agency’s answer is based on a permissible construction of the statute.”⁷⁵

The Major Questions Doctrine proposes a far different method for resolving ambiguity in the statutory text. “Under that doctrine’s terms, administrative agencies must be able to point to ‘clear congressional authorization’ when they claim the power to make decisions of vast ‘economic and political significance.’”⁷⁶ One criticism of the Major Questions Doctrine is that it does not eliminate the need to interpret ambiguous statutory text; it simply pre-decides that ambiguous language will prohibit any significant administrative action. That is, it creates “a one-way ratchet favoring deregulation.”⁷⁷ Yet federal agency inaction is just as much of a choice as action. Instead of deferring to Congress, courts applying the Major Questions Doctrine simply augment their own authority at the expense of a democratically elected President and the executive branch.⁷⁸

The salience of the Major Questions Doctrine came to the fore in another 2022 case, *West Virginia v. EPA*, which marked the first time that the doctrine was invoked in a majority opinion of the Supreme Court.⁷⁹ The interpretive theory resurfaced briefly during the October 2022 oral argument in *Sackett v. EPA*, when Justice Alito asked the government’s lawyer if EPA’s “understanding of ‘waters of the United States’ take[s] into account any of the clear statement rules.”⁸⁰ Justice Kavanaugh similarly wondered, “[W]hy not let Congress figure out where the line is?”⁸¹

The justification for Congress’s delegation of authority to agencies is often rooted in assumptions of agency expertise. We thus accept ambiguously worded delegations to protect water quality because we understand that EPA’s hydrologists, aquatic biologists, and engineers have the requisite knowledge needed to implement congressional directives—and that Congress lacks the expertise to be “in the weeds” on regulation. EPA’s consideration of historical, social, economic, and other non-water quality related values, however, might be viewed as only tangentially related to their areas of competency and thus subject to attack under the Major Questions Doctrine.

⁷⁴ *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984).

⁷⁵ *Id.*, pp. 842–843 (internal footnotes omitted).

⁷⁶ *West Virginia v. EPA*, 142 S.Ct. 2587, 2616 (2022) (Gorsuch, J., concurring).

⁷⁷ *Super* (2022).

⁷⁸ Support for deregulation—*i.e.*, a limited role for the federal government—is often associated with political conservatives, but that is always the case. See, e.g., Jaffe (2020), pp. 692–698 (discussing several instances of Republican support for broad, federal, regulatory authority).

⁷⁹ *West Virginia v. EPA*, 142 S. Ct. 2587, 2609 (2022); Congressional Research Service (2022).

⁸⁰ Transcript of Oral Argument at 106, *Sackett v. Environmental Protection Agency*, No. 21-454, (Oct. 3, 2022).

⁸¹ *Id.*, p. 77.

Even so, it is hard to predict whether the Major Questions Doctrine will play much of a role in the implementation of the *Sackett* decision in the coming years. Noting that directly adjacent but non-navigable wetlands are unquestionably regulated as “navigable” waters, Justice Kavanaugh cautioned the Sacketts’ lawyer that he was “calling [for] a textual limit on something that’s divorced from the text to begin with.”⁸² Even more pointedly, Kavanaugh followed by asking, “Why did seven straight [Presidential] administrations not agree with you” on a narrow interpretation of the Clean Water Act?⁸³ (Kavanaugh would develop this observation more thoroughly in a concurring opinion filed in *Sackett*.) And Justices Sotomayor, Kagan, Kavanaugh, and Jackson all seemed to agree that adjacent wetlands—including those separated from navigable waters by manmade berms or dikes—would be protected.⁸⁴

At the same time, the Justices made it clear that the significant nexus test presented line-drawing problems. It can be challenging for a developer to determine where buildable property ends and jurisdictional waters begin. Appearing to summarize a majority of the Court’s thinking at the time of oral argument, Justice Sotomayor asked:

So is there another test? Not the *Rapanos* test, not the adjacency test, not the significant nexus test. But is there another test that could be more precise and less open-ended than the adjacency test or the significant nexus test that you use? Is there some sort of connection that could be articulated?⁸⁵

To be sure, congressional leaders have affirmed the function and importance of the Clean Water Act’s public interest reviews, thus granting the EPA and the Corps additional legitimacy in pursuing these goals. Such support was demonstrated in a 1982 House Subcommittee of the Committee on Government Operations hearing,⁸⁶ during which Chairman Toby Moffit admonished the Corps to consider broad public interest concerns: “When a private party wants to use a national resource, such as a wetland, for its private gain, there are legitimate public interest criteria that must be met. The Corps obviously needs to be reminded of whose resources are at stake.”⁸⁷

And, as stated throughout this chapter, the Clean Water Act functions in collaboration with other federal statutes to create a holistic process that is set in motion with the filing of an application for a Section 404 permit. Regarding the incorporation of non-water quality values into project review, NEPA remains the most influential of these linked statutes. NEPA applies to all “major Federal actions significantly

⁸²Id., p. 52.

⁸³Id., p. 53.

⁸⁴Justice Barrett cautioned the Sacketts’ lawyer that Section “1344(g) is the biggest problem for you, clearly.” Id. at 29.

⁸⁵Id., p. 92.

⁸⁶Hearing before the Subcommittee of the Committee on Government Operations House of Representatives ninety-seventh Congress Second Session, Army Corps of Engineers: The North Haven, Conn., Mall, September 9, 1982.

⁸⁷Id., p. 3.

affecting the quality of the human environment.”⁸⁸ The issuance of a Section 404 permit by the Corps is a “major Federal Action” and thus requires federal agencies to comprehensively evaluate a project’s broader impacts.⁸⁹

The connection between Section 404 of the Clean Water Act and NEPA was acknowledged in a 1992 Senate Report of the Committee on Environment and Public Works,⁹⁰ which noted, “Before the Corps can grant such a section 404 authorization, the Corps is required by the Clean Water Act and /or the National Environmental Policy Act (NEPA) to: Solicit comments ... regarding any Corps proposal to authorize water disposal of dredged material; Apply EPA’s section 404(b)(1) Guidelines...”⁹¹ Evaluation of a Section 404 permit application is inherently linked to NEPA review.

Section 101(b) of NEPA further provides that “it is the continuing responsibility of the federal government to use all practicable means, consistent with other essential considerations of national policy to avoid environmental degradation, preserve historic, cultural, and natural resources, and promote the widest range of beneficial uses of the environment without undesirable and unintentional consequences.”⁹² Section 404’s triggering of NEPA thus authorizes and demands the consideration of non-water quality values in permitting decisions. To put it in the context of a possible Major Questions Doctrine challenge, the statutory linkage between NEPA and Section 404 is clear and unambiguous.

Indeed, this linkage was highlighted in a 2007 Congressional Research Service Report, which characterized NEPA as an umbrella statute:

The appropriate NEPA documentation must also indicate any federal permits, licenses, and other entitlements required to implement the proposed project. This means that compliance requirements of any additional environmental laws, regulations, or executive orders must be determined (but not necessarily completed) during the NEPA process.⁹³

The report acknowledged that if a project impacted a historic site, then the Advisory Council on Historic Preservation should be engaged as a cooperating agency.⁹⁴ Similarly, Section 106 of the National Historic Preservation Act of 1966 instructs agencies to consider an activity’s impact on any district, building, structure, site, or object that does or could fall under the purview of the National Register that before issuing any permit or license.⁹⁵ In a contemporaneous report published with

⁸⁸ 42 U.S.C. § 4332 (C).

⁸⁹ 33 C.F.R. § 330.5(b)(3).

⁹⁰ Report of the Committee on Environment and Public Works, United States Senate together with additional views to accompany, S. 2734. Water Resources Development Act of 1992 (May 15, 1992).

⁹¹ *Id.*, p. 46.

⁹² 42 USC 4331(b).

⁹³ CRS Report for Congress: The National Environmental Policy Act: Streamlining NEPA, December 6, 2007 at (CRS-7).

⁹⁴ *Id.*; 40 C.F.R. §§ 1501.6 and 1508.5.

⁹⁵ 16 U.S.C. § 470f.

enactment of the NHPA, the Senate noted that “[Section 106] is intended to insure that the Federal agencies will not work at cross purposes with the goals of historic preservation and provides meaningful review of Federal or federally assisted projects which affect historic properties identifies on the national register.”⁹⁶

A Clean Water Act permitting decision can also instigate review under Section 7 of the Endangered Species Act (“ESA”), which requires agencies to consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service to evaluate the impacts of any permitting or authorization decisions on threatened or endangered species or critical habitats.⁹⁷ The Corps’ granting of a Clean Water Act permit plainly constitutes an agency authorization under section 7 of the ESA, indicating that Congress expects ESA review to be part of any impactful Clean Water Act permitting decision.

Simply put, the requirement of NEPA, NHPA, and ESA review along with a Clean Water Act permit—the ripple effect we describe—should continue to prompt holistic executive agency consideration of non-water quality values. This should remain the case regardless of how the *Sackett* Court adjusts the jurisdictional reach of the Clean Water Act.

5 Conclusion

Issuance of a Section 404 permit under the Clean Water Act often triggers a NEPA review and may also trigger analyses under the Endangered Species Act, National Historic Preservation Act, and the Fish and Wildlife Coordination Act, among others—all by congressional design. That is, Congress drafted NEPA, the ESA, and the NHPA to piggyback on other federal permitting proceedings. In doing so, Congress ensured that non-water quality related values would be evaluated in Clean Water Act permit proceedings. Looking back on 50 years of Clean Water Act implementation, our conclusion is that this is a good thing.

The Biden Administration in January 2023 issued a Final Rule asserting its interpretation of the statutory phrase “waters of the United States.” The Corps and the EPA claim that theirs is “a durable rule that retains the protections of the longstanding regulatory framework and avoids harms to important aquatic resources, informed by the best available science and consistent with the agencies’ determination of the statutory limits on the scope of the ‘waters of the United States,’ informed by relevant Supreme Court case law.”⁹⁸

⁹⁶Preservation of Historic Properties, Report To accompany S. 3035, 89th Congress 2d Session, Senate, July 7, 1966 at 8.

⁹⁷16 U.S.C. 1536(a)(2). It should be noted that such consultation is unnecessary if the managing agency determines that a particular action will not impact a listed species or designated critical habitat.

⁹⁸U.S. Army Corps of Engineers & U.S. Environmental Protection Agency, Pre-Publication Final Rule Notice: Revised Definition of “Waters of the United States,” Docket ID No. EPA-

Yet it remains to be seen how extensively the U.S. Supreme Court's re-evaluation of the Clean Water Act's jurisdictional reach in *Sackett* will threaten to undermine this "durable" definition. As we have shown, the interplay between a broad swath of federal environmental laws is at stake. Stated differently, *Sackett* is obviously a very important Clean Water Act case, but it is likely to be much more than that.

References

- Boissoneault L (2019) The Cuyahoga River caught fire at least a dozen times, but no one cared until 1969, *Smithsonian Magazine*. <https://www.smithsonianmag.com/history/cuyahoga-river-caught-fire-least-dozen-times-no-one-cared-until-1969-180972444/>
- Congressional Research Service (2016) Clean Water Act: a summary of the law. <https://crsreports.congress.gov/product/pdf/RL/RL30030>
- Congressional Research Service (2022) The Major Questions Doctrine. <https://crsreports.congress.gov/product/pdf/IF/IF12077#:~:text=Under%20the%20Court's%20formulation%20of,require%20it%20to%20do%20so>
- Drelich D (2009) Restoring the cornerstone of the Clean Water Act. *Columbia J Environ Law* 34:267–330
- Flournoy AC (2008) Supply, demand, and consequences: the impact of information flow on individual permitting decisions under Section 404 of the Clean Water Act. *Ind Law J* 83:537–582
- Freeman KM (1995) An evaluation of ground water nutrient loading to Priest Lake, Bonner County, Idaho. M.S. Thesis, University of Idaho
- Guter L (2011) Sierra Club – Arkansas Chapter. Update on the Turk coal-fired power plant in southwest Arkansas. Spring 2011 Newsletter of the Sierra Club. https://www.sierraclub.org/sites/www.sierraclub.org/files/sce/arkansaschapter/newsletters/ARSC_newsletter_spring2011.pdf
- Hill G (1970) The polluted Potomac: sewage and politics create acute capital problem, *New York Times*. <https://www.nytimes.com/1970/07/12/archives/the-polluted-potomac-sewage-and-politics-create-acute-capital.html>
- Houck O (2006) Katrina to Louisiana: you can't have your wetlands and eat 'em too. In: Arnold G (ed) *After the storm: restoring America's Gulf Coast wetlands*. Environmental Law Institute, Washington DC, pp 27–29
- Houck O, Rolland M (1995) Federalism in wetlands regulation: a consideration of delegation of Clean Water Act Section 404 and related programs to the states. *Md Law Rev* 54:1242–1314
- Idaho Dep't of Fish and Game, Fisheries Bureau (2013) Management Plan for the Conservation of Westslope Cutthroat Trout in Idaho. <https://idfg.idaho.gov/old-web/docs/fish/planWestslopeCutthroat.pdf>
- Jaffe C (2001) Tragedy of the wetlands commons. *Va Environ Law J* 20:329–364
- Jaffe C (2020) Environmental federalism as forum shopping. *Wm Mary Environ Law Policy Rev* 44:669–699
- Martha's Vineyard Museum (2022a) Lighthouses. <https://mvmuseum.org/lighthouses/>
- Martha's Vineyard Museum (2022b) Treasured Beacon: The Edgartown Harbor Light, Martha's Vineyard Museum. <https://express.adobe.com/page/kTRoPF0kPI0W1/>
- Percival RV et al (2021) *Environmental regulation: law, science, and policy*, 9th edn. Aspen Publishing, Boston

- Sapp WW et al (2006) From the Fields of Runnymede to the Waters of the United States: a historical review of the Clean Water Act and the term “navigable waters”. *Environ Law Rep* 36:10190, 10213
- Smith D (2011) 2 Groups Appeal SWEPKO Ruling, *Arkansas Democrat-Gazette*. <https://www.arkansasonline.com/news/2011/jan/15/2-groups-appeal-swepco-ruling-20110115/>
- Super D (2022) The court reads free-market economics into the Constitution(again), *Washington Post*. <https://www.washingtonpost.com/outlook/2022/07/05/epa-supreme-court-environmental-regulations/>
- Tarlock AD (2005) The story of Calvert Cliffs: a court construes the National Environmental Policy Act to create a powerful cause of action. In: Lazarus R, Houck O (eds) *Environmental law stories*. Foundation Press, Santa Barbara, pp 77–108
- United States Coast Guard: U.S. Department of Homeland Security (2016) Historic light station information & photography: Massachusetts. <https://web.archive.org/web/20170501202446/http://www.uscg.mil/history/weblighthouses/LHMA.asp>

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