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Aquaculture and Pollutants Under the Clean Water Act: A Case for Regulation

by

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Aquaculture and Pollutants Under the Clean Water Act: A Case for Regulation

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INTRODUCTION

On October 18, 2002, the thirtieth anniversary of the Clean Water Act[1] came finally to pass.[2] Celebrations were, at best, muted.[3] Despite the Act's "objective of . . . restor[ing] and maintain[ing] the chemical, physical, and biological integrity of the Nation's waters,"[4] nearly half remained—three decades after the statute's passage—"in need of cleaning."[5] To some, the anniversary seemed "just the moment for an aggressive push forward."[6] Not all were so persuaded. Only two months before, a panel of the Ninth Circuit Court of Appeals announced its decision in *Association to Protect Hammersley, Eld, and Totten Inlets v. Taylor Resources*, an opinion in which the wastes from two "mussel-harvesting facilities" were held to be beyond the reach of the Clean Water Act's provisions.[7] The thrust of the court's reasoning was simple: because the "mussels, shells and . . . byproduct[s]" were not "waste product[s] of a transforming human process," they fell outside the category of "pollutants" defined by the statute, and were not, therefore, subject to the central permitting requirements of the Act.[8]

Despite its modest face, the Ninth Circuit's opinion is unsettling. The decision not only endorsed the unpermitted operation of mussel harvesting facilities within "the vibrant waters of Puget Sound,"[9] but also laid precedent for all other industries wishing to so harvest aquatic species. More insidiously, the court's opinion suggests a previously undiscovered element in the Act's definition of regulated pollutants, an element unearthed by unnamed "tools of reason"—the requirement of "identifiable harm" or,

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1. 33 U.S.C. §§ 1251–1387 (2000). While formally termed the "Federal Water Pollution Control Act," Congress capitulated to popular usage in the statute's 1977 Amendments, anointing references to the "Clean Water Act" with an official air. Clean Water Act of 1977, Pub. L. No. 95-217, § 2, 91 Stat. 1566, 1566 (1977).

2. *See All Things Considered: Chesapeake Bay, Maryland, on the 30th Anniversary of the Clean Water Act* (NPR radio broadcast, Oct. 18, 2002), 2002 WL 3498320.

3. *See, e.g.*, Hillary Rodham Clinton, *White House Not Doing Enough to Maintain Clean Water*, TIMES UNION ALB., Oct. 18, 2002, at B2, 2002 WL 24169163; Misty Edgecomb, *Clean Water Act at 30: Kudos, Criticism*, BANGOR DAILY NEWS, Oct. 18, 2002, at 1, 2002 WL 23751246; Tony Freemantle, *After Three Decades, Clean Water Act's Success Questioned*, HOUS. CHRON., Oct. 18, 2002, at A18, 2002 WL 23231118; Bruce Henderson, *1 in 4 Dump Chemicals That Sicken; Troubling Report Comes at 30th Anniversary*, CHARLOTTE OBSERVER, Oct. 18, 2002, at 3B, 2002 WL 101037765; Don Hopey, *Clean Water Act Hailed at 30; But Bush Proposals Worry Environmental Groups*, PITT. POST-GAZETTE, Oct. 18, 2002, at C1, 2002 WL 101474534; Tom Meade, *Clean Water Act Turns 30'h Year Facing New Challenges*, PROVIDENCE J., Oct. 18, 2002, at D28, 2002 WL 22526092.

4. 33 U.S.C. § 1251(a) (2000).

5. *The Clean Water Act at 30*, N.Y. TIMES, Oct. 22, 2002, at A30.

6. *Id.*

7. 299 F.3d 1007, 1010 (9th Cir. 2002) (Gould, J.).

8. *Id.* at 1017.

9. *Id.* at 1010.

perhaps, "appreciable or significant damage."[10] This Note seeks both to shed light upon the significance of the *Hammersley* opinion and to demonstrate the erroneousness of the court's reasoning.

Part I of this Note discusses the evolution of the federal water pollution control program and the impact of that evolution upon the terms of the Clean Water Act. Part II sets forth the basic provisions of the statute and the purposes for which they were enacted. Part III outlines the opinion of the Ninth Circuit in *Hammersley* and is followed, in Part IV, by a discussion of aquaculture and its relation to the marine environment. Finally, Part V seeks to demonstrate the applicability of the Act to the harvesting operation at issue in the case.

I. THE DEVELOPMENT OF FEDERAL WATER POLLUTION CONTROLS

The history of federal water pollution control is one of "increasing intervention" into a realm long dominated by state control.[11] From the initial moment of federal intervention in 1890,[12] Congress sought to maintain what was considered an "important principle of public policy"—that the "States [would] lead the national effort to prevent, control and abate water pollution," leaving the federal government to "support" and "assist[]" the states in their endeavors.[13] The conviction with which Congress

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10. *Id.* at 1016.

11. Jeffrey M. Gaba, *Federal Supervision of State Water Quality Standards Under the Clean Water Act*, 36 VAND. L. REV. 1167, 1176 (1983). J. William Futrell has termed this slow expansion of federal authority "creeping federalization." J. William Futrell, *The History of Environmental Law*, *in* SUSTAINABLE ENVIRONMENTAL LAW: INTEGRATING NATURAL RESOURCE AND POLLUTION ABATEMENT LAW FROM RESOURCES TO RECOVERY 3, 44 (Celia Campbell-Mohn ed., 1993). For a thorough history of early local, state, and federal water pollution control efforts, see N. William Hines, *Nor Any Drop to Drink: Public Regulation of Water Quality, Part I: State Pollution Control Programs*, 52 IOWA L. REV. 186 (1966) [hereinafter Hines I]; N. William Hines, *Nor Any Drop to Drink: Public Regulation of Water Quality, Part II: Interstate Arrangements for Pollution Control*, 52 IOWA L. REV. 432 (1966) [hereinafter Hines II]; N. William Hines, *Nor Any Drop to Drink: Public Regulation of Water Quality, Part III: The Federal Effort*, 52 IOWA L. REV. 799 (1967) [hereinafter Hines III].

12. While the federal government did pass legislation attempting to control water pollution prior to 1890, those statutes—enacted in 1886 and 1888—dealt only with the waters of New York Harbor. *See infra* note 16 and accompanying text (discussing the Rivers and Harbors Act of 1890 and its more limited predecessors). Despite the narrowness of the legislation, it seemed to spur some nascent commitment to water pollution control. Between 1886 and 1967, "[m]easures to control water pollution [were] introduced in all but six Congresses." Hines III, *supra* note 11, at 803.

13. S. REP. NO. 92-414, at 1 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3669; *see also* Hines III, *supra* note 11, at 838 ("In tracing the evolution of federal involvement in the water quality management field, it is seen that, although the emphasis may shift from time to time, federal effort substantially has been concentrated on both phases of pollution control: enforcement and financial assistance."). President Eisenhower, in vetoing a 1960 bill with the modest aim of increasing federal grants for water treatment facilities, demonstrated the conviction with which some maintained this sentiment. Reasoning from the false premise that water pollution is a "uniquely local blight," Eisenhower declared that the "primary responsibility for solving the

maintained this principle was remarkable. As the decades of the twentieth century dissolved, it became increasingly apparent that the states were not "lead[ing] the national effort" to maintain water integrity,[14] but rather shunning the movement's terms.[15]

A. THE RIVERS AND HARBORS ACT

Congress first addressed the integrity of the nation's waters, albeit indirectly, through the Rivers and Harbors Act of 1890.[16] The statute's provisions declared unlawful "[t]he creation of any [unauthorized] obstruction . . . to the navigable capacity of any waters" within the jurisdiction of the United States.[17] Less than a decade later, Congress expanded the breadth of the Act with the passage of the Rivers and Harbors Appropriation Act of 1899, which extended the statute's prohibition to the "throw[ing], discharg[ing], or deposit[ing] . . . [of] any refuse matter of any kind or description . . . into any navigable water of the United States," unless the refuse was of the kind "flowing from streets and sewers and passing therefrom in a liquid state."[18]

While the Rivers and Harbors Act seems, in retrospect, a remarkable piece of stewardship by a legislature working at the close of the nineteenth

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problem lies not with the Federal Government but rather must be assumed and exercised, as it has been, by state and local governments." H.R. REP. NO. 86-346, at 1 (1960), *reprinted in* 1960 U.S.C.C.A.N. 1542, 1542–43.

14. S. REP. NO. 92-414, at 1 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3669.

15. *See infra* note 36 and accompanying text (noting the limited promulgation of water quality standards by states and the near total lack of standard enforcement).

16. *See* 33 U.S.C.A. § 403 annot. (West 2000) (setting forth the original provisions of the Rivers and Harbors Act of 1890 and the revised text of 1899). Prior to the enactment of the Rivers and Harbors Act, two statutes—the first enacted in 1886 and the second in 1888—limited the dumping of refuse into the waters of New York Harbor alone. United States v. Standard Oil Co., 384 U.S. 224, 226–27 (1966). The Rivers and Harbors Act of 1890, and the subsequent Rivers and Harbors Appropriation Act of 1899, sought to consolidate these statutes and make their terms applicable to all the navigable waters of the United States. *Id.* at 227.

17. 33 U.S.C.A. § 403 annot. The act rested primarily upon criminal sanctions:

> [e]very person and every corporation . . . guilty of creating or continuing any such unlawful obstruction . . . shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding five thousand dollars, or by imprisonment (in the case of a natural person) not exceeding one year, or by both such punishments, in the discretion of the court.

Id. The original provisions of the Act also permitted "any circuit court [district court] exercising jurisdiction in any district in which such [an] obstruction . . . [was] threatened or . . . exist[s]" to "prevent[]" or "remove[] [it] by . . . injunction." *Id.* The 1899 revision altered these terms only slightly, requiring that the fine "not exceed[] $2,500 nor [be] less than $500." 33 U.S.C. § 406 (2000). While the Act, once revised, made no mention of the use of injunctions to prevent threatened obstructions, the Ninth Circuit Court of Appeals, in *United States v. Wishkah Boom Co.*, 136 F. 42 (9th Cir. 1905), held that the text of the original Act was not superseded by the revision in this regard. 33 U.S.C.A. § 403 annot.

18. 33 U.S.C. § 407.

century, the statute's purpose was more economic than environmental.[19] Its provisions were, in short, crafted in order to clear "obstruction[s]" from waters of the United States and, thus, assure their navigability.[20] Still, the Act was a watershed, one later interpreted broadly—after being disinterred by a "bit of legal archeology"[21]—to prohibit the discharge of "industrial solids"[22] and "aviation gasoline"[23] into American rivers. Of even greater importance, perhaps, was the statute's embrace of effluent limitations[24] and their influence on the formation of the Clean Water Act nearly a century later.[25]

B. THE FEDERAL WATER POLLUTION CONTROL ACT OF 1948

In 1948, the United States Congress adopted its first comprehensive statute directly addressing the mounting problem of water pollution—the Federal Water Pollution Control Act.[26] Under the statute's terms, states were handed the fundamental authority to develop and enforce water quality standards, leaving the federal government with the "very secondary position"[27] of advising state authorities and funding their efforts.[28] While

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19. *See Standard Oil*, 384 U.S. at 228–29 ("It is plain from [the Act's] legislative history that the 'serious injury' to our watercourses . . . sought to be remedied was caused in part by obstacles that impeded navigation and in part by pollution.") (citation omitted); Robert V. Percival, *Environmental Federalism: Historical Roots and Contemporary Models*, 54 MD. L. REV. 1141, 1149 (1995) (stating that the Act "was not inspired by environmental concerns" but was rather driven by Congress's desire "to prevent barriers to navigation on the waterways").

20. 33 U.S.C. § 403.

21. 117 CONG. REC. 38,833 (1971) (statement of Sen. Baker).

22. United States v. Republic Steel Corp., 362 U.S. 482, 483 (1960). The solids at issue in the case, though never enumerated specifically, were those discharged from a mill that produced "iron and related products." *Id.*

23. *Standard Oil*, 384 U.S. at 225.

24. Effluent limitations are "restriction[s] . . . on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged . . . into navigable waters." 33 U.S.C. § 1362(11). Effluent limitations stand in contrast to ambient water quality standards which, rather than restricting the amount of permissible discharge, "specify[] the acceptable levels of pollution" in a body of water. EPA v. California *ex rel.* State Water Res. Control Bd., 426 U.S. 200, 202 (1976). The line between effluent limitations and water quality standards is not only mechanical; the two approaches stem from disparate environmental philosophies. Advocates of water quality standards commonly argue that "[w]ater is meant to be used . . . , and one legitimate function is the assimilation of wastes." Oliver A. Houck, *TMDLs: The Resurrection of Water Quality Standards-Based Regulation Under the Clean Water Act*, 27 ENVTL. L. REP. 10,329, 10,331 (1997). Those seeking effluent limitations often take a different line, arguing, as did the drafters of the Clean Water Act, that waters should not be used to "dispose of . . . wastes," but rather to "support . . . life and health." S. REP. NO. 92-414, at 3672 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3674. Thus, the effluent lobby has argued, discharges of waste into the environment should be the exception, not the expectation. *Id.*

25. *See generally* 2 WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW: AIR AND WATER § 4.1 (1986).

26. Pub. L. No. 80-845, 62 Stat. 1155 (1948).

27. Hines III, *supra* note 11, at 810.

federal enforcement of the states' standards was permitted by the Act, the power was a limited one. Only when "the [United States] could show that a particular discharge actually . . . 'endanger[ed] the health or welfare' of persons by pollution of 'interstate' waters" was federal enforcement authorized.[29] Even in this limited set of situations, the Act required "the consent of the local pollution control agency of the state in which the pollution originated" before the federal government could bring suit seeking abatement.[30] Thus, while ambitious, the statute also proved impotent.[31] Nonetheless, the Federal Water Pollution Control Act would play a central role in the formation of the Clean Water Act more than two decades later,[32] its system of state-generated ambient water quality

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28. S. REP. NO. 92-414, at 2 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3669 ("The 1948 legislation . . . assigned powers for enforcement in water pollution control to Governors of the States. The Federal agencies were authorized only to support research in water pollution, projects in new technology, and limited loans to assist the financing of treatment plants."); *see also* Gaba, *supra* note 11, at 1177.

29. Gaba, *supra* note 11, at 1177.

30. Water Pollution Control Act, ch. 758, § 2(d)(4), 62 Stat. 1155, 1157 (1948) (current version at 33 U.S.C. §§ 1251–1387 (2000)); Hines III, *supra* note 11, at 812.

31. *See* Hines III, *supra* note 11, at 812 ("It is difficult to conceive of a procedure more ill-designed to secure meaningful abatement."). The "ill-design[]" of the Act's abatement mechanism can be comprehended entirely only when one is confronted with the full bureaucratic weight of the procedure:

> Interstate pollution conditions that endangered the health or welfare of persons in a state other than that in which the pollution originated were declared a public nuisance and subject to abatement. However, once the Surgeon General determined that there existed such interstate conditions of pollution constituting a public nuisance, subjecting it to abatement was quite another matter under the prescribed procedure. First, of course, a *request from the local control agency* was required before conducting an investigation to determine whether pollution was occurring. Assuming such a request was forthcoming, and that pollution was found, the Surgeon General was required to give *formal notice to the polluter.* If, after a reasonable period, action calculated to remedy the cause of the pollution was not forthcoming, the Surgeon General gave a *second notice* to the polluter and the local control agency. If, after a reasonable period, this notice did not elicit satisfactory progress, then a *public hearing* was held at which the Federal Security Administrator made a finding as to whether it was reasonable and equitable to secure abatement of the pollution. If the hearing officer decided such action was justified, he could *request the Attorney General of the United States to bring a suit* to secure abatement, but this request could be made only with the *consent of the local pollution control agency* of the state in which the pollution originated.

Id. (emphasis added). The legislature could not have been oblivious to the inherent limitations of such a procedure, limitations that were not inconsistent with "Congress's express[] hope . . . that through federal assistance and support the local programs might be stimulated to handle effectively the nation's water quality problems." *Id.* at 810.

32. *See generally* 2 RODGERS, *supra* note 25, at § 4.1.

standards[33] standing in firm contrast to the effluent limitations at the core of the Rivers and Harbors Act.

C. THE WATER QUALITY ACT OF 1965

Seventeen years after the passage of the Federal Water Pollution Control Act—and in response to its most glaring inadequacies[34]—Congress made its first assertion of federal primacy in the realm of water pollution control with the Water Quality Act of 1965.[35] While states, under the statute, were still endowed with the authority to develop ambient water quality standards,[36] their discretion was no longer unconfined. According to the terms of the Water Quality Act, each state was obligated to develop water quality standards substantial enough to "protect the public health or welfare, enhance the quality of water and serve the [statute's] purposes."[37] In short, the ambient concentrations of pollutants allowed by the states could not adversely affect the "use and value" of interstate waters "for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses."[38] These requirements were not established merely to inform state governments during the process

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33. *See supra* text accompanying note 24 (defining ambient water quality standards and contrasting them to effluent limitations in both mechanism and theory).

34. Gaba, *supra* note 11, at 1177; *see also* Hines III, *supra* note 11, at 825 ("Despite the significant strides made in bringing the power of the federal establishment to bear on pollution, all indications pointed to a continuing deterioration in the quality of the nation's waters.").

35. Pub. L. No. 89-234, 79 Stat. 903 (1965); *see also* Mark C. Van Putten & Bradley D. Jackson, *The Dilution of the Clean Water Act*, 19 U. MICH. J.L. REFORM 863, 867 (1986) ("The Water Quality Act (WQA) of 1965 marked the first assertion of primary federal authority in national water pollution control efforts.").

36. S. REP. NO. 92-414, at 2 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3669 ("Each State was required by the 1965 Act to develop standards for water quality within its boundaries. These standards were to be applied to all interstate navigable waters flowing through the State; intrastate waters were not included."). In *National Wildlife Federation v. Gorsuch*, the court stated:

> The 1965 Act required each state to classify its streams (or stream segments) and waters according to their intended uses, such as agriculture, municipal water supply, fish and wildlife, or recreation; and set water quality standards, such as the allowable concentration of dissolved oxygen or suspended solids, appropriate for each category of use.

530 F. Supp. 1291, 1296 (D.D.C. 1982). "More than 4 years after the deadline for submission of standards," the Senate Public Works Committee lamented, "only a little more than half of the States [had] fully approved standards." S. REP. NO. 92-414, at 4 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3671.

37. 33 U.S.C. § 1313(c)(2)(A) (2000) (originally enacted as 33 U.S.C. § 466g(c)(3) (Supp. III 1965)).

38. *Id.* This provision reflects the fundamental ideology of water quality standards, that "[w]ater is meant to be *used*." Houck, *supra* note 24, at 10331 (emphasis added).

of standard formation. Rather, they formed a basis on which the federal government could reject a state's proposed standards as inadequate.[39]

In addition to the power to reject proposed state standards, Congress reserved two other means of federal oversight in the Water Quality Act. First, the United States was given the authority to enforce the standards adopted by the individual states.[40] Second, in the event that a state failed to establish federally approved standards, the Secretary of the Interior could promulgate standards for the unprotected waters.[41] In practice, both these powers proved illusory. The process of promulgation to which the Secretary was bound was, at best, "cumbersome."[42] The process of federal enforcement was scarcely more effective, consisting of an "extended informal enforcement 'conference'" during which the water pollution control agencies of the state and federal governments negotiated with violators about reductions in offensive discharges.[43] The ineffectiveness of such enforcement conferences was only increased by the difficulty inherent in demonstrating that a specific source had itself caused the violation of the water quality standard in question.[44] This said, it can be of no great surprise that the terms of the Water Quality Act resulted in "an almost total lack of enforcement."[45] Indeed, only one enforcement action made it to the courts in more than two decades.[46]

II. THE CLEAN WATER ACT

In 1972, less than ten years after the passage of the Water Quality Act, the Senate Public Works Committee declared "that the national effort to abate and control water pollution [had] been inadequate in every vital

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39. 33 U.S.C. § 466g(c)(1) (Supp. III 1965) (This statute was transferred to 33 U.S.C. § 1160(c)(1) (1970) and then omitted by Pub. L. No. 92-500, § 2, 88 Stat. 816 (1972)).

40. *Id.*

41. *Id.* § 466g(c)(2).

42. Gaba, *supra* note 11, at 1178. As Gaba further noted:

> The Secretary first had to conduct a conference of representatives of appropriate federal agencies, states, municipalities, and industries to discuss his proposed standards; he then had to publish the proposed standards in their final form. The published federal standards became official only if the affected state did not adopt acceptable standards within six months of publication. Even after this six month period an affected state could request a hearing before a Hearing Board that had the authority to approve or modify the federal standards promulgated by the Secretary.

Id. at 1179.

43. Van Putten & Jackson, *supra* note 35, at 868.

44. Gaba, *supra* note 11, at 1179.

45. S. REP. NO. 92-414, at 5 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3672.

46. *Id.* at 7, *reprinted in* 1972 U.S.C.C.A.N. at 3674.

respect."[47] The failure of previous water legislation, the Committee lamented, was evident in the state of American waters:

> Many of the Nation's navigable waters [were] severely polluted, and major waterways near the industrial and urban areas [were] unfit for most purposes . . . . Rivers [had become] the primary sources of pollution of coastal waters and the oceans, and many lakes and confined waterways [were] aging rapidly under the impact of increased pollution . . . .[48]

"Rivers, lakes, and streams" were, in short, "being used to dispose of man's wastes rather than to support man's life and health."[49]

Faced with such a crisis, and in response to an unprecedented movement for environmental protection,[50] Congress passed the Federal Water Pollution Control Act Amendments of 1972, with them creating the Clean Water Act.[51] From the opening words of the statute—which declared the legislators' objective of "restor[ing] and maintain[ing] the chemical, physical and biological integrity of the Nation's waters"—Congress made plain its determination to break from the ineffective legislation of the previous decades.[52] This determination was underscored by the two "national goals" set forth within the Act: first, that water quality sufficient "for the protection and propagation of fish, shellfish, and wildlife and provid[ing] for recreation in and on the water be achieved by . . . 1983"; and, second, "that the discharge of pollutants into the navigable waters be eliminated by 1985."[53]

In order to attain these goals, Congress brought about a "major change" in the mechanism of the federal water pollution control program.[54] Unlike the previous water quality regimes,[55] the "fundamental premise"[56] of the

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47. *Id.*

48. *Id.*

49. *Id.*; *see also* Hines I, *supra* note 11, at 186 (noting "the usual silt, sewerage and garbage carried by most rivers" at the time).

50. *See* OLIVER A. HOUCK, THE CLEAN WATER ACT TMDL PROGRAM: LAW, POLICY, AND IMPLEMENTATION 20 (2d ed. 2002) (characterizing the period of the Clean Water Act's formation as one with "a climate of rising public demand for environmental protection"); Futrell, *supra* note 11, at 44 ("By Earth Day 1970, the environmental issue had become a major political issue, inspiring a keen competition between executive branch leaders and congressional committees as each sought to impose its solution on the problem. Competing agencies and congressional committees vied for domination of the field.").

51. 33 U.S.C. §§ 1251–1387 (2000); Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (1972).

52. 33 U.S.C. § 1251(a).

53. *Id.* § 1251(a)(2).

54. S. REP. NO. 92-414, at 7 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3672.

55. *See supra* notes 16–46 and accompanying text (reviewing federal water pollution control prior to the Clean Water Act).

56. Natural Res. Def. Council v. EPA, 822 F.2d 104, 109 (D.C. Cir. 1987).

Clean Water Act is the simple edict that "the *discharge* of any pollutant by any person shall be unlawful."[57] With this imperative, however, come two "critical" exceptions.[58] First, the full regulatory weight of the statute falls only upon those discharges from a "point source"—defined inelegantly 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."[59] Second, and "after opportunity for public hearing," the Act grants the Administrator of the Environmental Protection Agency (EPA) authority to "issue a permit for the discharge of any pollutant, or combination of pollutants" from such a point source, so long as the permit comes within the bounds established by the Act.[60] In order to facilitate the issuance of the requisite permits, the statute created the National Pollutant Discharge Elimination System (NPDES),[61] a "national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits."[62] It is this program, and the discharge permits issued under it, that lie at the core of the *Hammersley* opinion.

III. *ASSOCIATION TO PROTECT HAMMERSLEY, ELD, AND TOTTEN INLETS V. TAYLOR RESOURCES*[63]

On January 10, 2002, a panel of the Ninth Circuit Court of Appeals gathered to consider a "novel" question as to the reach of the Clean Water Act. In *Association to Protect Hammersley, Eld, and Totten Inlets v. Taylor Resources*, the court was asked to determine "whether the mussel shells,

57. 33 U.S.C. § 1311(a) (emphasis added). State water quality standards remain, under the Clean Water Act, effective as means of imposing more demanding discharge limitations in the event that the discharge reductions resulting from permit requirements are inadequate to meet the required ambient levels. *See id.* § 1313.

58. *Natural Res. Def. Council*, 822 F.2d at 108.

59. 33 U.S.C. § 1362(14). Those dischargers of pollutants not included within the definition of "point source"—a category of sources "defined by exclusion and includ[ing] all water quality problems not subject to [33 U.S.C. § 1288]"—are referred to as "nonpoint sources." Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 166 (D.C. Cir. 1982). "A classic example of nonpoint source pollution is unchanneled runoff which flows over land and into navigable waters." Kristy A. Niehaus, *Clean Water Act Permitting: The NPDES Program at Fifteen*, NAT. RESOURCES & ENV'T, Winter 1987, at 16.

60. 33 U.S.C. § 1342(a)(1). These bounds of the Act are defined Sections 1311, 1312, 1316, 1317, 1318, & 1343.

61. The National Pollutant Discharge Elimination System is widely referred to by its acronym, "NPDES."

62. 40 C.F.R. § 122.2 (2003). It is worthy of note that, under the Clean Water Act, individual states are not precluded from administering their own permitting programs. *See* 33 U.S.C. § 1342(b) (setting forth the determinations required before the Administrator of the EPA must approve a state program).

63. 299 F.3d 1007, 1015 (9th Cir. 2002).

mussel feces and other biological materials emitted from mussels grown on harvesting rafts, and thereby entering the beautiful waters of Puget Sound, constitute the discharge of pollutants from a point source without a permit in violation of the Clean Water Act."[64] The court, concluding that no "pollutant" had been discharged within the meaning of the statute, held that no violation of the statute had occurred.[65]

A. THE CASE

Taylor Resources, the defendant in the case, was an operator of two "mussel-harvesting facilities" on Puget Sound's Totten Inlet, where the company produced more than 20,000 pounds of gallo mussels per season.[66] Each of the facilities was comprised of numerous floating rafts from which suspension ropes extended to the sea floor.[67] To these ropes, Taylor's employees attached "'mussel brood stock' or mussel 'seeds,'"—what the court termed "'infant' mussels if personified."[68] There the mussels remained until harvesting, "nurtured exclusively by the nutrients found naturally in the waters of Puget Sound."[69] "It is nature and the vibrant waters of Puget Sound," the court explained, "that transform the mussel 'seeds' into edible mussels worthy of admiration and human appetite."[70]

It was not the mussels' taste to which the Association to Protect Hammersley, Eld, and Totten Inlets objected, but rather their byproducts.[71] Though, as the court noted, "mussels act as filters and are considered by many to enhance water quality by filtering excess nutrients or other matter in the water that can be destructive to marine environments," the Association feared the impact of the mussels' wastes on the Sound's "vibrant" waters.[72] In the words of the court, the mussels harvested at Taylor's facilities "produce[d] and release[d], as particulate matter, feces and pseudo-feces, and they generate[d] dissolved materials in the form of ammonium and inorganic phosphate."[73] "Also," the court noted, "gallo

64. *Id.* at 1009. The court also addressed the threshold question of whether "a private party can bring a Clean Water Act citizen's suit for unpermitted discharges when the state agency charged with administering the NPDES permit program has determined that such a permit is not required." *Id.* at 1011. The court held, correctly, that to deny the Association's suit on the grounds that the Washington Department of Ecology had declined to issue Taylor an NPDES permit would "run[] squarely against the plain words of the statute and would frustrate the purposes of the Clean Water Act's empowerment of citizen suit." *Id.*

65. *Id.* at 1017–18.

66. *Id.* at 1010.

67. *Id.*

68. *Hammersley*, 299 F.3d at 1010.

69. *Id.*

70. *Id.*

71. *Id.*

72. *Id.*

73. *Hammersley*, 299 F.3d at 1010.

mussel shells [have] appeared on the beaches of Totten Inlet" for almost a decade.[74] The Association thus brought suit against Taylor Resources,[75] alleging that the company acted contrary to the terms of the Clean Water Act in "'discharging pollutants,' such as mussel feces, mussel shells, and ammonia from its rafts into the Puget Sound without an NPDES permit."[76]

B. THE DECISION

The fundamental issue brought before the Ninth Circuit by the Association's suit, whether Taylor Resources was in violation of the Clean Water Act due to its unpermitted operation of mussel harvesting facilities in Puget Sound, presented two distinct questions: first, whether the wastes released by Taylor's mussels constituted "pollutant[s]" under the statute,[77] and second, whether Taylor's installations amounted to "point source[s]" as defined by the Act.[78]

1. The "Pollutant" Question

In considering whether the mussel byproducts that descended from Taylor's rafts were "pollutant[s]" within the meaning of the Clean Water Act, the court began with the statute's definition of "pollutant,"[79] focusing on the category of "biological materials" included therein.[80] Finding that "the meaning of 'biological materials' [was] not readily apparent" within the Act, the court examined the definition through the lens of the ejusdem generis doctrine,[81] and determined that the meaning of "'biological materials' [was] not as broad as [the Association] argued."[82] Within the definition of "pollutant," the court reasoned, "the more specific items in the illustrative

74. *Id.* Pseudo-feces is, in the words of one reporter, "essentially matter the mussels spit out." Jenni Laidman, *Lake Erie's Low Oxygen Has Scientists Stumped, Worried*, PITT. POST-GAZETTE, June 23, 2002, at B6, 2002 WL 21880437. Mussels, in the process of feeding, bring in water from their surroundings and eject the materials they wish not to consume. Jeff Long, *Lake Michigan's Vanishing Crustacean; Diporeia's Survival Problems Could Jeopardize Waterway's Salmon, Trout*, WASH. POST, Jan. 14, 2001, at A10, 2001 WL 2536235.

75. The provisions of the Clean Water Act allow citizens to sue for the enforcement of the Act's terms. 33 U.S.C. § 1365 (2000).

76. *Hammersley*, 299 F.3d at 1011.

77. *Id.* at 1015.

78. *Id.* at 1018.

79. Under the Clean Water Act, "[t]he term 'pollutant' means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." 33 U.S.C. § 1362(6).

80. *Hammersley*, 299 F.3d at 1015.

81. Under the rule of ejusdem generis, "[w]hen a statute contains a list of specific items and a general item, [the courts] usually deem the general item to be of the same category or class as the more specifically enumerated items." Sutton v. Providence St. Joseph Med. Ctr., 192 F.3d 826, 834 (9th Cir. 1999), *quoted in Hammersley*, 299 F.3d at 1016.

82. *Hammersley*, 299 F.3d at 1016.

list of pollutants, such as 'radioactive materials,' 'wrecked or discarded equipment,' 'garbage,' 'sewage sludge,' 'solid waste,' and 'incinerator residue' support an understanding of the more general statutory term, 'biological materials,' as waste material of a human or industrial process."[83] In light of this understanding, the court concluded that "mussel shells, mussel feces and other natural byproduct[s] of live mussels do not appear to be the type of materials the drafters of the Act would classify as 'pollutants.'"[84] However, the court did not treat this conclusion as dispositive, instead acknowledging that the meaning of the phrase "biological materials" was "not readily apparent," and "could literally embrace the emissions at issue."[85] For this reason, the court proceeded to consider Congress's intent in enacting the legislation.[86]

Rather than reviewing the structure or legislative history of the Act in its determination of congressional intent, the Ninth Circuit focused solely on the opening section of the statute[87] and its declared goal of "protect[ing] and *propagat[ing]* . . . shellfish."[88] "It would be anomalous," the Court asserted,

> to conclude that the living shellfish sought to be *protected* under the Act are, at the same time, pollutants, the discharge of which may be *proscribed* by the Act. Such a holding would contravene clear congressional intent, give unintended effect to the ambiguous language of the Act and undermine the integrity of its prohibitions.[89]

The court, therefore, did not so hold.

The Ninth Circuit became only more confident in its conclusion when it turned to consider the purported benefit Taylor's mussels bore on Puget Sound. In the eyes of the record, the mussels did not "add any identifiable

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83. *Id.*

84. *Id.*

85. *Id.* The court defined the specific ambiguity as being "whether 'biological materials' means *all* biological matter regardless of quantum and nature and regardless of whether generated by living creatures, or whether the term is limited to biological materials that are a waste product of some human process." *Id.*

86. *Id.*

87. *Hammersley*, 299 F.3d at 1016.

88. *Id.* (quoting 33 U.S.C. § 1251(a)(2) (2000)).

89. *Id.* In its analysis, the court speaks twice of the "integrity" of the Clean Water Act, *id.* at 1015 ("APHETI's contention must be rejected to preserve the integrity of the Clean Water Act."), but never directly of the integral aquatic state with which the Act is concerned, *see id.* at 1009 ("The Clean Water Act . . . aims to restore and maintain the 'chemical, physical and biological integrity of [the] Nation's waters.'") (alteration in original) (citation omitted); *id.* at 1017 ("[O]ur conclusion that the statutory term 'biological materials' means the waste product of a human process is further reinforced by the Act's use of the term 'pollution,' which is defined as the '*man-made* or *man-induced* alteration of the chemical, physical, biological, and radiological integrity of water.'" (quoting 33 U.S.C. § 1362(19) (2000)) (emphasis added).

harm, let alone appreciable or significant damage" to the waters, but seemed rather to improve their environment.[90] Thus, the court concluded, Congress could not have intended that the "living shellfish and the natural chemicals and particulate biological matter emitted from them, or the occasional shells that separate from them, be considered pollutants."[91]

To this determination the court added a caveat and a clarification. The caveat: in holding that that the mussel wastes at issue were not pollutants within the meaning of the Clean Water Act, it "[did] not decide whether the addition of biological materials to the water in concentrations significantly higher than natural concentrations could support a conclusion that such biological materials are 'pollutants' under the Act by virtue of their high concentrations."[92] In other words, had Taylor's mussels released more of the same, the court might have answered the question differently. The clarification: the court did not mean to "suggest that materials found naturally in the water [could] never" fall within the definition.[93] "A facility that processes fish on land or sea," the court explained,

> and that discards skin, scales, bones and entrails into the waters might be discharging pollutants under the Act. Similarly, if shellfish are processed and shells discarded in the water, this might be the discharge of pollutants, even though the biological materials had been in the water before processing. Such materials, although naturally occurring, are *altered by a human or industrial process* and, as waste material in significant amounts, might affect the biological composition of the water.[94]

The court found support for such a distinction in the "Act's use of the term 'pollution,' which is defined as the '*man-made* or *man-induced* alteration of the chemical, physical, biological, and radiological integrity of water.'"[95] As the mussel byproducts released from Taylor's facilities were "the result of the natural biological processes of the mussels, not the waste product of a transforming human process," the court found there to be no relevant human alteration of the Sound.[96] The mussels' wastes, the Ninth Circuit declared, did not fall within the statute's definition of "pollutant," placing Taylor's facility beyond the reach of the Clean Water Act.[97]

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90. *Id.*

91. *Id.*

92. *Hammersley*, 299 F.3d at 1017 n.9.

93. *Id.* at 1016–17.

94. *Id.* at 1017 (emphasis added) (citing Ass'n of Pac. Fisheries v. EPA, 615 F.2d 794, 802 (9th Cir. 1980)).

95. *Id.* (quoting 33 U.S.C. § 1362(19) (2000)) (alteration in original).

96. *Id.*

97. *Hammersley*, 299 F.3d at 1017–18.

2. The "Point Source" Question

The court's opinion did not here close, but rather continued to consider what was, perhaps, the more contentious issue among the parties: whether Taylor's installation constituted a "point source" under the statute.[98] The question was no longer essential to the determination of the case. In finding that the mussels' byproducts fell outside the statute's definition of "pollutant," the court had decided the matter. Yet the Act, in declaring "unlawful" the "discharge of any pollutant by any person,"[99] prohibited only the "addition of any pollutant to navigable waters from any point source."[100] Had the court found the wastes to be "pollutants," the "point source" question would therefore have been crucial. For this reason, the court proceeded to address the issue. In the opinion of the Ninth Circuit, Taylor's rafts were not "point sources" within the meaning of the Act, and thus, regardless of their discharges, could not be subject to its terms.[101]

In reaching this conclusion, the court traversed not the words of the statute, but those of an EPA regulation addressing "concentrated aquatic animal production facilities"[102] or, in more mundane prose, "fish farms."[103] According to the regulation, such a facility is a point source, and thus "subject to the NPDES permit program,"[104] if it, inter alia, "contains, grows, or holds . . . [c]old water fish species or other cold water aquatic animals in ponds, raceways, or other similar structures which discharge at least 30 days per year."[105] Taylor's facilities, the court noted in *Hammersley*, met these criteria.[106] The Agency's regulation continued, though, excluding from "CAAPF" designation "[f]acilities which produce less than . . . approximately 20,000 pounds . . . of aquatic animals per year," and "[f]acilities which feed less than . . . approximately 5,000 pounds . . . of food during the calendar

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98. *Id.* at 1018.

99. 33 U.S.C. § 1311(a) (2000).

100. *Id.* § 1362(12). This statutory sleight of hand is accomplished through the Act's qualified definition of "discharge of a pollutant," a definition which narrows the term to reference only those pollutant discharges from point sources. *Id.* By so defining the term, Congress was able to hear the "fundamental premise" of the statute, Natural Res. Def. Council v. EPA, 822 F.2d 104, 109 (D.C. Cir. 1987)—that "the discharge of any pollutant by any person shall be unlawful"—echo off the faces of Rushmore without actually declaring "the discharge of *any* pollutant by any person" to be "unlawful." 33 U.S.C. § 1311(a) (emphasis added).

101. *Hammersley*, 299 F.3d at 1019. The court classified its decision that "Taylor's facilities are not 'point sources' under the Act" as "an alternative and related basis for decision." *Id.*

102. Concentrated aquatic animal production facilities are more commonly referred to by their acronym, "CAAPF."

103. *Hammersley*, 299 F.3d at 1018.

104. 40 C.F.R. § 122.24 (2003).

105. 40 C.F.R. pt. 122 app. C. at (a). The regulation also provides for warm water concentrated aquatic animal production facilities. *Id.* at (b).

106. *Hammersley*, 299 F.3d at 1018.

month of maximum feeding."[107] The court seized onto the latter, declaring that "[b]ecause Taylor [did] not add any feed to its rafts or to the surrounding water," its installation was not a point source under the terms of the regulation.[108]

The Association did not accept the regulation as dispositive, arguing instead that Taylor's operation was a "discernible, confined and discrete conveyance," thus falling within the general definition of "point source" set forth in the Clean Water Act.[109] To this argument the court was unresponsive. "[I]n the construction of administrative regulations," the court noted, "it is presumed that every phrase serves a legitimate purpose and, therefore, constructions which render regulatory provisions superfluous are to be avoided."[110] As holding the rafts to be point sources would "render the EPA's . . . criteria superfluous," the court declined to do so.[111] "Taylor's facilities," it concluded, "are not 'point sources' under the Act."[112]

Insult had been added to injury.

C. *THE SIGNIFICANCE OF* HAMMERSLEY

On first glance, the Ninth Circuit's decision in *Hammersley* seems an unremarkable one, bound to facts so narrow and obscure that it could ultimately prove of little environmental consequence. This impression is mistaken. In pushing toward the ultimate conclusion that Taylor Resources was free to continue the unpermitted harvesting of mussels from Puget Sound, the court dealt two significant blows to the Clean Water Act. First, in holding that the wastes falling from Taylor's mussels were not the "product[s] of a transforming human process" and, consequently, not "pollutants" under the statute,[113] the court crafted an ideal precedent for all other industries seeking to similarly harvest aquatic species. Second, in declaring that it "[did] not decide whether the addition of biological materials to the water in concentrations significantly higher than natural concentrations could support a conclusion that such biological materials are 'pollutant[s]' under the Act by virtue of their high concentrations,"[114] the court quietly read a new element into the Act's definition of regulable pollutants: "identifiable harm."[115] The potential impact of the latter amendment is staggering, opening once simple determinations of a

107. 40 C.F.R. pt. 122 app. C at (a)(1)–(2).
108. *Hammersley*, 299 F.3d at 1018.
109. *Id.*
110. *Id.* (internal quotations omitted).
111. *Id.*
112. *Id.*
113. *Hammersley*, 299 F.3d at 1017.
114. *Id.* at 1017 n.9.
115. *Id.* at 1016.

material's "pollutant" status into contentious debates as to whether the material has caused the environment any notable damage.

Fortunately, the Ninth Circuit's reading of the Clean Water Act was mistaken. The failure of the court's reasoning is best understood in context.

IV. AN AQUACULTURE PRIMER

While among the less visible sectors of U.S. agriculture, the aquaculture industry is one with a significant and growing presence in the American economy. In 1998, the United States Department of Agriculture reported there to be in excess of 4,200 commercial aquaculture facilities in the United States alone—facilities which brought 842 million pounds of seafood, valued at nearly one billion dollars, to the market in 1999.[116] Of these pounds, almost a third consisted of mollusks, including oysters, mussels, and clams.[117] The industry, spurred both by a rising demand for seafood and a widespread collapse in the world's fisheries, shows little sign of slowing; it has for years stood among the fastest growing segments of American agriculture.[118]

This would all be of little consequence if the "natural byproduct[s] of . . . mussels" and other mass-cultivated aquatic species had no ill effect on the waters in which they were raised.[119] Unfortunately, this cannot be said, for even mussels—the supposed stewards of Puget Sound—inflict harm upon their surroundings when raised in such unnatural numbers.

As acknowledged by the court in *Hammersley*, mussels themselves pose a bit of an environmental conundrum. On one hand, mussels and other bivalves do "filter phytoplankton, bacteria and particulate organic matter

116. Effluent Limitations Guidelines and New Source Performance Standards for the Concentrated Aquatic Animal Production Point Source Category, 67 Fed. Reg. 57,872, 57,876 (Sept. 12, 2002) (to be codified at 40 C.F.R. pt. 86) [hereinafter Effluent Limitation Guidelines].

117. REBECCA GOLDBURG & TRACY TRIPLETT, MURKY WATERS: ENVIRONMENTAL EFFECTS OF AQUACULTURE IN THE US 22 (1997), *available at* http://www.environmentaldefense.org/documents/490_AQUA.pdf. The production of catfish dominated the largest sector of the aquaculture industry. Effluent Limitation Guidelines, *supra* note 116, at 57,876. In combination, catfish and trout—both raised primarily within inland ponds—"account for nearly fifty percent of the commercial market." *Id.*

118. Effluent Limitation Guidelines, *supra* note 116, at 57,876; GOLDBURG & TRIPLETT, *supra* note 117, at 7.

119. Ass'n to Protect Hammersley, Eld, & Totten Inlets v. Taylor Res., Inc., 299 F.3d 1007, 1017 (9th Cir. 2002). This Note does not address the substantial problems, environmental and legal, brought about by the "wide range of chemicals . . . used in many aquaculture operations," such as antibiotics and pesticides. GOLDBURG & TRIPLETT, *supra* note 117, at 10. It also gives few words to the consequences of "uneaten fish feed," which contributes substantially to nutrient pollution in American waters. *Id.* at 9. This Note, rather, focuses on the issue of wastes emitted by species as a result of their internal biological processes.

from the water column,"[120] thus reducing the nutrient content of their water and circumventing the cycle of algal growth and decomposition that leads inevitably to reduced oxygen levels and concomitant harm to aquatic life.[121] Yet mussels also "produce and release, as particulate matter, feces . . . , pseudo-feces," and shells, in addition to their "generat[ion] [of] dissolved materials in the form of ammonium and inorganic phosphate."[122] The question, then, presents itself: are mussels ultimately beneficial or harmful to the waters in which they are mass-produced?[123] The judges in *Hammersley* resolved this query in favor of the industry, declaring that the mussels did not "add any identifiable harm, let alone appreciable or significant damage, to the Puget Sound environment," and positing that the creatures might actually have "benefit[ed]" their environment.[124] One need not look far to cast significant doubt on the court's conclusion.

While mollusks do "clean" water "by filtering out particles of food,"[125] the narrative does not here end. Mussels, in their release of shells, feces, pseudo-feces, and other substances, "affect [the] nutrient dynamics" of their surroundings and often "alter the composition of [the] . . . communities" on the water's floor beneath them.[126] The most drastic change brought about by mussel production facilities is that on the "physical, chemical, and biological properties of the sediments" onto which the mussels' byproducts fall, a change similar in magnitude to that incurred by other fish-farming operations.[127] As previously discussed, mussels sustain themselves by filtering phytoplankton and other nutrients from the water in which they are immersed.[128] This process, while efficient, results in two primary discharges: the mussel's *feces*—waste created by the animal's natural metabolic processes, and the mussel's *pseudo-feces*—those particles rejected by the mussel's discriminating palate and heaved from its shell.[129] This material, rather than

120. Caryn C. Vaughn & Christine C. Hakenkamp, *The Functional Role of Burrowing Bivalves in Freshwater Ecosystems*, 46 FRESHWATER BIOLOGY 1431, 1431 (2001); *see also* Effluent Limitation Guidelines, *supra* note 116, at 57,879 (noting that mussels and other mollusks "feed from naturally occurring sources").

121. GOLDBURG & TRIPLETT, *supra* note 117, at 9 ("High nutrient levels can stimulate blooms of phytoplankton, or algae populations. When algae die in large numbers, their subsequent degradation can drastically reduce oxygen levels in water, stressing or killing fish and other organisms.").

122. *Hammersley*, 299 F.3d at 1010.

123. The elements of mass-production and relocation are central to the arguments in this Note. Mussels and other aquatic species are, of course, essential in their natural numbers to the ecosystems in which they are naturally found; with such populations the Clean Water Act has no qualms. *See infra* notes 165–69 and accompanying text.

124. *Hammersley*, 299 F.3d at 1016.

125. GOLDBURG & TRIPLETT, *supra* note 117, at 36.

126. Vaughn & Hakenkamp, *supra* note 120, at 1431.

127. GOLDBURG & TRIPLETT, *supra* note 117, at 36.

128. *See supra* note 120 and accompanying text.

129. *See supra* notes 72–74 and accompanying text.

being assimilated into the water from which it came, descends to the floor below, increasing the sediment's nutrient concentration and, thus, altering the native composition of the sea floor.[130]

More notable, in light of the *Hammersley* opinion, are recent studies connecting suspended shellfish cultures to a net increase in water nutrient concentrations.[131] The nutrients, released by mussels in the form of ammonia, phosphate, silicate, and dissolved organic nitrogen,[132] weigh heavily on the receiving waters. High nutrient concentrations lead to high concentrations of algae and phytoplankton, leading to the process of "eutrophication."[133] When these algal "blooms" die, their decomposition consumes oxygen, leading to decreased oxygen concentrations that can "stress[] or kill[] fish and other organisms."[134] Thus, in the words of a recent study, the impact of such nutrient pollution "can be extreme,"

> causing reduced dissolved oxygen levels, fish stress, afaunal sediments, outgassing, the production of fungal *Beggiatoa* mats and also impacting on normal sediment chemistry and microflora . . . . The recovery of sites from intense organic pollution from fish cages or suspended shellfish culture . . . can take many years and there is evidence that only an unstable equilibrium of benthic infauna and sediment chemistry is established in the sediments and that this can be very easily disrupted.[135]

The release of mussel shells comes also with environmental consequence. The bivalves' shells can, when deposited on a water's floor, provide a place for the settlement of algae and other plant colonies, grant refuge from predatory organisms, and stabilize the floor's sediments,

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130. Vaughn & Hakenkamp, *supra* note 120, at 1437. This effect holds even if the presence of mussels results in a net decrease in water nutrient content—but for the presence of the mussels, the nutrients removed from the water and emitted as feces or pseudo-feces would not have been deposited on the sea floor, but rather left suspended in the water. Thus, the mussels, regardless of their effect on the nutrient content of the water, work to relocate nutrients in their environment and, hence, alter its natural composition.

131. A.R. Henderson et al., *Use of Hydrodynamic and Benthic Models for Managing Environmental Impacts of Marine Aquaculture*, 17 J. APPLIED ICHTHYOLOGY 163, 164 (2001).

132. *Id.*; Vaughn & Hakenkamp, *supra* note 120, at 1435.

133. GOLDBURG & TRIPLETT, *supra* note 117, at 37.

134. *Id.*

135. Henderson et. al., *supra* note 131, at 164 (citations omitted). Mussel aquaculture has substantially avoided the further nutrient pollution that results from the addition of food to the waters in which salmon and other species are raised. *Id.*; *see* Ass'n to Protect Hammersley, Eld, & Totten Inlets v. Taylor Res., Inc., 299 F.3d 1007, 1010 (9th Cir. 2002) ("Taylor does not add fish food or chemicals to the water; the mussels are nurtured exclusively by the nutrients found naturally in the waters of Puget Sound, with nothing added."). This trend, however, may be shifting. Studies have now reported that mussels have been successfully fed, thus, allowing their growth in nutrient-deprived waters. Henderson et al., *supra* note 131, at 164.

thereby increasing the population of certain aquatic creatures.[136] While the organisms finding salvation beneath the discarded shells are surely indebted for their presence, the deposits violate further the natural composition of the benthic community, thus moving it farther from its integral state.[137]

All of this is said to pour light upon a single point—aquaculture, and the harvesting of mussels most specifically, is not an innocuous occupation. In other words, the question of whether such activities are within reach of the Clean Water Act is not one that can be diminished on the basis that—questions of law aside—the industry is harmless. On this point and others, the Ninth Circuit's opinion fails.

V. A CASE FOR REGULATION

In addressing the Ninth Circuit's opinion in *Hammersley*, the remainder of this Note will follow the path set down by the court. The analysis begins, therefore, with the definition of "pollutant" under the Clean Water Act and its application to the facts at hand.

A. THE "POLLUTANT" QUESTION

The question of whether the wastes released by Taylor's mussels constitute "pollutant[s] under the Clean Water Act will be approached, first, from the language of the statute and, second, from the legislative history of the statute. The court's "transformative human process"[138] and "identifiable harm"[139] rationales will then be specifically addressed.

1. The Language of the Act

"It is well settled," as noted by the court in *Hammersley*, "that the starting point for interpreting a statute is the language of the statute itself."[140] Under the terms of the Clean Water Act, "[t]he term 'pollutant' means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge,

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136. Vaughn & Hakenkamp, *supra* note 120, at 1437. Vaughn & Hakenkamp note that shells deposited on a sea floor

> can provide a suitable substratum for the settlement of benthic algae and invertebrates. . . . [and] provide a clean substratum for both epiphytic and epizoic colonization. Interstices between shells may provide refug[e] from predators and spates, help stabilize fine-grained sediments and increase habitat suitability for other organisms. Organic matter accumulating in spaces between shells may provide both food and shelter that, along with biodeposition of faeces and pseudofaeces [by the mussels], may increase the abundance of chironomids and other detritivores.

Id. (citations omitted).

137. *Id.*

138. *Hammersley*, 299 F.3d at 1018.

139. *Id.* at 1016.

140. *Id.* at 1015–16.

munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water."[141] It is this definition, and the term "biological materials" included therein, that the court subjected to the rule of ejusdem generis. According to that canon, "[w]hen a statute contains a list of specific items and a general item, [the court should] deem the general item to be of the same category or class as the more specifically enumerated items."[142] Within the Act's definition of "pollutant," the Ninth Circuit concluded, "the more specific items in the illustrative list of pollutants, such as 'radioactive materials,' 'wrecked or discarded equipment,' 'garbage,' 'sewage sludge,' 'solid waste,' and 'incinerator residue' support an understanding of the more general statutory term, 'biological materials,' as waste material of a human or industrial process."[143]

This analysis, while initially persuasive, proves specious. In setting forth "the more specific items" from the list of pollutants, the court left unmentioned other elements of the definition that seem similarly, if not more, specific: "rock," "sand," and "heat."[144] When these "items" are interspersed among the others referenced in the court's analysis, it no longer appears that the "specific" pollutants enumerated by the statute are unified within the category of "waste material[s] [from] . . . human or industrial process[es]."[145] Thus, to declare that Congress must have intended "biological materials" to fall within such a class is to make a claim that is, at best, less than compelling.[146]

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141. 33 U.S.C. § 1362(6) (2000).

142. Sutton v. Providence St. Joseph Med. Ctr., 192 F.3d 826, 834 (9th Cir. 1999), *quoted in Hammersley*, 299 F.3d at 1016.

143. *Hammersley*, 299 F.3d at 1016.

144. *Id.* While the court might contest the relative specificity of these terms, it seems undeniable that, for instance, the category of materials unified under the heading of "rock" is much more clearly defined than that gathered under the mantle of "solid waste."

145. *Id.*

146. The force of the court's argument is further minimized by the place of ejusdem generis in the hierarchy of statutory interpretation. The Supreme Court has long reiterated that the rule of ejusdem generis "is only an instrumentality for ascertaining the correct meaning of [a statute's] words when there is uncertainty," an instrumentality that "may not be used to defeat the obvious purpose of legislation." Gooch v. United States, 297 U.S. 124, 128 (1936); *see also* Norfolk & W. Ry. Co. v. Am. Train Dispatchers Ass'n, 499 U.S. 117, 129 (1991) ("The canon [of ejusdem generis] does not control, however, when the whole context dictates a different conclusion."); United States v. Alpers, 338 U.S. 680, 682 (1950) ("But [ejusdem generis] is to be resorted to not to obscure and defeat the intent and purpose of Congress, but to elucidate its words and effectuate its intent."); F.W. Fitch Co. v. United States, 323 U.S. 582, 585–86 (1945) (noting that the rule of ejusdem generis "may be invoked . . . [when] it does not conflict with the general purpose of the statute"); United States v. Gilliland, 312 U.S. 86, 93 (1941) (quoting Texas v. United States, 292 U.S. 522, 534 (1934)) ("The rule of 'ejusdem generis' is applied as an aid in ascertaining the intention of the Legislature, not to subvert it when ascertained."); Helvering v. Stockholms Enskilda Bank, 293 U.S. 84, 89 (1934) ("If, upon a consideration of the

The opinion's narrow reading of the definition is further undermined by the strong tendency among courts to interpret the term "pollutant" as "encompass[ing] substances not specifically enumerated but subsumed under [the definition's] broad generic terms."[147] This is not to say, certainly, that the tendency is uniform. The United States Court of Appeals for the District of Columbia Circuit has construed the definition more narrowly, reasoning that Congress—in defining the term as "mean[ing]" a number of things—narrowed its reach by avoiding "the looser phrase 'includes,' used elsewhere in the Act."[148] Yet, in the words of the Fifth Circuit:

> the breadth of many of the items in the list of "pollutants" tends to eviscerate any [such] restrictive effect. . . . It is scarcely disputable that many substances discharged into the waters of the United States could be characterized as "industrial waste," or even as "chemical waste," another listed material. Therefore, the statutory definition of pollutant at least appears to invite the inclusion of

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context and the objects sought to be attained and of the act as a whole, it adequately appears that the general words were not used in the restricted sense suggested by the rule [of ejusdem generis], we must give effect to the conclusion afforded by the wider view in order that the will of the Legislature shall not fail."); Mason v. United States, 260 U.S. 545, 554 (1923) ("The rule [of ejusdem generis] is . . . to be resorted to only as an aid to the ascertainment of the meaning of doubtful words and phrases, and not to control or limit their meaning contrary to the true intent.").

147. Hudson River Fisherman's Ass'n v. City of New York, 751 F. Supp. 1088, 1101 (S.D.N.Y. 1990), *aff'd*, 940 F.2d 649 (2d Cir. 1991); *see also* Natural Res. Def. Council v. EPA, 822 F.2d 104, 109 (D.C. Cir. 1987) ("The term 'pollutant' is broadly defined . . . ."); Minnehaha Creek Watershed Dist. v. Hoffman, 597 F.2d 617, 625 (8th Cir. 1979) ("In keeping with far-reaching objectives of the Act 'pollutant' is very broadly defined."); United States v. Hamel, 551 F.2d 107, 110 (6th Cir. 1977) (noting that the definition is set forth in "broad generic terms"); Niehaus, *supra* note 59, at 16 ("[B]oth [the] EPA and the courts have interpreted the statutory definitions liberally."). Additionally, William H. Rodgers asserts that

> [d]espite the absence of an indisputable catch-all (e.g., 'any other waste whatever'), there is little doubt that the recitation of categories in the definition of "pollutant" is designed to be suggestive not exclusive. In the 1972 amendments, Congress meant to carry on the tradition of the Refuse Act, and that tradition was to construe the word "refuse" as condemning each and every variation of damage-inducing wastes that changing technologies could invent. This interpretation is endorsed by United States v. Hamel, which condemns a discharge of gasoline as within a generic understanding of "pollutant," rather than stretch the less inclusive "biological materials" to cover organically-based petroleum compounds.

2 RODGERS, *supra* note 25, at § 4.10 p. 144.

148. Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 172 (D.C. Cir. 1982). Unmentioned in *Gorsuch* is Congress's declaration that "the term *does not mean* . . . 'sewage from vessels or a discharge incidental to the normal operation of a vessel of the Armed Forces within the meaning of section 1322' . . . or . . . water, gas, or other material which is injected into a well to facilitate production of oil or gas . . . ." 33 U.S.C. § 1362(6) (2000) (emphasis added). If the statement that the term "means" a list of items, suggests a definition of restricted scope, the statement that the term "does not mean" another list of things suggests, conversely, a definition of broader scope.

> discharged substances that are not specifically listed into these broad categories. Otherwise, these terms would be meaningless; that is, there would be no such thing as "industrial waste" because any discharge could always be described in more specific terms that are not listed in the statute . . . .[149]

"Given these observations," the court concluded, "it seems clear that, while the listing of a specific substance in the definition of pollutant may be significant, the fact that a substance is not specifically included does not remove it from the coverage of the statute."[150] To restate this in the context of the *Hammersley* opinion, the fact that Congress did not enshrine "feces and pseudo-feces from aquaculture facilities" in the definition of "pollutant" does not place such material beyond the Act's reach, but instead requires only that the substance be located within one of the "ambiguous"[151] categories included in the definition, such as "biological materials" or "industrial waste."[152]

The failure of the court to address the category of "industrial waste" is curious.[153] This curiosity is only deepened by words written by Judge Gould, the author of *Hammersley*, less than a year following the opinion's announcement. In response to a party's declaration that "industrial waste" included only "'sludge oozing from manufacturing or processing plants, barrels filled with toxic slime, and raw sewage floating in a river," Judge Gould stated unequivocally that

> industrial waste is not limited to only the most heinous and toxic forms of industrial byproducts. "Industrial" means "of, pertaining to, or derived from industry." "Industry," in turn, is defined as "the commercial production and sale of goods and services." "Waste" is defined as "any useless or worthless byproduct of a process or the

149. Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., 73 F.3d 546, 565 (5th Cir. 1996) (citation omitted). The Fifth Circuit's reasoning brings to the fore the Ninth Circuit's wholesale dismissal of the possibility that the mussels' byproducts constitute "industrial . . . waste" under the definition of "pollutant." 33 U.S.C. § 1362(6). As the mussels' waste was introduced into the water as the result of a human industrial process—the mass-cultivation of seafood—it seems within the provision's reach. *See infra* text accompanying notes 154–59. This the court did not address.

150. *Sierra Club*, 73 F.3d at 566.

151. Ass'n to Protect Hammersley, Eld, & Totten Inlets v. Taylor Res., Inc., 299 F.3d 1007, 1016 (9th Cir. 2002).

152. 33 U.S.C. § 1362(6). In "incorporat[ing] . . . the broad proscription of the Refuse Act" into the language of the definition, Congress seems to have intended such "a strong prohibition of all discharges . . . ." United States v. Hamel, 551 F.2d 107, 111 (6th Cir. 1977). According to the Committee primarily responsible for the Act's drafting, the basic definition of "pollutant" was "extracted from the Refuse Act . . . so that before *any material* can be added to the navigable waters authorization must first be granted by [the appropriate authority]." S. REP. NO. 92-414, at 76 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3742 (emphasis added).

153. *See supra* note 149.

> like; refuse or excess material." Combining these ordinary meanings, "industrial waste" is any useless byproduct derived from the commercial production and sale of goods and services.[154]

The wastes released from Taylor's mussels were a "useless byproduct derived from the commercial production . . . of goods."[155] Thus, under Judge Gould's own definition, the discharges from Taylor's rafts should have been held "industrial wastes" within reach of the statute.

By ignoring the category of "industrial waste" and concluding that "biological materials" are only "waste material[s] [from] . . . human or industrial process[es],"[156] the Ninth Circuit too narrowly interpreted the Act. While the court went so far as to concede "that the phrase 'biological materials' could literally embrace the . . . mussel shells, mussel feces and other natural byproduct[s] of live mussels . . . at issue," it was unwilling to accept such a literal construction of the term.[157] Instead, the court unearthed a novel bit of indeterminacy. "[T]he statute," it declared, "is ambiguous on whether 'biological materials' means *all* biological matter regardless of quantum and nature and regardless of whether generated by living creatures, or whether the term is limited to biological materials that are a waste product of some human process."[158] Ambiguity in hand, the court was left to consider the intent of Congress in promulgating the Act.[159]

2. Congressional Intent

The Ninth Circuit's consideration of "congressional intent"[160] in *Hammersley* is, in a word, odd. While suggesting an intention to examine the "legislative history" of the Clean Water Act in order to determine the statute's underlying purpose,[161] the court made no mention of such history

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154. N. Plains Res. Council v. Fid. Exploration & Dev. Co., 325 F.3d 1155, 1161 (9th Cir. 2003) (Gould, J.) (citations omitted).

155. *Id.*

156. *Hammersley*, 299 F.3d at 1016.

157. *Id.*

158. *Id.* This statement is a peculiar one. The question the court here poses is whether Congress, in including "biological materials" among the pollutants reached by the Act, meant "biological materials" or "biological materials that are a waste product of some human process." *Id.* A similar question is suggested in the court's later declaration that it "need not decide whether the addition of *biological materials* to the water in concentrations significantly higher than natural concentrations could support a conclusion that such *biological materials* are 'pollutant[s]' under the Act by virtue of their high concentrations." *Id.* at 1017 n.9 (emphasis added).

It can be of little surprise that neither sentence was accompanied by a citation.

159. *Id.* at 1017.

160. *Id.* at 1016.

161. *Hammersley*, 299 F.3d at 1016 ("In light of this ambiguity, we consider the congressional intent in passing the Clean Water Act.") (citing N.W. Forest Res. Council v. Glickman, 82 F.3d 825, 834 (9th Cir. 1996) ("Where a statute is ambiguous, we may look to the legislative history to ascertain [the statute's] purpose.")). In its own language, the court claims

in its opinion. Instead, the court derived the intent of Congress from a single section of the statute—that "plainly and explicitly listed the 'protection and *propagation* of . . . shellfish' as one of the goals of reduced pollution and cleaner water."[162] "It would be anomalous to conclude," the court declared,

> that the living shellfish sought to be *protected* under the Act are, at the same time, "pollutants," the discharge of which may be *proscribed* by the Act. Such a holding would contravene clear congressional intent, give unintended effect to the ambiguous language of the Act and undermine the integrity of its prohibitions.[163]

There are two problems with this reasoning. First, as an interpretation of the relevant section, the court's conclusion borders on the absurd. Second, as an interpretation of Congress's intent, the argument would benefit from a consideration of the Act's legislative history.[164]

a. The Principle of Integrity

The failure of the Ninth Circuit's interpretation is best understood when the section the court purports to interpret is returned to its context. "The objective of this chapter," that section declares,

> is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. In order to achieve this objective it is hereby declared that, consistent with the provisions of this chapter . . . it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985 . . . . [I]t is

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only to "consider the congressional intent in passing the Clean Water Act," *id.* (quoting *Glickman*, 82 F.3d at 834), which it arguably does (though its analysis would be more aptly described as a consideration of *an* intent of Congress, rather than *the* intent of Congress). Yet, the court's quotation of *Glickman* suggests an actual analysis of *legislative history*, an analysis that never comes.

162. *Id.* at 1016 (alteration in original) (quoting 33 U.S.C. § 1251(a)(2) (2000)). While acknowledging that the "protection and propagation of . . . shellfish" was a secondary "goal[]" under the statute—its primary aim being to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters," 33 U.S.C. § 1251(a)—the court conflates this distinction in its analysis. *See infra* text accompanying note 8. Rather than seeking the "protection and propagation of fish, shellfish, and wildlife," the Act sets forth an "interim goal of *water quality* which provides for the protection and propagation of fish, shellfish, and wildlife . . . by July 1, 1983." 33 U.S.C. § 1251(a)(2) (2000) (emphasis added). While the significance of this distinction is not overwhelming, it is also not meaningless; Congress sought not shellfish, but water quality. What the court called upon was, therefore, not the (interim) end but its measure.

163. *Hammersley*, 299 F.3d at 1016.

164. *See* Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 170-71 (D.C. Cir. 1982) ("The district court's opinion paid too much attention to the broad stated purposes of the Act, and too little attention to the legislative history that must inform its view of those purposes.").

> [further] the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983 . . . .[165]

Of these words, the most critical is "integrity," it being the ultimate "objective" sought by the Act. "The word 'integrity,'" according to a House Report addressing the nascent statute, "is intended to convey a concept that refers to a condition in which the natural structure and function of ecosystems is maintained. Although [humans are] a 'part of nature' and a production of evolution," the report continued,

> "natural" is generally defined as that condition in existence before the activities of [human beings] invoked perturbations which prevented the system from returning to its original state of equilibrium.
>
> This definition is in no way intended to exclude [humankind] as a species from the natural order of things, but in this technological age, and in numerous cases that occurred before industrialization, [humans have] exceeded nature's homeostatic ability to respond to change. Any change induced by [humankind] which overtaxes the ability of nature to restore conditions to "natural" or "original" is an unacceptable perturbation.[166]

In this language, the failure of the Ninth Circuit's reasoning is manifest. Integrity, so defined, cannot be achieved through the installation of aquaculture facilities in which species are reared by the ton. Not only are waters put to such a use far from their "natural structure and function," but such concentrations of species and their byproducts result in a "perturbation . . . which overtaxes the ability of nature to restore conditions to [their] 'natural' or 'original'" state.[167] Waters, in a state of integrity, do not possess such disproportionate concentrations of a single species and their byproducts.[168]

This truth did not elude the framers of the statute. In more than one instance, the Clean Water Act addresses "those waters . . . for which

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165. 33 U.S.C. § 1251(a)–(a)(2). These goals, Senator Muskie stated, "are not merely the pious declarations that Congress so often makes in passing its laws; on the contrary, this is literally a life or death proposition for the Nation." 118 CONG. REC. 33,693 (1972).

166. H.R. REP. NO. 92-911, at 76–77 (1972).

167. *Id.*; *see also supra* Part IV (discussing the environmental impacts of mass mussel rearing).

168. This conclusion is reinforced by the Senate Committee's unequivocal statement that "it should be the national policy to take those steps which will result in change towards that *pristine state* in which the physical, chemical and biological integrity of the water body can be said to exist." S. REP. NO. 92-414, at 76 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3742 (emphasis added); *see infra* text accompanying notes 189–89.

controls . . . are not stringent enough to assure protection and propagation of a *balanced indigenous population* of shellfish, fish, and wildlife."[169] These sections make clear that Congress was uninterested in the mass cultivation of species celebrated by the Ninth Circuit as an embodiment of the statute's very intent.[170]

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169. 33 U.S.C. § 1313(d)(1)(B) (emphasis added); *see also id.* § 1313(d)(1)(D) ("Each State shall estimate for the waters identified . . . the total maximum thermal load required to assure protection and population of a balanced indigenous population of shellfish, fish and wildlife."); *id.* § 1313(d)(3) ("[E]ach State shall . . . estimate . . . the total maximum daily load . . . for [identified] pollutants . . . and for thermal discharges, at a level that would assure protection and propagation of a balanced indigenous population of fish, shellfish and wildlife.").

170. A more subtle difficulty, one confined to the facts of *Hammersley*, stems from the presence of gallo mussels in Puget Sound for a mere twenty-five years. Ass'n to Protect Hammersley, Eld, & Totten Inlets v. Taylor Res., Inc., 299 F.3d 1007, 1010 (9th Cir. 2002). According to the court, "[g]allo mussels were first brought to Puget Sound in the 1970s and 1980s by mussel harvesters," placing them in the waters subsequent to the passage of the Clean Water Act, and its goal of integral aquatic environments. *Id.* at 1010, 1010 n.1 (dismissing the suggestion of *amicus curiae* Pacific Coast Shellfish Growers Association "that gallo mussels may have also independently found their way to Puget Sound by (1) hybridizing with sibling species of mussels or (2) migrating northward along the Pacific coast"). Due to this timing, the fact that gallo mussels "now reproduce naturally in [the] Sound," *id.*, is irrelevant, for they do not constitute part of the ecosystem's "natural structure," H.R. REP. NO. 92-911, at 76, much less the structure present at the time of the Act's passage. They are, instead, a "non-indigenous species" that undermines the integrity sought by the Clean Water Act. *See* S. REP. NO. 92-414, at 51 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3717 ("Water quality is intended to refer to the biological, chemical and physical parameters of aquatic ecosystems, and is intended to include reference to key species, natural temperature and current flow patterns, and other characteristics which help describe ecosystem integrity."); *see also* David M. Whalin, *The Control of Aquatic Nuisance Nonindigenous Species*, 5 ENVTL. LAW. 65, 90–94 (1998) (arguing non-indigenous species constitute "pollutants" under the Act). Thus, for the Ninth Circuit to interpret an "interim goal" aimed at integrity to "protect[]" such installations is clearly contrary to the purposes of the Act. *See* 33 U.S.C. § 1251(a), (a)(2). For discussions of the impact of non-native mussel species on ecosystems, see James H. Thorp & Andrew F. Casper, *Potential Effects on Zooplankton from Species Shifts in Planktivorous Mussels: A Field Experiment in the St Lawrence River*, 47 FRESHWATER BIOLOGY 107, 107 (2002) ("Suspension feeding by bivalves exceeds that by other planktivores in many North American rivers, and food webs may be altered substantially by differences in feeding patterns between native unionid mussels and invading dreissenid mussels."). Thorp and Casper note:

> Today native unionid species face threats from exotic molluscs in both Europe and North America. In the late 1950s, the Asian clam . . . invaded eastern North America and, in the mid to late 1980s, it was followed by two species of Ponto-Caspian bivalves: quagga mussels . . . and zebra mussels . . . .
>
> The invasion of [these] mussels is thought to have caused a severe decline in [the native] unionids through food competition and/or physical disturbance. This invasion is also linked to a significant decrease in phytoplankton in the Great Lakes and to a decline in some rivers of flagellated protozoa, phytoplankton and zooplankton. This planktivory makes [the invading] mussels potentially strong resource competitors with native unionid and sphaeriid bivalves and with most larval and some older fish. Their great local abundance may also make [them] both keystone predators of the potamoplankton in these large rivers and functionally important for nutrient and energy spiralling.

b. Eutrophication and the Clean Water Act

The Clean Water Act, as previously noted, stemmed from a legislative determination that "the national effort to abate and control water pollution ha[d] been inadequate in every vital aspect."[171] Faced with a situation in which "[m]any of the Nation's navigable waters [were] severely polluted, and . . . many lakes and confined waterways [were] aging rapidly under the impact of increased pollution,"[172] the ninety-second Congress brought forth "one of . . . [its] most significant pieces of legislation."[173] The fundamental premise of the Amendments was made abundantly clear: "[n]o one has the right to pollute."[174] "Therefore, [the Act] . . . declare[d] the discharge of pollutants unlawful,"[175] making an exception for only those with an NPDES permit.[176]

Among the concerns about the dire state of the Nation's waters, eutrophication—a condition linked to the wastes released from aquaculture facilities, resulting in death and distress among aquatic life[177]—was dominant.[178] At the time of the statute's enactment, the "development of intensive livestock and poultry production on feedlots and in modern buildings" had resulted, not unlike the aquaculture installations now multiplying in the nation's waters,[179] in "high concentrations of pollutants which reduce[d] oxygen levels in receiving streams and lakes and accelerate[d] the eutrophication process."[180] All of this "[came] at a time of

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Id. at 107–08 (citations omitted); *see* Vaughn & Hakenkamp, *supra* note 120, at 1431 ("In North America, native burrowing bivalves (*Unionidae*) are declining at a catastrophic rate. This significant loss of benthic biomass, coupled with the invasion of an exotic burrowing bivalve (*Corbicula*), may result in large alterations of ecosystem processes and functions.").

171. S. REP. NO. 92-414, at 7, *reprinted in* 1972 U.S.C.C.A.N. 3668, 3674.

172. *Id.*

173. *Id.* at 97, *reprinted in* 1972 U.S.C.C.A.N. at 3758 (from the supplement view of Senators Boggs, Cooper, Baker, Dole, and Buckley).

174. *Id.* at 42, *reprinted in* 1972 U.S.C.C.A.N. at 3709.

175. *Id.* at 43.

176. *See supra* notes 57–62 and accompanying text.

177. *See* Laidman, *supra* note 74 at B4 (describing the ailing state of Lake Erie and the scientific suspicion that invading zebra mussels are to blame); *supra* notes 131–35 and accompanying text.

178. The Senate Public Works Committee's lament that "many lakes and confined waterways [were] aging rapidly under the impact of increased pollution" was itself a reference to the eutrophic state of many of the nation's waters. S. REP. NO. 92-414, at 7, *reprinted in* 1972 U.S.C.C.A.N. 3668, 3674.

179. *See* LESTER R. BROWN, FISH FARMING MAY SOON OVERTAKE CATTLE RANCHING AS A FOOD SOURCE (Earth Pol'y Inst., Oct. 3, 2000) ("Fish grown in offshore cages or pens, as salmon frequently are, also concentrate large quantities of waste, which itself presents a management problem. For example, the waste produced by farmed salmon in Norway is roughly equal to the sewage produced by Norway's 4 million people."), *at* http://www.earth-policy.org/Alerts/Alert9.htm (on file with author).

180. S. REP. NO. 92-414, at 100, *reprinted in* 1972 U.S.C.C.A.N. 3668, 3761 (supplemental views of Senator Dole).

increasing public concern about eutrophication of lakes and streams and the presence of nutrients in groundwater."[181]

Contrary to the court's assertion in *Hammersley*, the thrust of this history is not that the requirement of discharge permits for aquaculture installations "would contravene clear congressional intent, give unintended effect to the ambiguous language of the Act and undermine the integrity of its prohibitions."[182] Rather, such a requirement would simply acknowledge Congress's "expect[ation] that the ultimate mechanism for the restoration and maintenance of the natural integrity of the waters will be the complete cessation of [the] discharge of pollutants into waters."[183]

3. Human Processes and "Pollution"

More troubling, perhaps, than the Ninth Circuit's aberrant examination of congressional intent is the court's determination that the "biological materials" within reach of the Clean Water Act are simply "the waste product[s] of . . . human or industrial process[es]."[184] In reaching this end, the court relied primarily on its application of the ejusdem generis doctrine, from which it concluded that the term "biological materials" seemed only to include "waste material of a human or industrial process."[185] This argument has already been addressed. What remains is the court's alternate textual argument for so narrow a reading of "biological materials"—the statutory term "pollution,"[186] defined as the "man-made or man-induced alteration of the chemical, physical, biological or radiological integrity of the water."[187] As the sum of the preceding suggests, this definition does not militate against the regulation of commercial aquaculture installations, but speaks rather to the necessity of such intervention.[188]

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181. *Id.*

182. Ass'n to Protect Hammersley, Eld, & Totten Inlets v. Taylor Res., Inc., 299 F.3d 1007, 1016 (9th Cir. 2002).

183. S. REP. NO. 92-414, at 50, *reprinted in* 1972 U.S.C.C.A.N. 3668, 3716.

184. *Hammersley*, 299 F.3d at 1017.

185. *Id.* at 1016.

186. *Id.* at 1017.

187. 33 U.S.C. § 1362(19) (2000).

188. "That the definition of 'pollutant' is meant to leave out very little," William Rodgers argues, "is confirmed by the statutory definition of 'pollution,' which means nothing less than the 'man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.'" 2 RODGERS, *supra* note 25, at § 4.10 p. 144. "[W]hat the definition of 'pollution' does," Rodgers explains,

> is to stress "bad effects," defined as a departure from nature's norm, while "pollutant" underscores "bad causes," usually some kind of foreign "stuff" that ends up in the water to the detriment of water quality. There is every reason to expect a rough symmetry between effects and causes, so that if "pollution" occurs, it does so because "pollutants" are in the neighborhood. While this fit is not perfect, and some courts have endeavored to widen the gap rather than narrow it, they offer no plausible reason why the Congress might wish to embrace the counterintuitive

To this question, the legislative history speaks with remarkable clarity. In the words of the Senate Public Works Committee, the definition of "pollution" was added

> to further refine the concept of water quality measured by the natural chemical, physical and biological integrity. Maintenance of such integrity requires that any changes in the environment resulting in a physical, chemical or biological change in a pristine water body be of a temporary nature, such that by natural processes, within a few hours, days or weeks, the aquatic ecosystem will return to a state functionally identical to the original.[189]

"In those water bodies which are not pristine," the Committee continued,

> it should be the national policy to take those steps which will result in change towards that pristine state in which the physical, chemical and biological integrity of the water body can be said to exist. Striving towards, and maintaining the pristine state is an objective which minimizes the burden to man in maintaining a healthy environment, and which will provide for a stable biosphere that is essential to the well-being of human society.[190]

To use, then, the Act's definition of "pollution" to limit the regulatory grasp of the statute is to wholly undermine the purpose of the provision. The presence of the term "pollution" in the Act is not, as the statute's history makes certain, to narrow the statute's vision to those pollutants produced by transformative human actions. The definition is present, instead, to reinforce the fundamental notion of integrity in the statute and to thereby stress that those discharges foreign to an ecosystem's integral state—such as the wastes descending from the rafts in *Hammersley*—must come under regulation.

Even without this history, the erroneousness of the Ninth Circuit's conclusion is manifest. In short, the "alteration of the chemical, physical, [and] biological . . . integrity"[191] of the Sound, though a result of the mussels' discharges, was, in fact, "man-induced."[192] It was the will of Taylor Resources, and not the mussels themselves, that brought the creatures into the water. But for Taylor's decision to begin such an operation, the integrity of the waters would not have been so altered. Thus, under any reasonable

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proposition that water can be polluted by humans even though it doesn't have "pollutants" in it.

Id. p. 145.

189. S. REP. NO. 92-414, at 76 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3742.

190. *Id.* at 76–77.

191. 33 U.S.C. § 1362(19).

192. *Id.*

construction of the word, Taylor Resources "induced" the alterations at issue. These alterations, therefore, amount to "pollution" under the terms of the Act.[193]

In sum, by so utilizing the term "pollution" in its analysis, the Ninth Circuit was dismissive of both the import of the provision and its application to the facts at hand. A similar regard for the statute is evident in the court's apparent divination of a previously unknown element in the statute's definition of "pollutant"—that of "identifiable harm."[194]

4. "Pollutant[s]" and the Requirement of "Identifiable Harm"

The element of "identifiable harm" in the Ninth Circuit's opinion was a child of ambiguity and unnamed "tools of reason."[195] "When faced with an ambiguous statutory term," the court explained, "we may apply other tools of reason in assessing what Congress proscribed."[196] Bearing these tools against "the ambiguous term, 'biological materials,'" the court "consider[ed]" a single factor—"that the addition of [the mussels' wastes] to the waters, so far as the record shows, [did] not add any identifiable harm, let alone appreciable or significant damage, to the Puget Sound environment."[197] With this, the court's implements were retired. "We are persuaded," it declared, "that Congress did not intend that living shellfish and the natural chemicals and particulate biological matter emitted from them, or the occasional shells that separate from them, be considered pollutants."[198]

Were this the only reference to considerations of "identifiable harm" in the opinion, it would seem hyperbole to characterize the court's words as generative of such a requirement. The reference, though, came not in isolation. Quite to the contrary, the element of "identifiable harm" is a subtext throughout the decision, a subtext that surfaces on more than one occasion. Most notable, perhaps, is the court's allusion to a requirement of harm in its discussion of the "skin, scales, bones, and entrails" discharged by seafood processing facilities. "Such materials," the court noted, "although naturally occurring, are altered by a human or industrial process and, as waste material in significant amounts, *might affect* the biological composition of the water."[199] In other words, though the "waste material of a human or

193. *Id.*

194. Ass'n to Protect Hammersley, Eld, & Totten Inlets v. Taylor Res., Inc., 299 F.3d 1007, 1016 (9th Cir. 2002).

195. *Id.*

196. *Id.*

197. *Id.* Here, the court continued, conjecturing that "there may be countervailing environmental benefits for encouraging shellfish farming in Puget Sound." *Id.*

198. *Id.*

199. *Hammersley*, 299 F.3d at 1017 (emphasis added).

industrial process,"[200] the matter "discard[ed]" by such a facility may constitute a "pollutant" only when released in quantities sufficient to noticeably alter the receiving waters.[201] In this context, the weight afforded to the element of "identifiable harm" by the opinion cannot be denied—so prominent it was in the mind of the court that it could be articulated as a qualification to the primary holding in the case, the requirement of a "transformative human process."[202]

A requirement of harm was similarly voiced in the court's discussion of the concentrations of "biological materials" at issue in the case.[203] In the words of the court, as the record did not "indicate that the biological materials released by Taylor's facilities were released in concentrations significantly greater than would otherwise be found in the waters of the Puget Sound," it had no reason to decide "whether the addition of biological materials to the water in concentrations significantly higher than natural concentrations could support a conclusion that such biological materials are 'pollutant[s]' under the Act by virtue of their high concentrations."[204] In short, as the "feces and chemicals exuded from live mussels [were] not . . . shown in the record significantly to alter the character of Puget Sound waters,"[205] those wastes, in such concentrations, fell outside the definition of "pollutant" under the Clean Water Act.[206] This said, the full weight of "identifiable harm" within the opinion is apparent. The outcome in *Hammersley*—while justified primarily on the grounds that the materials at issue resulted from "the natural growth and development of the mussels and not from a transformative human process"[207]—turned as much on the claimed absence of any discerned impact on the waters of the Sound.[208]

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200. *Id.* at 1016.

201. *Id.* at 1016–17.

202. *Id.* at 1018.

203. *Id.* at 1017 n.9. For a discussion of the court's concession that the materials at issue are, in fact, "biological materials," see *supra* note 158.

204. *Hammersley*, 299 F.3d at 1017 n.9.

205. *Id.* The court here omits any reference to the shells that "have appeared on the beaches of Totten Inlet since the mid-1990s." *Id.* at 1010.

206. *Id.* at 1017.

207. *Id.* at 1018.

208. This view of the case permeated even the court's statement of the facts:

> There is no doubt that mussel byproduct and mussel shells are released from Taylor's facilities and, in this sense, they are adding something, however small, to the Sound's abundant waters. But it must also be recognized that the mussels act as filters and are considered by many to enhance water quality by filtering excess nutrients or other matter in the water that can be destructive to marine environments.

Id. at 1010.

The question, then, is unavoidable: can the definition of "pollutant" inherent in the Clean Water Act, or the statute more broadly, be read as implying a requirement of "identifiable harm"? The answer is an unhesitant "no."

Before addressing the impropriety of the court's interpretation, it is worthwhile to restate the requirement of harm imputed by the opinion. First, rather than forcing the element of "identifiable harm" into the statute's definition of the term "discharge of a pollutant"—an amendment that would have required, for such a discharge, the "addition of any pollutant to navigable waters from any point source [resulting in identifiable harm to the receiving waters]"[209]—the court placed the requirement within the word "pollutant" itself.[210] Second, rather than extending the requirement to every category of substances within the definition of "pollutant," the element was confined by the decision as a qualification upon the "ambiguous term, 'biological materials.'"[211] Presumably, the latter line was drawn not on the basis of some characteristic of "biological materials," but instead in accordance with the supposed ambiguity of the term.[212]

So understood, the element is incoherent. In yielding "tools of reason" against a purportedly ambiguous term, the Ninth Circuit crafted a requirement of "identifiable harm" that is incapable of permeating every category of materials within the definition of "pollutant."[213] The result is untenable. For instance, a court faced with the discharge of "incinerator residue"[214] would not be presented with "an ambiguous statutory term"—"incinerator residue" being a narrow and clearly defined class of matter—and could not, therefore, consider whether the discharge caused the receiving waters harm.[215] In contrast, a court confronted by the possible release of "chemical wastes" would be presented with some measure of ambiguity—ambiguity permitting it, under the Ninth Circuit's reasoning, to

209. 33 U.S.C. § 1362(12)(A) (2000).

210. *Hammersley*, 299 F.3d at 1016.

211. *Id.*

212. The court reasoned:

> [w]hen faced with an ambiguous statutory term, we may apply other tools of reason in assessing what Congress proscribed. Interpreting the ambiguous term, "biological materials," in its context, we consider that the addition of this material to the waters, so far as the record shows, does not add any identifiable harm, let alone appreciable or significant damage, to the Puget Sound environment.

Id.

213. *Id.*

214. 33 U.S.C. § 1362(6).

215. Considering the heroic efforts of the Ninth Circuit in discerning ambiguity in *Hammersley*, it might be more apt to here state that the court "*should not* be presented with 'an ambiguous statutory term.'" *See supra* notes 158–59 and accompanying text (discussing the discovery of ambiguity in *Hammersley*).

decide on the basis of whether or not harm is evinced in the record. Had Congress intended that "identifiable harm" be considered in the identification of "pollutant[s]," it would not have incorporated the element in such a nonuniform, and apparently arbitrary, fashion.[216]

Congress did not intend such a requirement. While the "fundamental premise"[217] of the Clean Water Act, that "the discharge of any pollutant by any person shall be unlawful,"[218] did not come without qualification,[219] such a gaping and unpredictable exception was not provided. In the words of Chief Justice Rehnquist, "Congress' intent in enacting the [statute] was clearly to establish an all-encompassing program of water pollution regulation. *Every* point source discharge is prohibited unless covered by a permit, which directly subjects the discharger to the administrative apparatus established by Congress to achieve its goals."[220] In the words of the Senate Public Works Committee, "before any material can be added to the navigable waters authorization must first be granted by [the appropriate authority]."[221]

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216. There is no indication that the least ambiguous categories of pollutants (e.g. "incinerator residue," "rock," and "sand") are inherently more harmful than the most ambiguous categories (e.g. "solid waste," "chemical wastes," and "industrial, municipal and agricultural waste"). *See* 33 U.S.C. § 1362(6) (defining "pollution" to include these categories). Thus, it could not be reasonably argued that the extension of an "identifiable harm" requirement to only the most ambiguous categories of "pollutant[s]" somehow preserves an innate requirement of harmfulness not jeopardlized by the least ambiguous of the categories.

217. Natural Res. Def. Council v. EPA, 822 F.2d 104, 109 (D.C. Cir. 1987).

218. 33 U.S.C. § 1311(a).

219. *See supra* notes 59–61 (discussing the "point source" requirement and the National Pollutant Discharge Elimination System).

220. City of Milwaukee v. Illinois & Michigan, 451 U.S. 304, 318 (1981); *see* Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., Inc., 73 F.3d 546, 560 (5th Cir. 1996) ("[T]he discharge of any pollutant without a NPDES permit is an unlawful act under § 1311(a).") (quoting Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 165 (D.C. Cir. 1982)); *see also* Hughey v. JMS Dev. Corp., 78 F.3d 1523, 1524 (11th Cir. 1996) ("The amended CWA absolutely prohibits the discharge of any pollutant by any person, *unless* the discharge is made according to the terms of [an NPDES] permit."); Natural Res. Def. Council v. Costle, 568 F.2d 1369, 1374 (D.C. Cir. 1977) ("[T]he legislative history makes clear that Congress intended the NPDES permit to be the only means by which a discharger from a point source may escape the total prohibition of § [1311(a)]."); Reynolds v. Rick's Mushroom Serv., Inc., 246 F. Supp. 2d 449, 454 (E.D. Pa. 2003) ("[W]hether a point source discharge creates a new increase in the level of pollution is irrelevant to the liability issue in this case. 'Rather, the Act categorically prohibits any discharge of a pollutant from a point source without a permit.'" (quoting Comm. to Save Mokelumne River v. E. Bay Mun. Util. Dist., 13 F.3d 305, 309 (9th Cir. 1993)). In *Kitlutsisti v. Arco Alaska, Inc.* the court stated:

> NPDES permits are required to discharge any pollutants into the Nation's waters, and it is illegal for anyone to discharge except pursuant to a permit. . . . [T]he requirement that all discharges covered by the statute must have a NPDES permit is unconditional and absolute. Any discharge except pursuant to a permit is illegal.

592 F. Supp. 832, 839 (D. Alaska 1984).

221. S. REP. NO. 92-414, at 76 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3742.

The Ninth Circuit, in setting forth an ill-defined requirement of "identifiable harm," amended the Clean Water Act. Its opinion, therefore, is one best abandoned.

B. THE "POINT SOURCE" QUESTION

The conclusion that the wastes from Taylor's mussels were, in fact, "pollutant[s]" leads inevitably to the second question addressed so curtly by the court—whether Taylor's facilities constituted a regulable "point source" under the terms of the Clean Water Act.[222] While the analysis of such an issue would normally begin with the words of the Act in which the term is defined,[223] it is here expedient to begin, instead, with the regulations on *which the court in Hammersley relied.*

1. Concentrated Aquatic Animal Production Facilities

"Concentrated aquatic animal production facilities . . . are," according to the Environmental Protection Agency, "point sources subject to the NPDES permit program."[224] To the fortune of those left with interpreting the regulation, the Agency gave definition to the otherwise nebulous phrase. "A hatchery, fish farm, or other facility is a concentrated aquatic animal production facility," the regulation provides, if it "contains, grows, or holds . . . [c]old water fish species or other cold water aquatic animals in ponds, raceways, or other similar structures which discharge at least 30 days per year . . . ."[225] From this category of installations are excluded "[f]acilities which produce less than . . . approximately 20,000 pounds . . . of aquatic animals per year," and "[f]acilities which feed less than . . . approximately 5,000 pounds . . . of food during the calendar month of maximum feeding."[226] It was the latter provision that the Ninth Circuit viewed as dispositive: as Taylor did not add nourishment to the waters of Puget Sound, its installations were determined to fall beyond reach of the regulation.[227]

The court's application of the rule is undoubtedly correct. While Taylor's installation did produce in excess of 20,000 pounds of mussels per year,[228] no nutrients were said to be added to the water during the growing process,[229] placing the facility under the second of the regulation's exceptions.[230] So excepted, Taylor's rafts cannot be termed "concentrated

222. *See supra* notes 98–112 and accompanying text.

223. *See supra* note 140 and accompanying text.

224. 40 C.F.R. § 122.24(a) (2003).

225. *Id.* pt. 122 app. C at (a).

226. *Id.* at (a)(1)–(2).

227. Ass'n to Protect Hammersley, Eld, & Totten Inlets v. Taylor Res., Inc., 299 F.3d 1007, 1018 (9th Cir. 2002).

228. *Id.* at 1010.

229. *Id.*

230. *See supra* notes 226–27 and accompanying text.

aquatic animal production facilities" under any reasonable interpretation of the Agency's provision.[231] Consequently, if Taylor's operation is to be classified as a regulable "point source," it must be so designated in contravention of a regulation set forth by the very agency charged with the interpretation of the Clean Water Act.[232] What remains to be determined, then, is whether the court in *Hammersley* was required to defer to the interpretation of the Act evinced in the Agency's regulation.

2. The Question of Deference

In *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*,[233] the United States Supreme Court set forth the now predominant statement of the judicial deference due to agency interpretations of legislation. "If . . . Congress has not directly addressed the precise question at issue," Justice Stevens declared,

> the court does not simply impose its own construction on the statute, as would be necessary in the absence of an administrative interpretation. Rather, if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute.[234]

This standard presents a threshold question—whether, in defining "point source," Congress was "ambiguous" as to the applicability of the term to mussel harvesting operations like that at issue in *Hammersley*.[235] Without such ambiguity, no opportunity for deference is presented. This possibility will not be pursued here. In short, as the regulation applied by the court in

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231. It seems worthy of note that, under the provisions regulating "concentrated aquatic animal production facilities," ("CAAPF") a facility that produced any number of times more than Taylor's yield of seafood annually would not be classified as a CAAPF—and thus a "point source"—so long as it added little or no food to the waters. 40 C.F.R. pt. 122 app. C at (a)(1)–(2) (2003). This possibility suggests, quite strongly, that the aim of the CAAPF regulation was not the realization of the Clean Water Act's purposes, but rather the achievement of administrative efficiency (through the reduction of facilities required to seek permits).

232. *See* Pronsolino v. Nastri, 291 F.2d 1123, 1131 (9th Cir. 2002) ("The CWA delegates to the EPA the general rule-making authority necessary for the agency to carry out its functions under the Act."); Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 167 (D.C. Cir. 1982) ("[The] EPA certainly has responsibility for administering the Act.").

233. 467 U.S. 837 (1984).

234. *Id.* at 843 (citations omitted); *see also* NLRB v. Brown, 380 U.S. 278, 291 (1965) (stating that "courts are not obliged to stand aside and rubber-stamp . . . administrative decisions that they deem inconsistent with a statutory mandate or [contrary to] the congressional policy underlying a statute").

235. *Brown*, 380 U.S. at 291.

Hammersley does not stand as a "permissible construction" of the statute, "no amount of deference can save it."[236]

A demonstration of the inconsistency between the Act's definition of "point source" and the EPA's regulation of "concentrated aquatic animal production facilities" must begin with the text of the definition itself. According to the Clean Water Act, a "point source" is "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."[237] This provision differs from the Act's definition of "pollutant" in one key respect: at its core lies a characterization, rather than a mere enumeration, of those "conveyances" within its grasp.[238] With the catalogue of illustrative point sources removed, the definition reads clearly: a "point source [is] any discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged."[239]

It takes few analytical strides to conclude that Taylor's rafts constituted such a conveyance. They were, undoubtedly, "discernible, confined, and discrete,"[240] floating at an obvious point on Puget Sound.[241] They were also a "conveyance," a means by which the mussels and their wastes were suspended directly in the receiving waters and ultimately released.[242] Finally, as all the preceding has gone to demonstrate, the rafts constituted instrumentalities "from which pollutants [were] discharged."[243] Thus, under the terms of the statute, such rafts are a "point source" subject to permitting requirements of the Clean Water Act. In this, the impermissibility of the regulation is manifest. It is the regulation that must fall.[244]

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236. *Gorsuch*, 693 F.2d at 171 (citing Fed. Election Comm'n. v. Democratic Senatorial Campaign Comm., 454 U.S. 27, 32 (1981)).

237. 33 U.S.C. § 1362(14) (2000). "[A]gricultural stormwater discharges and return flows from irrigated agriculture" are expressly excluded from the definition. *Id.*

238. The definition of "pollutant," it will be recalled, consists solely of an enumeration of included items. *See supra* note 79 and accompanying text.

239. 33 U.S.C. § 1362(14). Such condensation is permissible as the definition "includ[es] but [is] not limited to" the listed items. *Id.*

240. *Id.*

241. *See supra* notes 66–70 and accompanying text.

242. *See supra* notes 66–70 and accompanying text. This conclusion is solidified by the inclusion of both "concentrated animal feeding operation[s]" and "vessel[s] or other floating craft[s]" within the definition. 33 U.S.C. § 1362(14).

243. *Id.*

244. Oddly, the EPA, in the very regulation declaring Taylor's facility not to be a "point source," implicitly concedes that such an installation is a "discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged." 33 U.S.C. § 1362(14). The regulation's exceptions concern not the structure of the installations at issue—for instance, whether the conveyance is "confined" or "discrete"—but rather the productive and nutritive output of the facility. *See supra* text accompanying note 226. These are characteristics relevant

CONCLUSION

In a seminal interpretation of the Clean Water Act, the United States Court of Appeals for the District of Columbia Circuit gave clear statement to an undeniable truth. "[A]s any student of the legislative process . . . learns," the court declared, "it is one thing for Congress to announce a grand goal, and quite another for it to mandate full implementation of that goal."[245] What is sought in these pages is not the implementation of the ninety-second Congress's highest aspirations, but rather the enforcement of those words they enacted into law. The Clean Water Act does not require that "the discharge of pollutants into navigable waters be eliminated by 1985."[246] The statute does, however, demand that aquaculture facilities such as those of Taylor Resources be subject to the permitting requirements at its core. In holding otherwise, the Ninth Circuit made conscious amendment to the Act, and its opinion must be abandoned—be it by court or Congress.

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not to the primary "point source" question, but rather a secondary question of scale. The definition of "point source" is in no way concerned with scale. By integrating such a requirement into its regulation, the Agency acted in a manner inconsistent with the Act it was charged to enforce.

245. Nat'l Wildlife Fed'n v. Gorsuch, 693 F.2d 156, 178 (D.C. Cir. 1982).

246. 33 U.S.C. § 1251(a)(2).