

# History of the 1972 Clean Water Act: The Story Behind How the 1972 Act Became the Capstone on a Decade of Extraordinary Environmental Reform

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Most environmental law scholars would probably agree that three ambitious pieces of federal legislation, adopted within a three-year period forty years ago, form the backbone of the nation's continuing efforts to control and prevent environmental pollution. Of the three iconic statutes—the National Environmental Policy Act of 1969 (“NEPA”),<sup>1</sup> the Clean Air Act of 1970,<sup>2</sup> and the 1972 Clean Water Act (“CWA”)—many environmental law scholars would likely agree that the CWA was the best designed and most artfully drafted. At least some would also agree that over the forty years of its existence, the CWA has been the most effective in achieving its objectives.<sup>4</sup> Admirers of the impressive national progress under the CAA might disagree, however.

For the entire millennium prior to adoption of the 1972 CWA, the capacity of a waterway to absorb and dilute deleterious wastes legally was considered a common resource subject to exploitation by anyone having access to the water. The Anglo-American common law of nuisance allowed any discharger to dump wastes into a waterway up to the point the resulting pollution caused unreasonable harm to another person's property right or to the public interest.<sup>5</sup> Starting in the 19th century, many states codified these nuisance law prin-

ciples in statutory definitions of what acts or omissions would constitute private and public nuisances as a matter of law. State courts, however, generally recognized that the organic common law of nuisance would continue to evolve.<sup>6</sup> In one bold stroke, the 1972 CWA abrogated this traditional legal doctrine that defined actionable water pollution in terms of unreasonable harm. The new law accomplished this critical reversal by adopting as a long-term goal the elimination of all polluting discharges to the nation's waters, and by creating a complex new regulatory regime employing technology-based effluent limitations to accomplish this ambitious goal.

Unlike Athena, the 1972 CWA did not spring full-grown from the brow of Zeus. To the contrary, it was the culmination of over eighty years of gradually intensifying federal involvement in the increasingly serious deterioration in the quality of the nation's waters.<sup>7</sup> Between the first, very limited intervention into a local water pollution problem in 1886<sup>8</sup> and the adoption of the formal Federal Water Pollution Control Act in 1948,<sup>9</sup> bills dealing with water pollution went before Congress in all but six sessions.<sup>10</sup> Despite periodic changes in the federal program (six significant amendments), twenty-four years passed between the very modest initiatives in the 1948 Act and the bold strides made in the 1972 CWA. Throughout this period, environmental advocates exerted

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1. The National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852 (1970) (codified as amended at 42 U.S.C. §§ 4321–4347 (2006)).
2. Clean Air Act Amendments of 1970, Pub. L. No. 91-604, 84 Stat. 1676 (1970) (codified as amended at 42 U.S.C. §§ 7401–7671q (2006)).
3. Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (1972) (codified as amended at 33 U.S.C. § 1251–1376 (2006)) [hereinafter Clean Water Act of 1972 (“CWA”)].
4. See William L. Andreen, *Water Quality Today—Has the Clean Water Act Been a Success?*, 55 ALA. L. REV. 537 (2004).
5. The remedy for such unreasonable harm was an action for private or public nuisance, depending on the nature of the harm. See WILLIAM LLOYD PROSSER & W. PAGE KEETON, PROSSER & KEETON ON TORTS 619, 643 (5th ed. 1984); DAN B. DOBBS, THE LAW OF TORTS 1322, 1337 (2000).

6. See, e.g., IOWA CODE § 657.2 (2011) (listing “[t]he corrupting or rendering unwholesome or impure the water of any river, stream or pond” as a nuisance); *Bates v. Quality Ready-Mix Co.*, 154 N.W.2d 852, 857 (Iowa 1967) (“The above statutory enumerations do not modify the common-law application to nuisances.”).
7. See N. WILLIAM HINES, NAT'L WATER COMM'N REPORT NO. NWC-L-72-036, PUBLIC REGULATION OF WATER QUALITY IN THE UNITED STATES 459–99 (1971) [hereinafter HINES, PUBLIC REGULATION OF WATER QUALITY] (discussing the evolution of federal water regulation leading up to the enactment of the Clean Water Act in 1972).
8. See *id.* at 460 (discussing legislative action in 1886 to prevent dumping in the New York Harbor).
9. Federal Water Pollution Control Act of 1948, Pub. L. No. 80-845, 62 Stat. 1155 (1948) (codified as amended at 33 U.S.C. § 1251–1376 (2006)).
10. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 459.

constant pressure on Congress to tighten the regulatory framework and ratchet up the federal financial support for state and local pollution control efforts.<sup>11</sup>

After a brief look at the status of state water pollution control programs immediately before the adoption of the 1972 CWA, this paper will follow the development of the federal program for combating water pollution across its entire pre-1972 history, grouping developments into three discrete historical segments: (1) between the first primitive control statute in 1886 and the first fumbling attempt at a comprehensive statute in 1948; (2) between 1948 and the beginning of a serious, federally-organized regulatory program in the Water Quality Act of 1965 ("WQA"); and (3) between the 1965 WQA and the adoption of the 1972 CWA, the passage of which required a congressional override of President Nixon's veto. Finally, the paper will identify the key elements in the 1972 CWA and try to trace their origins in the legislative and administrative history of the Act.

In recounting this history, the paper will place primary emphasis on the third period indicated above, which is by far the most dynamic and interesting. At the outset, it is worthy of note that there was an unprecedented escalation in the national interest in combating environmental pollution during the decade before the 1972 CWA was enacted. Much of this heightened public interest was sparked by the publication of best-selling books<sup>12</sup> and high-profile government reports<sup>13</sup> that sounded clear alarms about the rapidly rising costs of manmade destruction of the natural environment. National media coverage of burning rivers, massive fish kills, declining shellfish populations, and closed beaches also captured public attention.<sup>14</sup> Not coincidentally, a number of active citizen-led organizations emerged during this period, dedicated to fighting pollution on several fronts and seeking major reforms in the nation's regulatory regime affecting environmental resources. Also, some important judicial rulings were decided that emboldened environmentalists to become more aggressive, which in turn led to extraordinary legislative initiatives in Congress, all of which affected American citizens' relationship with the natural environment in important ways that have never been replicated in the four decades since this period.

## I. The Status of State Water Pollution Control Programs Entering the 1970s

### A. State Programs Limited in Scope

Before tracing the background of the 1972 CWA at the federal level, we should note at the outset that, before the mid-1960s, the task of controlling water pollution was almost universally believed to be a state responsibility.<sup>15</sup> Much of the early resistance to fashioning any federal role in controlling water pollution was grounded in the belief that dealing with such pollution was strictly a state or local matter. Therefore, the affected states or localities should step up and mount whatever regulatory effort was required to eliminate the pollution.<sup>16</sup> President Eisenhower even vetoed one of the early congressional attempts to expand the federal role in combatting water pollution and gave as his primary justification that the proposed statute violated the concept of federalism by intruding too far into an exclusively state regulatory domain.<sup>17</sup>

In the 19th century, local governments gradually began exerting legal authority over serious water pollution problems within their jurisdiction. As concern grew over the pollution of entire rivers or watersheds, more and more states created state agencies charged with regulating water quality within the state's waterways. By the time the federal government began to take an interest in controlling water pollution, every state had an agency or department specifically responsible for monitoring water quality and working to eliminate pollution.<sup>18</sup> Typically, this agency was part of the state's public health department, and it was primarily staffed with professionals specializing in sanitary engineering.<sup>19</sup> This staffing reflected the perception of the time that the only water pollution problems worthy of being addressed were those that flowed directly from sanitary sewers, from municipal waste treatment plants providing only primary treatment, and from industries dumping large loads of raw organic waste material into waterways.<sup>20</sup>

During this period, it is fair to say that most state laws were quite weak when it came time to undertake effective legal enforcement against known polluters.<sup>21</sup> Even when state statutes appeared sufficient to support aggressive enforce-

11. *Id.* at 463-99.

12. See generally RACHEL CARSON, *SILENT SPRING* (1962); DONALD E. CARR, *DEATH OF THE SWEET WATERS* (1966); DAVID ZWICK & MARCY BENSTOCK, *WATER WASTELAND: RALPH NADER'S STUDY GROUP REPORT ON WATER POLLUTION* (1972).

13. See, e.g., STAFF OF SUBCOMM. ON AIR & WATER POLLUTION TO THE S. COMM. ON PUB. WORKS, 89th CONG., *STEPS TOWARD CLEAN WATER* (Comm. Print 1966); U.S. GOV'T PRINTING OFFICE, *SECOND ANNUAL REPORT OF THE PRESIDENT'S COUNCIL ON ENVIRONMENTAL QUALITY* (1971).

14. See RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* 59 (2004) (describing the smoldering Cuyahoga River).

15. See HINES, *PUBLIC REGULATION OF WATER QUALITY*, *supra* note 7, at 105-11.

16. See, e.g., Federal Water Pollution Control Act of 1948, Pub. L. No. 80-845, 62 Stat. 1155 (1948). The opening paragraph of the first federal legislation authorizing creation of a federal program in water pollution control provided: "It is the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of states to prevent, reduce, and eliminate pollution . . . ." CWA § 101(b), 33 U.S.C. § 1251(b) (2006).

17. See HINES, *PUBLIC REGULATION OF WATER QUALITY*, *supra* note 7, at 105-11.

18. *Id.*

19. *Id.* at 109.

20. See N. William Hines, *Nor Any Drop to Drink, Public Regulation of Water Quality, Part I: State Pollution Control Programs*, 52 IOWA L. REV. No. 2, 186, 201-05 (1966) [hereinafter Hines, *Nor Any Drop to Drink, Part I*].

21. See *id.* at 203-04.

ment against polluters, tough enforcement was simply not the norm.<sup>22</sup> Generally, those charged with enforcing the law much preferred a strategy of offering inducements and friendly persuasion to one of confronting polluters with legal action.<sup>23</sup> This, however, is not to place sole blame on state authorities for the dramatic worsening of the nation's water quality during the first half of the 20th century; rather, it is only to note the widespread reluctance of state officials to employ the limited enforcement options that did exist.<sup>24</sup> This non-enforcement norm represented the preference for seeking voluntary compliance by polluters, which was prevalent among the sanitary engineers who ran the state programs at the time. The approach of sanitary engineers is perhaps best summed up in their favorite axiom: "Dilution is the solution to pollution."<sup>25</sup>

On the other hand, by the time the 1972 CWA was adopted, the world of water pollution control had changed. Just a few years had passed since federal law first required all the states to adopt new water quality standards for their interstate waters. By 1970, implementation of the 1965 WQA was proceeding at a good pace in the states, and the legal and administrative difficulties in developing effective enforcement strategies for translating the emerging water quality standards into cleaner water were just beginning to be recognized and tackled.<sup>26</sup> The prevailing perception in Congress, however, as expressed repeatedly during the debates over the 1972 CWA,<sup>27</sup> was that it was hopeless to expect the states to develop sufficiently tough regulatory controls on water pollution to make real progress on cleaning up the nation's rivers and lakes. A major report at the time, however, concluded that this assessment was premature and probably unjustified.<sup>28</sup> Congress obviously did not agree.

## B. The 1971 National Water Commission Report

In 1971, I headed a team of researchers commissioned by the National Water Commission to conduct a nation-wide study of state-level water pollution control programs.<sup>29</sup> We surveyed all fifty state programs, asking a battery of questions about how they were dealing with the most pressing water pollution issues within their jurisdiction.<sup>30</sup> In addition, we identified what we deemed the nine best state programs and spent considerable time on the ground with them, studying their regulatory activities in much greater detail. Our 1971 report

confirmed that all fifty states had prepared and submitted water quality standards for their interstate waters as mandated by the 1965 WQA, and they were busily engaged in implementing them.<sup>31</sup> Forty-seven of the states already had in place permit systems to control the biggest point-source polluters.<sup>32</sup> Among the nine state programs most carefully studied, a median of ninety-eight percent of their publically owned treatment works ("POTW")<sup>33</sup> were already operating under state permits that required them to apply secondary treatment,<sup>34</sup> and a median of eighty-eight percent of industrial polluters were also operating under permits.<sup>35</sup> Although these compliance numbers were self-reported, and therefore possibly exaggerated, and the permits for industrial dischargers were certainly not technology-based, my research at the time nevertheless suggested that a dramatic expansion of the federal role in controlling water pollution was unnecessary and unjustified. Congress did not heed my contention, and with the benefit of forty years of hindsight, Congress was right.

Congress, however, made a particularly wise decision in the 1972 CWA to retain the traditional deference to state water pollution control agencies to implement the new effluent limitations. The decision to delegate to the states responsibility for the day-to-day administration of the new National Pollutant Discharge Elimination System ("NPDES") was not based on abstract principles of federalism like those cited above by President Eisenhower, or on key congressional leaders wanting to treat the states' interests with special respect. Instead, it was based on the practical recognition that the human resources employed by the U.S. Environmental Protection Agency ("EPA") at this point in time were small compared with the large number of technical experts and management personnel imbedded in state programs across the country—programs that then accounted for over ninety-five percent of the ongoing regulatory activity in U.S. water pollution control.<sup>36</sup> This model of cooperative federalism has been retained throughout the forty-year history of the CWA.

22. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 350–72.

23. *See id.*, at x.

24. *See* Hines, *Nor Any Drop to Drink, Part I*, *supra* note 20, at 201–35 (discussing various types of state pollution control regimes).

25. *See* N. William Hines, *A Decade of Nondegradation Policy in Congress and the Courts: The Erratic Pursuit of Clear Air and Clean Water*, 62 IOWA L. REV. 643, 643 (1977) [hereinafter Hines, *A Decade of Nondegradation Policy*].

26. *See* HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at v–xiii.

27. *See* S. REP. NO. 92-414, at 8 (1971), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1426 (1973).

28. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7.

29. *See generally* HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7.

30. States thoroughly studied were Alabama, California, Iowa, Michigan, New York, Ohio, Oregon, Pennsylvania, and Texas. *Id.* at 284.

31. *Id.* at 49, 51.

32. *Id.* at viii.

33. As we will see later, Publically-Owned Treatment Works ("POTW") became a term of art in section 301(b) of the 1972 CWA. CWA § 301(b), 33 U.S.C. § 1251(b) (2006). Oddly, the Act does not define this important term, but it is obvious from the definition of "Municipality" in section 502(4) of the Act that POTWs are public bodies created by law that exert jurisdiction over the disposal of sewage, industrial wastes or other wastes discharged to water. *Id.* § 502(4), 33 U.S.C. § 1362(4) (2006).

34. Secondary treatment means treating the waste one stage beyond primary treatment, during which only offensive solids are filtered out of the wastewater stream before it is returned to receiving waters. OFFICE OF WASTEWATER MGMT., U.S. ENVTL. PROT. AGENCY, EPA 832-R-04-001, PRIMER FOR MUNICIPAL WASTEWATER TREATMENT SYSTEMS 9–11 (2004), *available at* [http://water.epa.gov/aboutow/owm/upload/2005\\_08\\_19\\_primer.pdf](http://water.epa.gov/aboutow/owm/upload/2005_08_19_primer.pdf). Secondary treatment involves subjecting the waste to biological processes relying on bacteria to decompose the organic material in the waste to the point that when it is released the treated wastewater will exert no biological oxygen demand on the receiving waters. *Id.* at 11–12.

35. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 284.

36. *See id.*



## II. Federal Efforts from 1886 to 1948

### A. *The Rivers and Harbors Act*

The first federal intervention into controlling water pollution was a very modest one. In 1886, Congress enacted an early version of what was to become the Rivers and Harbors Act of 1899, also later known as the Refuse Act.<sup>37</sup> This early statute charged the Army Corps of Engineers (“Corps”) with preventing the dumping of materials into the harbors of New York City that might pose an impediment to navigation.<sup>38</sup> The regulatory authority granted to the Corps was extended in 1890 to grant jurisdiction over other harbors in the United States.<sup>39</sup> In 1899, the Refuse Act was amended to broaden the Corps’ regulatory authority to reach all of the nation’s navigable waters and their tributaries without regard to whether the discharges actually impeded navigation.<sup>40</sup> Of vital importance to the modern history of U.S. water pollution control, the 1899 amendments to the Rivers and Harbors Act also gave the Corps the authority to regulate all discharges of wastes to the affected waters,<sup>41</sup> except liquid wastes flowing from municipal sanitary sewers and storm sewers. Interestingly, this potentially powerful federal tool to control and prevent water pollution nationwide remained dormant for over seventy years until revitalized by a Supreme Court decision in 1966.<sup>42</sup> We will return to this development later to describe its major impact on the shape of the 1972 CWA.

### B. *U.S. Public Health Service Takes the Lead*

Early in the 20th century, new scientific knowledge about the sources of water-borne communicable diseases like typhoid and cholera spurred national interest in the public health aspects of water pollution.<sup>43</sup> In 1912, the U.S. Public Health Service (“PHS”) received congressional authorization to investigate the connection between pollution in the nation’s navigable rivers and lakes and adverse health effects suffered by persons using the waters for household purposes.<sup>44</sup> The PHS was not granted any power to initiate corrective measures to abate the pollution it found, but this proved to be

no handicap to taking preliminary steps toward eliminating this health hazard through improved treatment of drinking water. Close cooperation between PHS and state and local public health departments led to the adoption of national standards for chlorination and other treatments of public drinking water supplies, which all but eliminated water-carried diseases in the United States.<sup>45</sup>

### C. *Oil Pollution Act of 1924*

The next water pollution problem to attract national attention was oil pollution resulting from discharges from ships plying coastal waters. Not only did this pollution render public beaches unfit for bathing and create a fire hazard around harbors and docks, but it also caused great harm to certain key shellfish production areas.<sup>46</sup> The Oil Pollution Act of 1924 outlawed the dumping of oil into coastal waters and charged the Secretary of War with enforcement of the law.<sup>47</sup> Expanded to also cover other hazardous substances, an updated version of this law became part of the 1972 CWA.<sup>48</sup>

### D. *Roosevelt Vetoes Proposed New Federal Program*

The success of the Oil Pollution Act in dealing with a serious water pollution problem inspired members of Congress to consider broader federal action to deal with the growing concerns about water quality expressed by fish and wildlife specialists and conservation groups.<sup>49</sup> Senator Augustine Lonergan of Connecticut convened a national conference in 1934, at which water quality experts were invited to assess the nation’s water quality problems and to suggest what might be the proper federal role in ameliorating them.<sup>50</sup> The theme of the conference was to “destroy pollution before it destroys us.”<sup>51</sup> In the same year, the National Resources Committee appointed a Special Advisory Committee on Water Pollution.<sup>52</sup> Both the conference report and the Advisory Committee concluded that there was a serious water pollution problem in America.<sup>53</sup> In 1935, the recommendations from

37. Rivers and Harbors Appropriations Act of 1886, ch. 929, § 3, 24 Stat. 310, 329 (1886).

38. U.S. ENVTL. PROT. AGENCY, IMPLEMENTATION OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM 4 (1973), available at <http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockkey=2000V0FW.txt>.

39. Rivers and Harbors Appropriations Act of 1890, ch. 907, § 6, 26 Stat. 426, 453 (1890).

40. Rivers and Harbors Appropriations Act of 1899, ch. 425, § 13, 30 Stat. 1121, 1152 (1899) (codified as amended at 33 U.S.C. § 407 (1988)). This section only applied if such waste discharges impede or hinder navigation. *Id.*

41. River and Harbor Act of 1905, ch. 1482, § 4, 33 Stat. 1147 (1905) (codified as amended at 33 U.S.C. § 419 (1964)).

42. *United States v. Standard Oil*, 384 U.S. 224 (1966).

43. See Lloyd F. Novick & Cynthia B. Morrow, *Defining Public Health: Historical and Contemporary Developments*, in PUBLIC HEALTH ADMINISTRATION: PRINCIPLES FOR POPULATION-BASED MANAGEMENT 8 (Lloyd F. Novick et al. eds., 2008), available at [http://www.jblearning.com/samples/0763738425/38425\\_CH01\\_001\\_034.pdf](http://www.jblearning.com/samples/0763738425/38425_CH01_001_034.pdf).

44. See Public Health Service Act, Pub. L. No. 78-410, § 301, 58 Stat. 682, 692 (1944) (codified as amended at 42 U.S.C. § 241 (1964)) (incorporating stream and lake pollution investigation authority).

45. See 16 Fed. Reg. 2037 (1951). See also Comm’n on Org. of the Exec. Branch of the Gov’t, *The Federal Government and Water Pollution Control*, in 3 TASK FORCE REPORT ON WATER RESOURCES & POWER 1222 (1955).

46. See STAFF OF S. COMM. ON PUB. WORKS, 88th CONG., A STUDY OF POLLUTION—WATER 4 (Comm. Print 1963); see also *Pollution of Navigable Waters: Hearings on H.R. 10625 Before the H. Comm. on Rivers & Harbors*, 71st Cong. 4 (1930).

47. Oil Pollution Act of 1924, Pub. L. No. 68-238, § 3, 43 Stat. 604, 605 (1924) (codified as amended at 33 U.S.C. §§ 431–36 (1964)). This act only applied to coastal waters where the tide ebbs and flows, so it was of limited application. See *Particular Problems of Water Pollution Under New York Law and Federal Law: A Summary of the Right of a Riparian to Pollute a Stream Under the New York Common Law*, 10 BUFF. L. REV. 503–04 (1961).

48. See CWA § 311, 33 U.S.C. § 1321 (2006).

49. Fish and Wildlife Coordination Act, Pub. L. No. 78-121, 48 Stat. 401 (1934) (codified as amended at 16 U.S.C. § 661 (1964)) (authorizing the Secretary of Agriculture and the Secretary of Commerce to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife).

50. See S. DOC. NO. 16, at v, 102 (1935).

51. *Id.* at v.

52. SPECIAL ADVISORY COMM. ON WATER POLLUTION, NAT’L RES. COMM., REPORT ON WATER POLLUTION (1935).

53. See generally S. DOC. NO. 16.

these two sources stimulated the introduction of the first legislative proposal to launch an active federal program in water quality management.<sup>54</sup> Although this bill did not pass, it is interesting to note that the federal program envisioned in this legislation would have interjected the federal government into the water pollution control business in rather extensive ways, and yet no one raised much resistance at the time on states' rights grounds.

The next year, 1936, marked the first of a series of near misses in attempts to create a federal water pollution control program.<sup>55</sup> Proponents of the reform legislation succeeded in getting a modest federal program passed in both houses of Congress, only to see the initiative fail on a motion to reconsider in the waning days of the session.<sup>56</sup> The key reason the proposal failed was objection to the inclusion of federal enforcement powers in the bill.<sup>57</sup> Efforts were continued in 1937, and in 1938, proponents of a federal program for water pollution control again steered their bill successfully through both houses of Congress, only to have it vetoed by President Roosevelt on an obtuse "separation of powers" ground, namely that one appropriations provision invaded the prerogatives of the Executive Branch.<sup>58</sup> President Roosevelt, however, recognized the general popularity of the water pollution control initiative and, in a special message to Congress in 1939, stated that he "fully subscrib[ed] to the general purposes" of the act he vetoed in 1938.<sup>59</sup>

### E. World War II Sidetracks Reforms

President Roosevelt's public support spurred the proponents of a federal program to try again, and a number of anti-pollution bills were introduced in 1939.<sup>60</sup> These bills carried over until 1940, when both houses of Congress again passed the proposals.<sup>61</sup> The two bills that were passed, however, were quite different in approach, and the conference committee could not reach agreement on a compromise bill before the

end of the session.<sup>62</sup> So for the third time, a new federal program to deal with water pollution on a national scale came close to adoption, but in the end, fell short. The industrial mobilization for World War II between 1940 and 1945 greatly increased the magnitude of the nation's water pollution problems, but the war effort so distracted members of Congress that Congress put new water pollution control legislation on the back burner until the war ended.<sup>63</sup> Congress introduced bills to create a federal water pollution control agency in 1941, 1943, and 1944, but none of them were reported out of committee.<sup>64</sup>

### F. Post-War Action on Reforms

As early as November 1945, Congress initiated hearings on four bills proposing new federal antipollution laws.<sup>65</sup> Congress seemingly lost these bills in the great mass of postwar legislation during the period, however, and water pollution control did not emerge again as a topic for serious discussion until 1947, when Congress considered four nearly identical bills, each of which proposed the creation of a new federal water pollution control program.<sup>66</sup> Congressman Brent Spence and Senators Alben Barkely, Robert Taft, and Frederick Vinson were all very active in promoting this legislation.<sup>67</sup> Not surprisingly, all of the bills under consideration in 1947 were closely based on the legislation that passed both houses in 1938, only to be vetoed by President Roosevelt.<sup>68</sup>

The Surgeon General led off the 1947 hearings in the Senate by stating, "[t]he necessity for the Federal Government to go into this matter of giving aid for the prevention of stream pollution is, I think, very clear if we consider the facts."<sup>69</sup> This proposition was never really challenged in the hearings, where most of the discussion focused on the scope and proper power of the proposed federal program.<sup>70</sup> The bill that finally passed the Senate in 1947 was substantially overhauled in the House,<sup>71</sup> and the Senate generally acceded to the House changes. The first Federal Water Pollution Control Act, signed by President Truman on June 30, 1948,<sup>72</sup> was a temporary measure with a five-year life until reauthorization of the Act was required in 1953.<sup>73</sup>

54. See H.R. 8992, 74th Cong. (1935); S. 3958, 74th Cong. (1936).

55. See 80 CONG. REC. 9192 (1936). Apparently this bill came within one vote of surviving the motion to reconsider. See also *Pollution of Navigable Waters: Hearings Before the H. Comm. on Rivers and Harbors on H.R. 2711 and H.R. 3419*, 74th Cong. (1937).

56. See 80 CONG. REC. 9192 (1936).

57. See 82 CONG. REC. 463-64 (1937) (remarks of Rep. John Marvin Jones, expressing concern about the bill's federal enforcement procedures); see also 81 CONG. REC. 9564-65 (1937) (remarks of Sen. Augustine Lonergan, who succeeded in getting the Senate bill amended to include minimal enforcement provisions).

58. 84 CONG. REC. 4852 (1939); *Pollution of Navigable Waters: Hearings Before the H. Comm. on Rivers and Harbors on H.R. 519, H.R. 587, and H.R. 4070*, 79th Cong. 24 (1945) [hereinafter House Hearings on H.R. 519, H.R. 587, and H.R. 4070]. An amended bill was introduced correcting the features objected to by the President, but the session ended before action could be taken on it. *Id.*

59. 84 CONG. REC. 1483 (1939).

60. In 1939, a total of eight bills were introduced by Representatives Bland, Mundt, Parsons, and Spence and Senators Barkley and Clark of Missouri. See 84 CONG. REC. 31, 33, 155, 355, 536, 1446, 2196 (1939).

61. See S. 685, 76th Cong. (1939); 84 CONG. REC. 4931 (1939) (passed Senate); 86 CONG. REC. 2,226 (1940) (passed House). This bill was similar to H.R. 2711, which was vetoed in 1938.

62. See 86 CONG. REC. 9347 (1940); 86 CONG. REC. 9350-57 (1940) (explaining of the history behind these bills and why they did not pass).

63. See Arnold Reitze, *The Legislative History of U.S. Air Pollution Control*, 36 Hous. L. REV. 679, 687 (1999).

64. *Id.*

65. See House Hearings on H.R. 519, H.R. 587, and H.R. 4070, *supra* note 58.

66. See H.R. 123, 80th Cong. (1947); H.R. 123, 80th Cong. (1947); H.R. 470, 80th Cong. (1947); S. 418, 80th Cong. (1947).

67. See House Hearings on H.R. 519, H.R. 587, and H.R. 4070, *supra* note 58.

68. *Stream Pollution Control: Hearings on S. 418 Before the Subcomm. on Flood Control and River & Harbor Improvements of the S. Comm. on Pub. Works*, 80th Cong. 29 (1947).

69. *Id.* (statement of Dr. Thomas Parran, Jr., Surgeon General of the United States).

70. *Id.* at 112, 132, 144, 184.

71. See 93 CONG. REC. 9032 (1947) (amended and passed the Senate); 94 CONG. REC. 8192 (1948) (amended and passed the House). See also S. REP. NO. 80-680, at 1 (1947); H.R. REP. NO. 80-1829, at 1 (1948).

72. Water Pollution Control Act of 1948, Pub. L. No. 80-845, 62 Stat. 1155 (1948) (current version at 33 U.S.C. §§ 1251-1376 (2006)).

73. *Id.* § 7, 62 Stat. 1169.

### III. The Evolution of the Federal Water Pollution Control Program from Beginning Steps in the 1948 Act to the Comprehensive 1965 Water Quality Act

#### A. Shortcomings of the 1948 Federal Water Pollution Control Act

Judged by the precepts of modern water pollution control, it would be charitable to describe the 1948 Act as a promising start on a comprehensive federal program, but it was at least a start. The federal role, as envisioned by the 1948 Act, was a very secondary one in relation to state and local pollution control activities. In the opening sentence of the Act, Congress declared federal jurisdiction over “the waterways of the Nation,” but it then went on to announce the federal policy to be primarily one of supporting state and local agencies in their water pollution abatement efforts through research, technical services, and financial assistance.<sup>74</sup> Administrative responsibility for the operation of the federal program was assigned to the PHS under the leadership of the Surgeon General.<sup>75</sup> The 1948 Act set out a number of areas in which there was to be cooperation between state and federal programs, but it always gave deference to the state programs to decide whether federal assistance was needed and how it should be provided.<sup>76</sup> The 1948 Act specifically encouraged the promulgation of uniform state laws and the creation of interstate compacts to regulate water pollution.<sup>77</sup> The Act also authorized funds to make modest grants to state agencies for surveys and studies of existing and potential pollution problems, and to make loans to help subsidize the cost of needed waste treatment facilities.<sup>78</sup> A major difficulty on this front was that Congress did not appropriate any funds for the first year of the new federal agency, and in subsequent years, Congress only appropriated about ten percent of the funds authorized.<sup>79</sup>

Perhaps most indicative of the weakness of the initial federal program was the virtual absence of enforcement powers. The 1948 Act boldly declared it to be a public nuisance subject to abatement whenever any interstate condition of water pollution endangered the health or welfare of persons in a state other than the state where the pollution originated,<sup>80</sup> but abatement of the nuisance was not easy. When a pollution claim was made, the Act authorized the Surgeon General to conduct an investigation to determine whether actionable pollution was, in fact, occurring.<sup>81</sup> If the Surgeon General’s investigation found that pollution existed, the

1948 Act required the agency to give the polluter notice of what actions were required to abate the nuisance, and grant reasonable time for the polluter to comply with the abatement plan.<sup>82</sup> If no corrective action from the polluter was forthcoming, the 1948 Act authorized the Surgeon General to request the Federal Security Administrator to conduct a public hearing to determine whether it was reasonable and equitable to secure abatement of the pollution.<sup>83</sup> If, as a result of the public hearing, abatement was deemed appropriate, the Surgeon General could request the U.S. Attorney General to bring a suit against the polluter to secure abatement of the public nuisance—but again, only after the state pollution control agency had given its consent to the suit.<sup>84</sup> It is difficult to imagine an enforcement procedure more poorly designed to secure prompt and meaningful action on the part of an industrial or municipal polluter, the assumed villains during this era.

#### B. The 1956 Amendments

Due to severe underfunding and serious understaffing of professional personnel, the implementation of the 1948 Act got off to a very slow start. In its first three years of operation, the PHS accumulated very little actual experience in dealing with the nation’s water pollution issues, but it learned enough to know that the problems were much more egregious than assumed when the 1948 Act was passed.<sup>85</sup> Progress in getting any serious regulatory activity off the ground was so sluggish that in 1952, the year before the federal water pollution program was up for reauthorization, Congress quietly extended the temporary status of the agency for three more years, until 1956.<sup>86</sup> Faced with the looming reauthorization for the federal program, in 1955, Congress began the process of constructing a permanent legislative base for the national water pollution control program.

Hearings in the Senate focused on two controversial proposals to strengthen the federal program created by the 1948 Act.<sup>87</sup> The first proposal was to grant the Surgeon General the power to establish water quality standards for

74. *Id.*

75. *Id.* § 2, 62 Stat. 1155.

76. *Id.* § 2(b), 62 Stat. 1156.

77. *Id.*

78. *Id.* § 8(b), 62 Stat. 1159.

79. William L. Andreen, *The Evolution of Water Pollution Control in the United States—State, Local, and Federal Efforts, 1789–1972: Part II*, 22 STAN. ENVTL. L.J. 215, 238 (2003) [hereinafter Andreen, *The Evolution of Water Pollution Control*].

80. Water Pollution Control Act of 1948, § 2(d)(1), 62 Stat. 1156 (current version at 33 U.S.C. §§ 1251–1376 (2006)).

81. *Id.* § 2(a), 62 Stat. 1155.

82. *Id.* § 2(d)(2), 62 Stat. 1156.

83. *Id.*

84. *Id.* § 2(d)(4), 62 Stat. 1157. There were several problems associated with the consent requirements. See Seymour C. Wagner, *Statutory Stream Pollution Control*, 100 U. PA. L. REV. 225, 238 (1951) (discussing how the consent requirements rendered the enforcement powers nearly illusory). The issue of consent was one of the most controversial to arise during debate on this act. The principal point of dispute was whether to give the federal enforcement agency authority to compel abatement of the pollution without the consent of the state where the pollution arises. FED. SEC. AGENCY, EXCERPTS FROM THE REPORT OF THE PRESIDENT’S WATER RESOURCES POLICY COMMISSION, A WATER POLICY FOR THE AMERICAN PEOPLE 194 (1951).

85. See generally *Extension of Water Pollution Control Act: Hearings Before the Subcomm. on Rivers & Harbors of the H. Comm. on Pub. Works*, 82d Cong. 6–8 (1952) (written statement of John L. Thurston, Acting Admin., Fed. Security Agency, noting that there had been a “tremendous increase in the size and importance . . . of the pollution problem [that] call[s] for a continuation of the program”).

86. Water Pollution Control Act Amendment of 1952, Pub. L. No. 82-579, 66 Stat. 755 (codified as amended at 33 U.S.C. § 466 (1964)).

87. *Water and Air Pollution Control: Hearings Before a Subcomm. of the S. Comm. on Pub. Works on S. 890 and S. 928*, 84th Cong. 1 (1955).



interstate waters.<sup>88</sup> Congressional leaders ultimately deemed this proposal too radical and deleted it from the reauthorization bill passed by the Senate.<sup>89</sup> The second proposal was to strengthen the federal enforcement powers. Arguments made against this proposal included that it violated the cooperative philosophy of the 1948 Act, it intruded into the domain of predominantly state and local powers, and it lacked justification, given that the existing enforcement powers had never been exercised.<sup>90</sup> Notwithstanding these objections, the upgrade in federal enforcement authority survived the Senate vote on the bill and it was sent on to the House of Representatives.<sup>91</sup> The House held hearings on the Senate bill, but it did not take action on it until 1956, when a new House bill, authored by Congressman John A. Blatnik, was substituted for the Senate bill. The House bill was very similar to the Senate bill, but with two major changes: the House bill watered down federal enforcement authority and inserted a new one billion dollar federal construction grant program to assist with municipal waste treatment facilities.<sup>92</sup> The House bill also made no provision for the creation of federal water quality standards. After a good deal of back and forth between the House and Senate, Congress passed the Water Pollution Control Act Amendments and President Eisenhower signed the bill into law without any further mention of water quality standards.<sup>93</sup>

As a technical matter, the 1956 amendments were simply affixed to the bare skeleton of the 1948 Act, but they provided for a somewhat better organized and more aggressive federal pollution control program than the earlier law. Federal fealty to the hegemony of state and local control efforts was reaffirmed rhetorically, but it was also clear from the sizeable increases in the variety and magnitude of federal support and the very modest stiffening of federal enforcement powers that the federal government's role in water pollution control was significantly expanded.<sup>94</sup>

Specifically, research and training activities were increased, a new grant-in aid program to assist state and interstate control programs was introduced, and, most importantly, the construction loan program of the 1948 Act was replaced with a large-scale construction grant program that was to grow in size over the years.<sup>95</sup> The loans offered to local governments under the 1948 Act proved unpopular with municipalities, so they produced little new construction of badly needed public waste water treatment facilities. The new federal grant program created by the 1956 amendments, on the other hand,

proved so popular that Congressional funding could not keep pace with the demand.<sup>96</sup> Over the ensuing fifteen years, the size of the construction grant program increased exponentially and ultimately became a major federal spending issue between Congress and Presidents Eisenhower and Nixon.<sup>97</sup>

The 1956 Amendments enhanced the federal enforcement powers in two ways. First, the new law removed the requirement that a state must first request the federal agency to investigate an alleged pollution before the federal agency could begin any action.<sup>98</sup> Second, the amendments inserted a new "conference" stage into the enforcement process between the investigation confirming an actionable condition of pollution and the public hearing. The idea was to bring together at the conference representatives of the local, state, and federal agencies to formulate a cooperative plan to deal with the problem. Congress only authorized the federal agency to seek enforcement by the U.S. Attorney General if the state or local actions failed to achieve the desired abatement, and Congress still conditioned this authority on receiving consent for a federal suit from either the state causing the pollution or the state suffering the pollution.

### C. The 1961 Amendments

The ink was barely dry on the 1956 Amendments before Congressman Blatnik introduced new legislation in the House to double the size of the construction grant program.<sup>99</sup> The Congressman claimed that the success of the construction grant program had been "nothing short of phenomenal," generating nearly four dollars in local expenditures for every one dollar in federal grants.<sup>100</sup> This initiative triggered a strong reaction from President Eisenhower and the Department of Health Education and Welfare ("HEW"), where the federal program was based.<sup>101</sup> The President and the Secretary of HEW sponsored legislation that called for the complete termination of the federal construction grant program on the ground that the construction of waste water treatment facilities was a matter of state and local concern and should be funded entirely by the affected communities.<sup>102</sup>

Led by the strong advocacy of Senator Robert S. Kerr,<sup>103</sup> the Senate sided with the House in this squabble, and the bill that ultimately cleared the conference committee called for increasing the construction grant program from fifty mil-

88. See *id.*

89. *Id.*

90. *Id.* at 39, 117, 130, 166, 170-71, 178 (1955).

91. N. William Hines, *Nor Any Drop to Drink: Public Regulation of Water Quality, Part III: The Federal Effort*, 52 IOWA L. REV. No. 5, 799, 814 (1966) [hereinafter Hines, *Nor Any Drop to Drink, Part III*].

92. *Id.* at 815.

93. Water Pollution Control Act Amendment of 1956, Pub. L. No. 84-660, 70 Stat. 498 (codified as amended at 33 U.S.C. § 466 (1964)).

94. The Pollution Advisory Board originally created in the 1948 Act was retained, but its membership was broadened to provide a more representative body to counsel the Surgeon General in administering this enlarged program. See H.R. REP. NO. 84-1446, at 3 (1956) (allowing for increased federal research and federal support and cooperation in state programs).

95. *Id.* at 2.

96. *Hearings Before the Subcomm. on Rivers & Harbors of the H. Comm. on Pub. Works on H.R. 11714*, 85th Cong. 2 at 39 (1958).

97. See *infra* notes 201-03 and accompanying text.

98. Hines, *Nor Any Drop to Drink, Part III*, *supra* note 91, at 817.

99. WILLIAM G. WHITTAKER, CONG. RES. SERV., RL31491, DAVIS-BACON ACT COVERAGE AND THE STATE REVOLVING FUND PROGRAM UNDER THE CLEAN WATER ACT 2 (2008), available at [http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1533&context=key\\_workplace](http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1533&context=key_workplace).

100. *Hearings Before the Subcomm. on Rivers & Harbors of the H. Comm. on Pub. Works on H.R. 11714*, 85th Cong. 2 (1958).

101. The President in his budget message recommended that appropriations for the construction grant program be cut back in fiscal year 1959 with a view toward eliminating them entirely later. 104 CONG. REC. 395 (1958).

102. The Joint-Federal-State Action Committee was created to reinforce the states in carrying out their fiscal responsibilities. The committee consisted of ten governors and various other representatives of the federal executive branch. *Id.*

103. *Water Pollution Control: Hearings Before the Subcomm. of the S. Comm. on Pub. Works on H.R. 3610 and S. 805*, 86th Cong. 19-20 (1959).

lion dollars annually to ninety million dollars annually.<sup>104</sup> In February 1960, President Eisenhower vetoed this legislation, stating in his veto message that because water pollution was a “uniquely local blight, primary responsibility for solving the problem lies not with the Federal Government, but rather must be assumed and exercised, as it has been, by state and local governments.”<sup>105</sup> The President went on to say that he favored those parts of the legislation that provided additional funds to help strengthen state and local control programs and the proposed further strengthening of federal enforcement powers.<sup>106</sup> The President also called for the convening of a National Conference on Water Pollution to assess the national water pollution problem and consider how best to attack it. Congress attempted to override the veto, but that attempt failed.<sup>107</sup>

President Kennedy’s election in November 1960 clearly altered the Executive Branch’s resistance to a larger federal role in water pollution control. The National Conference urged by President Eisenhower was convened in December 1960. The conference neither took a position on the sensitive issues of federal-state relationships, nor embraced President Eisenhower’s view that the continued need for large-scale federal support for the construction of municipal waste water treatment facilities should be terminated.<sup>108</sup> Shortly thereafter, the Senate’s Select Committee on National Water Resources issued its final report in which it recommended a doubling of the federal investment in the construction grant program.<sup>109</sup> The new President manifested much less concern than did his predecessor about preserving an appropriate balance between state and federal hegemony in dealing with domestic problems clearly national in their scope.<sup>110</sup> In February 1961, President Kennedy, in his first address to Congress, urged that the water pollution problem had reached alarming proportions, and “could no longer be regarded with complacency.”<sup>111</sup>

With several funding authorizations in the 1956 Amendments expiring in June 1961, both the Senate and the House accelerated their activities on new water pollution legislation early in that year. Congressman Blatnik and Senator Kerr introduced bills in their respective chambers, which received hearings and were ultimately approved.<sup>112</sup> The House bill passed only after another fight with states’ rights advocates over the extent and size of the appropriate federal role.<sup>113</sup> A conference committee reconciled the two bills into the Federal Water Pollution Control Act Amendments of 1961,

which passed both houses in July 1960, and which President Kennedy signed into law.<sup>114</sup>

The most important features of the 1961 Amendments were (1) the transfer of administrative authority for the program from the Surgeon General to the Secretary of HEW; (2) the expansion of federal jurisdiction from strictly interstate waters to “navigable or interstate waters in or adjacent to any state or states;” (3) the substantial increases in federal dollars to support basic and regional research, and local, state, and interstate control programs; (4) the doubling of the authorization for the construction grant program; and (5) the large increase in the size of a grant that can be awarded to a single local project and to combined projects.<sup>115</sup>

#### D. *The Continuing Drive to Adopt Water Quality Standards*

Congressional crusaders for a much more aggressive federal role in abating, what they considered, the national scourge of water pollution were again left dissatisfied with the 1961 amendments, much as they had been with the 1956 amendments. In 1963, both the Senate and the House began hearings aimed at identifying the major obstacles to improving pollution control.<sup>116</sup> A House subcommittee chaired by Congressman Robert E. Jones held hearings across the country to collect information that could help transform the federal effort into a more effective force for the improvement of water quality.

In April 1963, the Senate Committee on Public Works created a new Special Subcommittee on Air and Water Pollution,<sup>117</sup> which was destined to play a pivotal role in the battles that were to enliven Congress over its next two sessions. The subcommittee’s first act was to commission its staff to undertake its own study of the nation’s air and water pollution problems.<sup>118</sup> On behalf of the new subcommittee, Senator Edmund Muskie introduced S. 649, which proposed two major changes. First, the bill called for the creation of a Federal Water Pollution Control Administration (“FWPCA”) within HEW to consolidate and administer the ever-expanding federal program.<sup>119</sup> Second, and most controversially, the bill called for the Secretary of HEW to establish national water quality standards, creating both receiving water (ambient) standards and discharge (effluent) standards for all interstate and navigable waters.<sup>120</sup> The battle between advocates and opponents of water quality standards was joined in earnest at the Senate committee hearings on

104. H.R. REP. NO. 86-346, at 2 (1960).

105. Public Papers of President Dwight D. Eisenhower from 1960-61, in PUBLIC PAPERS OF THE PRESIDENTS OF THE UNITED STATES: DWIGHT D. EISENHOWER 208-09 (U.S. Gov’t Printing Office 1961), available at <http://name.umdl.umich.edu/4728424.1960.001>.

106. H.R. DOC. NO. 346, at 2.

107. 106 CONG. REC. 3486-94 (1960).

108. PUBLIC HEALTH SERV., U.S. DEPT. OF HEALTH, EDUC. & WELFARE, PROCEEDINGS: THE NATIONAL CONFERENCE ON WATER POLLUTION 566-67 (1960).

109. S. REP. NO. 87-29, at 1-19, 33 (1961).

110. 107 CONG. REC. 2585 (1961).

111. *Id.*

112. Water Pollution Control Act Amendments of 1961, Pub. L. No. 87-88, 75 Stat. 204 (1961) (codified as amended at 33 U.S.C. §§ 466-466k (1964)).

113. WHITTAKER, *supra* note 99, at 4.

114. Water Pollution Control Act Amendments of 1961, Pub. L. No. 87-88, 75 Stat. 204 (1961) (codified as amended at 33 U.S.C. §§ 466-466k (1964)).

115. See H.R. REP. NO. 87-306, at 4 (1961), reprinted in 1961 U.S.C.A.N. 2076, 2079.

116. *Hearings Before a Subcomm. of the House Comm. on Governmental Operations*, 88th Cong., 1st Sess., pt. 1A at 4-25 (1963).

117. 109 CONG. REC. 7304 (1963).

118. The results of this investigation were reported in STAFF OF S. COMM. ON PUB. WORKS, 88TH CONG., A STUDY OF POLLUTION—WATER (Comm. Print 1963).

119. 109 CONG. REC. 19682 (1963).

120. *Id.*



S. 649.<sup>121</sup> As amended to provide new provisions dealing with synthetic detergents and discharges from federal installations, the bill easily passed the Senate in October 1963.<sup>122</sup>

Meanwhile, in the House, Congressman Blatnik was not idle. His reform proposal, H.R. 3166, was the subject of hearings before a House committee. The House committee, however, elected to report out S. 649, but not before it reduced the HEW Secretary's power with respect to water quality standards to the mere authority to make recommendations to the states.<sup>123</sup> All of this churning over the issue of water quality standards consumed time and no compromise legislation emerged before the end of the 88th Congress.

Senator Muskie acted quickly in 1965 at the beginning of the 89th Congress to reintroduce his reform legislation at S. 4, and the Muskie bill was quickly maneuvered through the Senate.<sup>124</sup> On the House side, Congressman Blatnik reintroduced his proposal as H.R. 3988, and both bills shared the spotlight at hearings before the House Committee on Public Works.<sup>125</sup> Not surprisingly, most of the debate in these hearings centered on the water quality standards called for in S. 4.<sup>126</sup> In March 1965, the House committee chose to report out the Senate bill,<sup>127</sup> but again, only after downgrading the water quality standards component into the mere federal encouragement of state initiatives, which, if not undertaken, could possibly lead to the loss of federal funds.<sup>128</sup> The conference committee was left with the difficult task of reconciling the Senate and House versions of S. 4—the most critical issue being the fate of the water quality standards initiative. While negotiations within the conference committee continued, Senator Muskie's subcommittee was holding high-profile hearings around the country that generated considerable public interest in what was happening on the water pollution control front in Washington, D.C.<sup>129</sup>

In September 1965, the conference committee hammered out compromise legislation, which adopted the requirement of water quality standards only for receiving waters, leaving the more controversial effluent standards for another day. The conference committee bill easily passed both houses of Congress as the WQA.<sup>130</sup> President Johnson quickly signed the WQA into law.

### E. The Water Quality Act of 1965

The first section of the WQA created the new FWPCA in the Department of Health, Education, and Welfare to adminis-

ter the federal program.<sup>131</sup> After over ten years of struggle, the water-quality-standards approach to national water pollution control was finally the centerpiece of the federal effort to control pollution in interstate waters, but the new program was still clearly intended to be administered by the states.<sup>132</sup> A key provision of the WQA created a timetable for states to create ambient water quality standards for all of the nation's interstate waters, which were then to be utilized by the states in their regulatory activities.<sup>133</sup> Perhaps anticipating resistance from the states, the WQA gave the FWPCA clear authority to move forward if the states declined or defaulted in their role.<sup>134</sup> State-created standards were subject to review and disapproval by the Secretary of HEW and, in the absence of acceptable state-created standards, the new Act authorized the Secretary to promulgate water quality standards for the affected interstate waters.<sup>135</sup> Considering how hard fought the battle over the inclusion of water quality standards in the federal control effort was, it is remarkable that the section of the statute creating the standards program was so short and lacking in detail—less than a page.<sup>136</sup> The brevity of the statute necessitated that the FWPCA provide a great deal of formal and informal guidance to the states<sup>137</sup> on how to execute their responsibilities.

Other provisions of the WQA (1) upped the ante for federal construction grants for municipal waste water treatment facilities by fifty percent; (2) quadrupled the maximum grant per project for multi-municipality projects; (3) assigned primary responsibility for administration of the growing federal program to a newly created FWCPA within HEW; (4) authorized the first federal funding for research and development related to separating combined sanitary and storm sewers; and (5) conferred limited regulatory power on the Secretary of HEW to abate pollution in interstate and navigable water adversely affecting shellfish.<sup>138</sup>

## IV. Building Up Regulatory Momentum for Adoption of the Revolutionary 1972 CWA

The decade prior to adoption of the 1972 CWA was a tumultuous time in America—socially, politically and legally.<sup>139</sup> A truly amazing reshaping of important sectors of the American legal system occurred during this period of societal ferment.<sup>140</sup> During this ten-year period, salutary governmental

121. See Hines, *Nor Any Drop to Drink, Part I*, *supra* note 20, at 186 (discussing the pros and cons of organizing pollution control efforts around water quality standards).

122. 109 CONG. REC. 19,682 (1963).

123. H.R. REP. NO. 88-1885, at 6 (1964).

124. Senate hearings on S. 4 were held on January 18, 1965. *Water Pollution Control—1966: Hearings Before a Special Subcomm. on Air & Water Pollution of the S. Comm. on Pub. Works on S. 4*, 89th Cong. (1965) [hereinafter *Water Pollution Control—1966 Hearings*].

125. *Hearings Before the H. Comm. on Pub. Works*, 89th Cong. (1965).

126. *Id.* at 13, 52–61, 141, 211.

127. H.R. REP. NO. 89-215 (1965).

128. *Id.*

129. *Water Pollution Control—1966 Hearings*, *supra* note 124.

130. Water Quality Act of 1965, Pub. L. No. 89-234, 79 Stat. 903 (1965).

131. *Id.* § 1, 79 Stat. 903.

132. *Id.* § 5(a), 79 Stat. 908.

133. *Id.*

134. *Id.*

135. *Id.*

136. *Id.*

137. See U. S. DEP'T OF INTERIOR, GUIDELINES FOR ESTABLISHING WATER QUALITY STANDARDS FOR INTERSTATE WATERS (1966) [hereinafter cited as U.S. DEP'T OF INTERIOR, GUIDELINES].

138. Hines, *Nor Any Drop to Drink, Part III*, *supra* note 91 at 829–30.

139. Social history would focus attention on three heart-wrenching assassinations, cultural conflict between young and old, civil rights marches, and Viet Nam War protests on college campuses.

140. For example, in the realm of civil and political rights, the U.S. Supreme Court kicked off the decade with its 1962 “one man, one vote” decision in *Baker v. Carr*, 369 U.S. 186, 207 (1962). In 1963, the landmark case of *Gideon*

actions on the environmental front were far more numerous than at any time before or since. Ten major new environmental statutes were passed during this decade,<sup>141</sup> the Executive Branch took several important actions advancing environmental protection,<sup>142</sup> and the U.S. Supreme Court handed down a couple of important decisions on environmental law issues. In addition, several important new citizen environmental groups were founded, and some traditional long-standing conservation organizations substantially stepped up their environmental advocacy.<sup>143</sup> New and old environmental organizations alike were highly effective in lobbying Congress for their preferred reforms, and in suing federal agencies

both to challenge crabbed interpretations of newly-adopted laws protecting environmental resources and to compel mandated enforcement actions. In a very real sense, the remarkably bold national goals set forth in the 1972 CWA were a fitting capstone to this decade of fast and furious legislative, executive, and judicial activism on behalf of the nation's natural environment.

### A. *Reorganization Plan Reassigns Responsibility for the FWPCA to HEW*

Considering the hard-fought reform effort that culminated in the WQA, one would think that Congress and other proponents of a stronger federal effort might take a breather from water pollution for a year or two. Instead, 1966 was a year of frenetic activity in the field. Before the newly created FWPCA could settle into HEW, President Johnson announced a Reorganization Plan in February of 1966 that would move the FWPCA from HEW to the Department of the Interior,<sup>144</sup> a plan strongly endorsed by both HEW Secretary John W. Gardner and Interior Secretary Stewart Udall. On the other hand, congressional parents of the new federal water pollution agency were somewhat dismayed at the prospect of their cherished infant moving to, what seemed to them, a potentially hostile environment within Interior. At the hearings on the Reorganization Plan, however, Secretary Udall did an impressive job of selling himself and his department as champions of aggressive efforts to cleanse the nation's waterways.<sup>145</sup> Accordingly, Congress took no steps to disapprove the plan<sup>146</sup> and it took effect in May 1966.

### B. *HEW Issues New Water Quality Guidelines to States*

Making good on his commitment to accelerate the tempo of federal activity on the water quality front, shortly after the FWPCA's transfer to Interior, Secretary Udall issued to the states critically important guidelines for establishing water quality standards—as required by the 1965 Act.<sup>147</sup> These guidelines were critical to ensuring that the states adopted more or less uniform new water quality standards because the provisions in the WQA were quite skeletal in their detail about how the standards were to be created and how they were to be implemented. As prescribed in the guidelines, the states' first step in establishing the new water quality standards was to designate the uses intended for specific segments of regulated waters that were to be protected by the WQA—"public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and

*v. Wainwright*, 372 U.S. 335 (1963), found a constitutional right to counsel for all indigent criminal defendants. *Griswold v. Connecticut*, 381 U.S. 479, 495, 499 (1965), came next in 1965, which for the first time found that U.S. citizens were entitled to a "right of privacy" with respect to exercise of their reproduction freedom that was embedded in the penumbra of the Fourteenth Amendment. A year later, the Court further changed the landscape of criminal law enforcement with its 1966 decision in *Miranda v. Arizona*, 384 U.S. 436, 467–68 (1966), and in 1967 the Supreme Court issued its decision in *Loving v. Virginia*, 388 U.S. 1, 12 (1967), outlawing state regulation of interracial marriages. On the legislative front, the action was also intense as Congress moved to expand citizens' civil rights and strengthen the safety net for the least fortunate in society. The 1964 Civil Rights Act, Pub. L. No. 88-3952, Title II, 78 Stat. 243 (1964), barring segregation in all public accommodations, was followed closely by the enactment of the Voting Rights Act in 1965. Pub. L. No. 89-110, 79 Stat. 437 (1965). Medicare and Medicaid were born together in 1965 as well. See Health Insurance for the Aged Act, Pub. L. No. 89-97, Titles I, XIX, 79 Stat. 290–91, 343–53 (1965). The Federal Fair Housing Act was passed in 1968, which barred discrimination in housing. See Civil Rights Act of 1968, Pub. L. No. 90-284, Title VIII, 82 Stat. 73, 81, 83 (1968). The Occupational Safety and Health Act ("OSHA") was passed in 1970. Occupational Safety and Health Act of 1970, Pub. L. No. 91-596, 84 Stat. 1590 (1970). Title IX of the Education Amendments was enacted in 1972, which outlawed gender-based discrimination in education. See Education Amendments of 1972, Pub. L. No. 92-318, Title IX, 86 Stat. 373 (1972).

141. See The Wilderness Act of 1964, Pub. L. No. 90-284, Title VIII, 82 Stat. 73, 81, 83 (1968); Water Quality Act of 1965, Pub. L. No. 89-234, 79 Stat. 903 (1965); Solid Waste Disposal Act of 1970, Pub. L. No. 89-272, Title II, 79 Stat. 997 (1965); Resource Recovery Act of 1970, Pub. L. No. 91-512, 84 Stat. 1227–35 (1970). 4); Wild and Scenic Rivers Act of 1968, Pub. L. No. 90-542, 82 Stat. 906 (1968); National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852 (1970); National Historic Preservation Act, Pub. L. No. 89-665, 80 Stat. 915 (1966); Federal Environmental Pesticide Control Act of 1972, Pub. L. No. 92-516, 86 Stat. 973; Pub. L. No. 92-532 (1972); Coastal Zone Management Act of 1972, Pub. L. No. 92-583, 86 Stat. 1280 (1972); Endangered Species Act of 1973, Pub. L. No. 93-205, 87 Stat. 884 (1973). In addition to the ten new pieces of legislation, in the early 1970s, the Clean Air Act ("CAA") of 1970 added key amendments to the 1967 CAA to establish the first comprehensive framework for federal-state collaboration in controlling threats to air quality on a national scale. U.S. ENVTL. PROT. AGENCY, *Understanding the Clean Air Act*, <http://www.epa.gov/air/peg/understand.html> (last updated Mar. 6, 2012).

142. In October 1970, a major reorganization of the federal government's role in environmental regulation led to the creation of the Environmental Protection Agency ("EPA"). National Environmental Policy Act, 42 U.S.C. § 4321 (1970). In December 1970, an Executive Order created the ill-fated Refuse Act Permit Program ("RAPP"), which was to go out of business almost before it got started. Exec. Order No. 11574, 35 Fed. Reg. 19,627 (Dec. 25, 1970).

143. The Environmental Defense Fund ("EDF") was established in 1967. *Our Mission and History*, ENVTL. DEF. FUND, <http://www.edf.org/about/our-mission-and-history> (last visited Nov. 12, 2012). The Environmental Law Institute was established in 1969. *About ELI*, ENVTL. LAW INST., <http://www.eli.org/About/index.cfm> (last visited Nov. 12, 2012). Friends of Earth was established in 1960. *The First 25 Years*, FRIENDS OF THE EARTH INT'L, <http://www.foei.org/en/who-we-are/about/25years> (last visited Nov. 12, 2012). Natural Resources Defense Council was established in 1970. *About NRDC: Who We Are*, NATURAL RESOURCES DEF. COUNCIL, [http://www.nrdc.org/about/who\\_we\\_are.asp](http://www.nrdc.org/about/who_we_are.asp) (last visited Nov. 4, 2012). The Sierra Club was established in 1892. *History: Sierra Club Timeline*, SIERRA CLUB, <http://sierraclub.org/history/timeline.aspx> (last visited Nov. 12, 2012).

144. Reorganization Plan No. 2 of 1966, 31 Fed. Reg. 6857 (May 10, 1966) (codified at 3 C.F.R.).

145. *Reorganization Plan No. 2 of 1966: Hearing Before the Subcomm. on Executive Reorganization of the Comm. on Gov't Operations*, 89th Cong. 23–29 (1966) (statements of Hon. Stewart L. Udall, Sec'y of the Interior).

146. Rep. James Cleveland introduced H. Res. 827 in the House on April 27, 1966, to disapprove the Reorganization Plan, but the House Committee on Governmental Operations reported unfavorably on the resolution. H.R. 1478, 89th Cong. (1966).

147. U.S. DEP'T OF INTERIOR, *GUIDELINES*, *supra* note 137.

other legitimate uses.”<sup>148</sup> The next step was to determine the quality of ambient waters necessary to support the identified uses,<sup>149</sup> and the third step was to create an implementation plan designed to achieve the water quality standards where they were not currently sufficient to support the designated uses<sup>150</sup> and to prevent degradation of waters already meeting the standards.<sup>151</sup> These guidelines would generate a good deal of discussion—pro and con—over the next few years, but on first blush, they appeared to be nothing more than a conscientious effort to facilitate the standard-setting and enforcement goals of the 1965 WQA. One month after Secretary Udall promulgated the guidelines, he announced his plans for streamlining the administration within the FWPCA by appointing a new commissioner who would be directly responsible for oversight of the entire program, which was reorganized into four main divisions—Technical Programs, Facilities Programs, R&D, and Enforcement—each headed by an Assistant Commissioner.<sup>152</sup>

Initially, the states varied widely in their response to the challenge of developing water quality standards for all interstate waters, but by 1967, all states had submitted proposed standards to the FWPCA. Nearly all the original state submissions, however, were deficient in some respect.<sup>153</sup> The WQA contained an elaborate formal process for resolving differences between a state and the FWPCA over the sufficiency of state-proposed standards.<sup>154</sup> At the end of the lengthy procedure, an appeal to federal court was allowed, and the court’s review was virtually *de novo*. The FWPCA resorted to this cumbersome procedure only rarely over the next few years, preferring to reach negotiated settlements with the states.<sup>155</sup> Given the complicated formal process and the continued congressional insistence that the primacy of state regulatory programs be preserved, it was understandable why federal officials relied almost entirely on drawn-out negotiations to bring the state submissions in line with federal expectations. It was a slow slog, however, and it was 1970 before all the state standards had received preliminary approval, and then only twenty states’ standards had received full federal approval.<sup>156</sup> In April 1971, new regulations, which governed the revision of state standards that the FWPCA determined to be inadequate, suggested that EPA intended to step up the pressure on the states to upgrade the standards established in the first round of standard setting.<sup>157</sup> It is noteworthy that before the 1972 Clean Water Act, the federal standards program applied only to interstate waters, thereby leaving roughly six-sevenths<sup>158</sup> of the nation’s waters unaffected by the water quality standards program.

### C. The 1966 Amendments to the Federal Water Pollution Control Act

Early in 1966, President Johnson responded to a report from his Science Advisory Committee that recommended augmentation of the federal support of water pollution control.<sup>159</sup> In his February 1966 message to Congress on environmental quality, the President outlined a new initiative supported by the White House.<sup>160</sup> Legislation introduced in both houses of Congress based on the President’s plan had three principle objectives: (1) create and empower regional control agencies; (2) adopt a “One Shot” policy toward grants to localities that would require recipients to demonstrate that future needs could be met by local funds; and (3) strengthen federal enforcement powers in several important respects.<sup>161</sup> Proceeding independently, Senator Muskie introduced his own proposals that in one key matter were the polar opposite of the President’s “One Shot” idea. Muskie’s subcommittee had been conducting hearings around the country for three years, and the results of these hearings were released in a short report entitled “Steps to Clean Water.”<sup>162</sup> The Muskie proposal was premised on his subcommittee’s finding that the largest impediment to improvement in the nation’s water quality was the huge backlog in funding needed to upgrade municipal waste treatment facilities.<sup>163</sup> To remedy this problem, Muskie proposed a massive increase in funding for construction grants to municipalities—with an authorization to spend six billion dollars over six years—plus another package of technical changes to greatly expedite the rate of federal funding for construction of local waste water treatment facilities.<sup>164</sup>

At the Senate hearings on both the Muskie bill and the President’s bill, the “One Shot” approach was widely criticized<sup>165</sup> and Muskie’s order-of-magnitude increases in construction grant funding were generally applauded. As reported out by the Senate Committee on Public Works, the proposed legislation carried forward Muskie’s funding approach, watered down greatly the President’s river basin approach,<sup>166</sup> and made only innocuous changes to the enforcement effort. Adding only a minor amendment to authorize more support for training technical personnel, the Muskie bill passed the Senate.<sup>167</sup> When the bill went to the House, the House bill more or less paralleled the Senate bill because Representative Blatnik did not author a competitive

148. Water Quality Act of 1965, Pub. L. No. 89-234, § 5(a), 79 Stat. 908 (1965).

149. See U.S. DEP’T OF INTERIOR, GUIDELINES, *supra* note 137, at 5–6.

150. See *id.* at 6.

151. See *id.* at 7.

152. See *Federal Water Pollution Control Administration: Organization*, 1 CCH WATER CONTROL NEWS, No. 3, at 8 (June 6, 1966) (providing an organizational chart for the Federal Water Pollution Control Administration).

153. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 549.

154. See *id.* at 550–51.

155. See *id.* at 550–51.

156. *Id.* at 551.

157. *Id.*

158. *Id.* at 552.

159. ENVTL. POLLUTION PANEL, PRESIDENT’S SCI. ADVISORY COMM., RESTORING THE QUALITY OF OUR ENVIRONMENT 16–38 (1965).

160. 112 CONG. REC. 3667 (1966).

161. *Id.*

162. STAFF OF THE SUBCOMM. ON AIR & WATER POLLUTION TO THE S. COMM. ON PUB. WORKS, 89TH CONG., STEPS TO CLEAN WATER 2 (Comm. Print 1966) [hereinafter STEPS TO CLEAN WATER].

163. *Id.* at 4–9; Water Pollution Control—1966 Hearings, *supra* note 124, at 80–92.

164. STEPS TO CLEAN WATER, *supra* note 162, at 6; Water Pollution Control—1966 Hearings, *supra* note 124, at 23.

165. See, e.g., Water Pollution Control—1966 Hearings, *supra* note 124, at 120–22, 153, 247, 533.

166. *Id.* at 92–94, 537.

167. 112 CONG. REC. 15,288 (1966).



proposal.<sup>168</sup> The House bill reduced the funding authority, however, by about forty percent.<sup>169</sup> The House passed its bill, and a week later, a conference committee reported out a final bill that quickly passed both houses and was signed into law by President Johnson on November 3, 1966.<sup>170</sup>

Titled the Clean Water Restoration Act of 1966, the new legislation amended the Federal Water Pollution Control Act in a number of ways, but the key provisions were mostly financial and were intended to speed up the states' abilities to implement the new water quality standards mandate. The 1966 Act authorized substantial increases in the federal construction grant program—allowing the spending of \$3.55 billion over the next 5 fiscal years—and it removed any dollar ceiling on individual grants.<sup>171</sup> The 1966 Act expanded funding to support basic research and basin-wide studies.<sup>172</sup> The new law also expanded federal enforcement jurisdiction to international boundary waters, and transferred to the Secretary of the Interior the responsibility for administering the Oil Pollution Act.<sup>173</sup>

#### D. U.S. v. Standard Oil Revitalizes the Refuse Act

Another event occurred in 1966, outside the legislative arena, that was destined to have a huge impact on the federal regulation of water pollution. In *United States v. Standard Oil Co.*, the United States Supreme Court reversed over fifty years of precedent and interpreted the 1899 Refuse Act to give the Corps authority to regulate all forms of discharges to navigable waters, without regard to whether navigation might be impeded.<sup>174</sup> Thus, the Supreme Court ruled that an accidental gasoline spill into a Florida river violated the Refuse Act.<sup>175</sup> The Court reexamined the legislative history of the Refuse Act and determined that it was meant to cover intentional or unintentional discharges into navigable waters of any form of foreign substances or pollutants, except those expressly excluded—flows from municipal sanitary sewers and storm sewers.<sup>176</sup> Further, the Court ruled that section 13 of the Refuse Act prohibited industries from discharging into navigable waters any substance that could impede navigation or pollute the waters, unless the discharger had first obtained a permit from the Corps.<sup>177</sup> Only a handful of the tens of thousands of industrial dischargers to navigable waters actually had such permits. Violation of the Act was a misdemeanor and the Act gave the Corps authority to sue in federal court to have unlawful discharges enjoined.<sup>178</sup> For four years, this bombshell of a ruling passed more or less unnoticed by the environmental protection community. Then, in 1970, the

ruling burst forth on the public scene, with important ramifications to the shape of the 1972 CWA.<sup>179</sup> This article will later discuss in greater detail how Congress temporarily converted the Refuse Act's permit requirement into a potentially potent antipollution measure.

#### E. The Water Quality Improvement Act of 1970

Congressional leaders who favored a much stronger federal program were by no means satisfied by passage of the WQA and the 1966 Amendments. The 90th Congress, however, was something of an interregnum in the production of new water quality laws.<sup>180</sup> Several new bills were introduced in the Senate in 1967 dealing with oil pollution, acid mine drainage, and lake pollution.<sup>181</sup> The Senate leadership consolidated these separate bills into S. 2760, which received a favorable Senate vote in December 1967.<sup>182</sup> In the spring of 1968, the House held hearings on S. 2760 and H. R. 15906, which was co-sponsored by Congressmen George H. Fallon and Blatnik.<sup>183</sup> While awaiting action by the House, Senator Muskie's subcommittee held "oversight" hearings on progress under the 1965 Act and the 1966 Amendments.<sup>184</sup> Although all of this activity failed to produce new legislation, it did create some momentum for action in the 91st Congress.<sup>185</sup>

Shortly after the new Congress convened in early 1969, Senator Muskie introduced S. 544, an updated version of the bill that passed the Senate in the prior session.<sup>186</sup> The new Senate bill added provisions dealing with marine sanitation and an expansion of federal authority over the emerging water quality standards.<sup>187</sup> Hearings on the revised Muskie bill continued from February to May 1969.<sup>188</sup> In the House, Representatives Fallon and Blatnik each introduced bills that were very similar to their earlier co-sponsored bill, S. 544 and H.R. 4148.<sup>189</sup> After hearings, the House Committee on Public Works favorably reported on H.R. 4148 and the House passed this bill in April 1969.<sup>190</sup> As the action moved back to the Senate, the Senate Committee on Public Works considered both S. 544 and H.R. 4148, and then in August 1969, reported favorably on S. 7, a new bill containing most of the features of S. 544.<sup>191</sup> The Senate passed S. 7 in October 1969, but then vacated that decision and passed an amended version of H.R. 4148.<sup>192</sup> A conference committee deliber-

179. See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 553–63.

180. *Id.* at 485–86.

181. *Id.*

182. *Id.* at 485–86.

183. See *id.* at 486; *Federal Water Pollution Control Amendments of 1968: Hearings on H.R. 15906 and Related Bills Before the H. Comm. on Pub. Works*, 90th Cong. 1 (1968).

184. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 486; *Water Pollution—1968: Hearings Before the Subcomm. on Air & Water Pollution of the S. Comm. on Pub. Works*, 90th Cong. (1968).

185. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 486.

186. *Id.*

187. *Id.*

188. *Id.*; *Water Pollution—1969: Hearings Before the Subcomm. on Air & Water Pollution of the S. Comm. on Pub. Works on S. 7 and S. 544*, 91st Cong. (1969).

189. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 487.

190. *Id.*; H.R. REP. NO. 91-127 (1969).

191. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 487.

192. *Id.* at 487.

168. *Hearings Before the H. Comm. on Pub. Works*, 89th Cong. 4–5 (1966).

169. Cf. H.R. REP. NO. 89-2289, at 16, 17 (1966); S. REP. NO. 89-1367, at 1–2 (1966).

170. Clean Water Restoration Act of 1966, Pub. L. No. 89-753, 80 Stat. 1246 (1966).

171. *Id.* §§ 203, 205, 89 Stat. 1248, 1250.

172. *Id.* §§ 201–202, 89 Stat. 1246–58.

173. *Id.* §§ 206, 211, 89 Stat. 1250, 1252.

174. *United States v. Standard Oil Co.*, 384 U.S. 224, 228–30 (1966).

175. *Id.* at 229–30.

176. *Id.* at 230.

177. *Id.* at 229–30.

178. Rivers and Harbor Act of 1889, ch. 425, 30 Stat. 1152, 1152–53 (1899).

ated for six months over the differences between the House and Senate versions of the two bills before agreeing on what was designated as the Water Quality Improvement Act of 1970.<sup>193</sup> This legislation passed both houses of Congress and was signed into law by President Nixon in April 1970.<sup>194</sup>

The Water Quality Improvement Act of 1970 represented the most far-reaching federal action since the 1965 Act.<sup>195</sup> Besides expanding federal support for existing research, training, and demonstration programs, it created a new research and development program for the control of acid mine drainage, authorized studies of water pollution in the Great Lakes, and provided support for Alaskan village water and sewer projects.<sup>196</sup> More importantly, the 1970 Act replaced the 1924 Oil Pollution Act with a much stricter law that imposed clear liability on persons owning or operating a vessel or facility discharging oil into navigable waters or waters of the contiguous zone.<sup>197</sup> In addition, the new oil pollution control law authorized the President to take direct action to remove oil discharged in violation of the 1970 Act and directed the Secretary of Interior to promulgate standards and regulations to prevent the discharge of sewage from watercrafts.<sup>198</sup>

Another important new wrinkle in the 1970 Act focused on state and federal collaboration. First, the earlier Executive Order mandating pollution control by federal facilities was legislatively reaffirmed.<sup>199</sup> Second, section 21(b) of the federal program was amended to require, as a prerequisite, the issuance of any federal license or permit, and the state affected by the activity must certify that its applicable water quality standards will not be violated.<sup>200</sup> The amendment lacked any significant changes in either the water quality standards or in federal enforcement powers.<sup>201</sup>

Although President Nixon generally supported most of the key provisions of the Water Quality Improvement Act of 1970, he was distressed with the size of the new federal funding commitments made to the construction grant program.<sup>202</sup> This Presidential concern over the size of the federal funding implications mounted over the next two years as Congress regularly voted to allocate much larger proportions of the spending authorized for local wastewater treatment facilities than the Administration requested. This disagreement ultimately led President Nixon to veto the 1972 CWA. Rather than incur the political costs of vetoing spending bills during a period of heightened environmental concern, the President chose simply to exercise executive discretion to avoid spending amounts in excess of what he thought prudent.<sup>203</sup> This practice of impounding funds Congress had appropriated

for spending on local construction grants ultimately led to a major confrontation with Congress in the early 1970s.<sup>204</sup>

## F. Influence of the Clean Air Act of 1970

The 91st Congress enacted another major piece of environmental regulation, the Clean Air Act of 1970 ("CAA"),<sup>205</sup> that very shortly would influence the content of the 1972 CWA, and later interact on several fronts with the expanded federal water pollution control effort under the new Act. The CAA of 1970 was a major overhaul of the Air Quality Act of 1967, which in turn was an upgrade of the original Clean Air Act passed in 1963.<sup>206</sup> Like the WQA of 1965, the CAA made ambient resource quality standards the key regulatory mechanism of the law.<sup>207</sup> The design of the CAA called for the adoption of ambient air quality standards for all of the nation's air sheds to be implemented by the regulation of existing and future stationary sources of air pollution.<sup>208</sup> In addition, the CAA created long-term control programs to deal with air pollution caused by mobile sources.<sup>209</sup> It is not within the purview of this paper to provide a detailed analysis of the 1970 CAA, but it is worthy of note that many of the same congressional leaders responsible for the ever-expanding federal water pollution control effort, also played important roles in shaping the federal approach to air pollution control.<sup>210</sup> Therefore, it is not surprising that some new provisions in the 1972 CWA (e.g., definition of point sources, focus on technology-based permit requirements, and authorization for citizen suits) bear a strong similarity to parallel provisions in the CAA.<sup>211</sup>

## G. President Nixon Takes the Initiative and Creates EPA

One set of legislative proposals concerning the environment that the 91st Congress chose not to adopt was submitted by President Nixon in February 1970.<sup>212</sup> The President's initiative was designed to substantially strengthen the enforcement powers of the federal agency in lieu of spending huge sums on federal construction grants to support the construction of local waste water treatment facilities.<sup>213</sup> The President later

193. H.R. REP. NO. 91-940 (1970) (Conf. Rep.).

194. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 487.

195. *Id.* at 488.

196. *See id.* at 489; Water Quality Improvement Act 1970, Pub. L. No. 91-224, 84 Stat. 91 (amending the Federal Water Pollution Control Act).

197. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 488.

198. *Id.*

199. *See* Exec. Order No. 11548, 35 Fed. Reg. 11,677 (July 22, 1970).

200. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 488.

201. *Id.* at 489.

202. *See* STAFF OF S. COMM. ON INTERIOR & INSULAR AFFAIRS, 92D CONG., CONGRESS AND THE NATION'S ENVIRONMENT 83-84 (Comm. Print 1971).

203. *See* HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 489-90.

204. *See id.* at 494.

205. Clean Air Act Amendments of 1970, Pub. L. No. 91-604, 84 Stat. 1676 (codified at 42 U.S.C. §§ 1857-1858a (1970)).

206. Clean Air Act of 1963, Pub. L. No. 88-206, 77 Stat. 392 (1963) (amended by Air Quality Act of 1967, Pub. L. No. 90-148, 81 Stat. 485 (1967)).

207. Hines, *A Decade of Nondegradation Policy*, *supra* note 25, at 660.

208. Clean Air Act Amendments of 1970, Pub. L. No. 91-604, § 111, 84 Stat. 1684 (1970).

209. *Id.* § 108, 84 Stat. 1678.

210. *See* WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW 248-49 (2d ed. 1994); HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 490-91 (mentioning, among others, Sen. Edmund Muskie, Rep. Paul Rogers, and Rep. John Dingell as key figures in the legislative campaigns for water, air pollution, and other environmental laws).

211. *See* RODGERS, *supra* note 210, at 163.

212. *See* Richard M. Nixon, *Special Message to the Congress on Environmental Quality*, in 1970 PUBLIC PAPERS OF THE PRESIDENTS: RICHARD M. NIXON 96-109 (1971) [hereinafter Nixon, *Special Message to the Congress*]; S. 3470, 91st Cong. (1970); S. 33471, 91st Cong. (1970); S. 3472, 91st Cong. (1970).

213. *See* Nixon, *Special Message to the Congress*, *supra* note 212, at 99-100.

cited Congress's indifference to his proposals in December 1970 when he shocked the environmental community by issuing an Executive Order directing the Corps to create a new federal water pollution permit system to implement the newly revitalized 1899 Refuse Act.<sup>214</sup>

President Nixon's involvement with environmental regulation in 1970 did not stop at proposing his own legislation and issuing the paradigm-shifting Executive Order described above. In June 1970, the President announced a National Oil and Hazardous Materials Contingency Plan<sup>215</sup> and, by Executive Order, delegated to various agencies enforcement responsibilities under the Plan.<sup>216</sup> This development was particularly noteworthy because it built on the groundwork laid out in the 1970 Federal Water Pollution Control Act amendments for the federal agency to create a new program, modeled on the oil pollution initiative, for controlling the discharge of all hazardous substances to the nation's waters.<sup>217</sup> Also in 1970, President Nixon issued an Executive Order directing all federal departments to take an aggressive stance toward cleaning up water pollution emanating from federal facilities.<sup>218</sup> As noted earlier, this Executive Order was later embraced by Congress in the 1970 Federal Water Pollution Control Act amendments in which the federal agency was directed to assure compliance with water quality standards by federal facilities "consistent with the paramount interest of the United States."<sup>219</sup> Of greatest significance, in July 1970, President Nixon proposed a new Reorganization Plan, which was recommended to him by his Advisory Council on Executive Organization.<sup>220</sup> This Plan called for the creation of a new federal agency, the EPA, which would assume responsibility for the administration of all major federal programs having to do with environmental quality.<sup>221</sup> The proposed consolidation of federal environmental programs would bring together under one roof (1) the water pollution control program from the Department of the Interior; (2) the air pollution control program and solid waste management from the Department of Health, Education and Welfare; (3) pesticide regulation from the USDA; and (4) a portion of radiation control from the Nuclear Regulatory Agency.<sup>222</sup> This Reorganization Plan

ran into some opposition in both houses of Congress, but survived after a resolution to disapprove it was defeated on a voice vote in the House.<sup>223</sup> The plan took effect on October 3, 1970.<sup>224</sup> When EPA officially opened for environmental business on December 2, 1970, it found an enormous amount of work on its plate.<sup>225</sup>

#### H. The Short-Lived Refuse Act Permit Program

Meanwhile, action was heating up on the Refuse Act front. Thanks in part to extensive publicity by Congressman Henry S. Reuss<sup>226</sup> and others about the environmental enforcement possibilities opened by the Supreme Court's decision in *United States v. Standard Oil Co.*,<sup>227</sup> environmentalists across the country began to push for federal legal action against industrial water polluters who lacked permits from the Corps.<sup>228</sup> When it was discovered that the Refuse Act provided for a "bounty" award of fifty percent of the fine recoverable to citizens responsible for reporting the violation, the Justice Department became inundated with reports of Refuse Act violations by bounty-hunting environmentalists.<sup>229</sup> As a result, in June 1970, the Justice Department distributed to U.S. Attorneys around the country "Guidelines for Litigation Under the Refuse Act."<sup>230</sup> The "Guidelines" called for very selective prosecution of Refuse Act violators.<sup>231</sup> Only violators whose water pollution was significant, "but not of a continuing nature," were to be prosecuted.<sup>232</sup> Furthermore, without express Justice Department approval, no prosecutions were to be commenced against an industrial discharger operating under a permit from a state, a discharger currently engaged in a federal administrative abatement proceeding, or a discharger whose pollution was already the subject of abatement litigation.<sup>233</sup> The Justice Department's policy, stated in the "Guidelines," represented a virtually total withdrawal of prosecutorial authority with respect to all industrial dischargers.<sup>234</sup>

Congressman Reuss and environmental activists across the country were outraged by the Justice Department's refusal to prosecute violators of the Refuse Act. In short order, a clever tactic emerged to circumvent the Justice Department's position. Congressman Reuss and his House Government

214. Exec. Order No. 11574, 35 Fed. Reg. 19,627 (Dec. 25, 1970). See Presidential Statement upon Signing Executive Order No. 11574, reported in *Water Pollution Control Programs: Hearings Before the Subcomm. on Air & Water Pollution of the S. Comm. Pub. Works*, 92d Cong. 430 (1971); HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 492–93.

215. 40 C.F.R. § 300 (1970). See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 561–63.

216. Exec. Order No. 11548, 35 Fed. Reg. 11,677 (July 22, 1970). See also HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 561–62 (summarizing enforcement responsibilities delegated to EPA by executive order).

217. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 562.

218. Exec. Order No. 11507, 35 Fed. Reg. 2,573 (Feb. 4, 1970); HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 563.

219. Federal Water Pollution Control Act of 1970, Pub. L. No. 91-224, § 103, 84 Stat. 107 (1970) (codified as amended in scattered sections of 33 U.S.C.). See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 563–64.

220. Reorganization Plan No. 3 of 1970, 35 Fed. Reg. 15,623 (Oct. 6, 1970); HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 493.

221. Reorganization Plan No. 3, 35 Fed. Reg. 15,623–24. See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 493–94.

222. See *id.* at 493–94; STAFF OF THE S. COMM. ON INTERIOR & INSULAR AFFAIRS, 91ST CONG., CONGRESS AND THE NATION'S ENVIRONMENT 16 (Comm. Print 1971).

223. See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 494.

224. *Id.*

225. EPA History, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/history/> (last updated Oct. 16, 2012).

226. See ZWICK & BENSTOCK, *supra* note 12, at XV–1.

227. *United States v. Standard Oil Co.*, 384 U.S. 224, 225–26 (1966) (expanding a narrowed interpretation of "refuse matter").

228. See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 496.

229. *Id.*

230. *Id.* at 497.

231. *Id.*

232. *Id.*; *Justice Department Guidelines for Litigation Under the Refuse Act*, 1 BNA Env't Rep. (BNA) No. 12, at 288 (July 17, 1970) [hereinafter *Justice Department Guidelines*].

233. See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 497; see also *Justice Department Guidelines*, *supra* note 232, at 288.

234. See William H. Rodgers, *Industrial Water Pollution and the Refuse Act: A Second Chance for Water Quality*, 119 U. PA. L. REV. 761, 795–96 (1971) (noting that these Guidelines were withdrawn in early 1971 after creation of the Refuse Act Permit Program).



Operations Committee touted use of the obscure *qui tam* action.<sup>235</sup> Where available, a *qui tam* action is brought by a private citizen to punish an unlawful act and claim a share in the civil or criminal fine.<sup>236</sup> Thus, the theory suggested, when the Justice Department refused to prosecute clear violations of the Refuse Act, the citizen watch dogs could bring *qui tam* actions to vindicate both the federal regulatory objective and their entitlement to the bounty. Before questions about the applicability of the *qui tam* concept to Refuse Act violations could be finally resolved, however, President Nixon issued an Executive Order on December 21, 1970, directing the creation of a joint Corps-EPA permit program for dischargers subject to the Refuse Act—thereby rendering the issue moot.<sup>237</sup>

Under the Refuse Act Permit Program (“RAPP”) created by President Nixon’s December 1970 Executive Order and refined by a “Memorandum of Understanding”<sup>238</sup> between the Corps and EPA published in early 1971, the Corps was given responsibility for “granting, denying, conditioning, revoking, or suspending” permits to discharge pollutants into navigable waters.<sup>239</sup> In exercising these new responsibilities, however, the Memorandum required the Corps to seek and follow EPA’s advice with respect to compliance with federal water quality standards.<sup>240</sup> In addition, the Corps was expected to comply with section 21(b) of the Federal Water Pollution Control Act, which required certification by the relevant state or interstate pollution control agency that the permit applicant’s discharge will not violate applicable water quality standards in interstate waters.<sup>241</sup>

EPA issued new regulations in February 1971 covering the mechanics of state certification under section 21(b).<sup>242</sup> Further regulations, issued in April 1971, outlined a tightly structured program for the issuance of Refuse Act permits.<sup>243</sup> The permit requirement was expressly stated to apply to all direct or indirect discharges or deposits into a navigable waterway or tributary, including discharges of water at a temperature significantly different than the ambient water.<sup>244</sup> The new regulations seemingly expanded the considerations going into the issuance of RAPP permits to include fish and wildlife protection values not reflected, or inadequately protected, in the federal water quality standards.<sup>245</sup> In addition,

these regulations indicated for the first time that, consistent with its general administration of the federal water quality standards program, EPA would expect industrial polluters to apply secondary treatment, or its equivalent, to all of their wastewater discharges.<sup>246</sup>

To implement this policy, EPA planned to apply its recently completed studies of the state-of-the-art technology available for wastewater treatment in twenty-two industries.<sup>247</sup> Environmentalists complained bitterly that this regulatory approach violated the letter and spirit of the “no discharge” language of the Refuse Act, but this was to no avail in the initial RAPP planning. The April 1971 regulations required all permit applications for existing discharges to be filed by July 1, 1971, and new dischargers to apply within 120 days prior to the commencement of the discharge.<sup>248</sup> This deadline was met by over 15,000 industrial discharges representing over 30,000 outfall points where pollutants are discharged into water, and thousands of additional applications were received over the next few months.<sup>249</sup>

The application form for a RAPP permit was so detailed that the Corps granted many applicants a three-month extension of the deadline to generate all the technical information needed to process the application effectively.<sup>250</sup> The new permit program was barely underway when it was halted by a December 1971 federal court case brought by environmentalists claiming that NEPA required the preparation of an EIS for each of the tens of thousands of permits undergoing review.<sup>251</sup> At the time the program was stopped in its tracks—pending resolution of the issue of NEPA’s applicability to the issuance of RAPP permits—only a handful of permits had been issued.<sup>252</sup> Before the NEPA issue could be resolved in the courts, however, Congress enacted the 1972 CWA, mooting the argument that an EIS was required for every RAPP permit.

## V. Reform Proposals Envision New National Goals and a Radical Change in Regulatory Focus

Consideration of what was to become the 1972 CWA proceeded against the background of a likely presidential race in November between President Nixon and Senator Muskie, who had gained much of his national visibility as a champion of environmental reform.<sup>253</sup> After completing its work

235. See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 497; see also STAFF OF THE SUBCOMM. ON CONSERVATION & NATURAL RES. OF THE H. COMM. ON GOV’T OPERATIONS, 91ST CONG., QUI TAM ACTIONS AND THE 1899 REFUSE ACT: CITIZEN LAWSUITS AGAINST POLLUTERS OF THE NATION’S WATERWAYS VI (Comm. Print 1970).

236. Allan W. May, *Qui Tam Actions and the Rivers and Harbors Act*, 23 CASE W. RES. L. REV. 173 (1972).

237. Exec. Order No. 11574, 35 Fed. Reg. 19,627 (Dec. 25, 1970).

238. See *Water Pollution Control Programs: Hearings Before the Subcomm. on Air & Water Pollution of the S. Comm. on Pub. Works*, 92d Cong. 438–40 (1971) (Memorandum of Understanding between the Administrator of the Environmental Protection Agency and the Secretary of the Army).

239. Exec. Order No. 11574, § 2(2), 35 Fed. Reg. 19,627 (Dec. 25, 1970).

240. *Id.* at § 2(2)(A).

241. *Id.*

242. 40 C.F.R. § 115 (1972).

243. 33 C.F.R. § 209.131 (1971).

244. 33 C.F.R. § 209.131(d)(1); HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 556.

245. 33 C.F.R. § 209.131(d)(5); HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 556.

246. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 557.

247. See *Safe Drinking Water: Hearings Before the Subcomm. on Pub. Health & Env’t of the H. Comm. on Interstate & Foreign Commerce*, 92d Cong. 154 (1971); HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 556.

248. 33 C.F.R. § 209.131(d)(3).

249. HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 556, 558 (noting that a total of seventeen RAPP permits were issued before the program was shut down); *Status of Refuse Act Program Announced*, 3 CLEAN AIR & WATER NEWS (CCH) No. 29, at 442–43, 480 (July 23, 1971).

250. *Water Pollution Control Programs: Hearings Before the Subcomm. on Air & Water Pollution of the S. Comm. on Pub. Works*, 92d Cong. (1971).

251. See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 558; see also *Court Challenges Licenses to Pollute*, BUSINESS WEEK, No. 2209, Jan. 1, 1972, at 21.

252. *Id.*

253. See Andreen, *The Evolution of Water Pollution Control*, *supra* note 79, at 255.

on air pollution control with the passage of the CAA in 1970, Muskie's Senate subcommittee turned its attention once again to water pollution in 1971. Very early in the congressional session, Senator Muskie introduced legislation to extend federal authority to all navigable waters of the United States, to adopt ambitious new goals for eliminating pollutants from the nation's waters, and to radically reform the federal regulatory structure for controlling water pollution. Muskie's proposal called for establishing a national goal—"no pollutant discharge"—to be achieved by adoption of technology-based effluent limitations. His bill also greatly stiffened federal enforcement powers, authorized citizen suits, and ramped up federal grants for the construction of wastewater treatment plants.<sup>254</sup> In February 1971, Senator Cooper introduced a Senate bill embodying President Nixon's legislative proposals, which generally tracked the Muskie blueprint on key points, but were slightly more conservative on the regulatory side and much less generous in the financing of construction grants.<sup>255</sup>

The Senate subcommittee held hearings on both bills in March 1971;<sup>256</sup> it then worked diligently on the final shape of the bill, which it published as a working draft in July.<sup>257</sup> In its ambition, the subcommittee's draft bill went beyond both the original Muskie bill and the Administration's bill. The draft subcommittee bill extended federal jurisdiction to all of the nation's navigable waters, as did both of the earlier proposals, but to the delight of the environmental community, it also expanded the reach of the Refuse Act permit requirement to municipal wastewater outlets as well as industrial discharges.<sup>258</sup> The draft bill retained the idea of the Refuse Act permits, but reassigned responsibility for issuing the permits from the Corps to EPA.<sup>259</sup> The permit scheme envisioned in the draft bill would require secondary treatment of all wastewater discharge to navigable waters.<sup>260</sup> Further, permitted dischargers could not violate federal water quality standards or any requirements in state water quality certifications.<sup>261</sup> The draft bill contemplated higher levels of effluent standards for new sources of pollutant discharges, and prohibited certain types of toxic discharges.<sup>262</sup> The draft bill also substantially strengthened EPA's enforcement powers

and authorized citizen suits. Finally, the draft bill pegged the funding for the construction grant program at three billion dollars per year for five years.<sup>263</sup> At hearings on the subcommittee's draft bill, industry and business trade groups severely criticized the proposal, but shortly after the comment period expired, the subcommittee recommended the bill to the full Senate Public Works Committee.<sup>264</sup> Two months later, the Public Works Committee unanimously voted to report a remarkably revised bill to the Senate floor.<sup>265</sup>

### A. *The Senate Bill Shifts the Regulatory Mechanism to Nationwide Effluent Standards*

The revised legislation authored by the Senate Public Works Committee adopted an entirely different approach to water pollution control—regulation grounded in technology-based effluent standards applied uniformly across industries of the same type.<sup>266</sup> This was indeed a sea change in the national strategy for dealing with water pollution. The Senate committee deemed the existing water quality standards insufficient for the task of upgrading and protecting the quality of America's waters for two primary reasons. First, water quality standards inherently recognized the right of polluters to rely on the assimilative capacity of the public's waters to dilute their waste so long as the discharges did not impair the quality of the water for existing uses.<sup>267</sup> In the Senate bill, dilution was expressly rejected as a solution to the nation's worsening water pollution problem.<sup>268</sup> Second, the Senate bill characterized enforcement against polluters under the water-quality-standards regime as often impracticable, and sometimes impossible, because of the difficulty in proving that a specific discharge was the cause of a violation of the relevant water quality standard.<sup>269</sup> By contrast, the Senate committee projected that pollution control officers monitoring waterways, detecting pollution conditions, and bringing enforcement actions against violators of technology-based effluent limitations would be much more effective in eliminating water pollution.<sup>270</sup>

The Senate committee bill did not so much abandon the water quality standards established by the 1965 WQA as it moved beyond them to place the primary regulatory focus directly on the wastewater stream of each individual discharger. In S. 2770, the existing water quality standards program was not altered, except to employ it in a new way as a mechanism for detecting cases where initial effluent standards were insufficient to achieve required levels of water quality in waters receiving the regulated effluent.<sup>271</sup>

254. See S. 2770, 92d Cong. § 1 (1971), reprinted in 2 LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 1534–723 (1973).

255. Andreen, *The Evolution of Water Pollution Control*, supra note 79, at 262; see also S. 1013, 92d Cong. § 1 (1971), reprinted in *Water Pollution Control Legislation Part 1: Hearings Before the Subcomm. on Air & Water Pollution of S. Comm. on Pub. Works*, 92d Cong. 292–305 (1971).

256. See Andreen, *The Evolution of Water Pollution Control*, supra note 79, at 263.

257. *Id.*; see also STAFF OF SUBCOMM. ON AIR & WATER POLLUTION OF THE S. COMM. ON PUB. WORKS, 92D CONG., FEDERAL WATER POLLUTION CONTROL AMENDMENTS (Comm. Print 1971), reprinted in *Water Pollution Control Legislation Part 4: Hearings Before the Subcomm. on Air & Water Pollution of S. Comm. on Pub. Works*, 92d Cong. 1549–1601 (1971) [hereinafter *Hearings on Water Pollution Control Legislation Part 4*].

258. See Andreen, *The Evolution of Water Pollution Control*, supra note 79, at 264.

259. *Id.*

260. *Id.*

261. *Id.*

262. *Id.*; *Hearings on Water Pollution Control Legislation Part 4*, supra note 257, at 1577 (the working draft prohibited the discharge of certain toxics, including arsenic and PCBs, and called for the promulgation of effluent standards for other nonconventional pollutants).

263. See *Hearings on Water Pollution Control Legislation Part 4*, supra note 257, at 1563.

264. See Andreen, *The Evolution of Water Pollution Control*, supra note 79, at 265.

265. *Id.*; S. REP. NO. 92-414, at 92 (1971), reprinted in 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1509 (1973).

266. See Andreen, *The Evolution of Water Pollution Control*, supra note 79, at 267.

267. *Id.* at 266; see also S. REP. NO. 92-414, at 42–43, reprinted in 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1460–61.

268. See Andreen, *The Evolution of Water Pollution Control*, supra note 79, at 266.

269. *See id.*

270. *See id.*

271. *See id.* at 268–69.

The implicit rationale for uniform effluent limits, carefully tailored to the technologies available to each specific industry, was promoting nationwide fairness among competitors in the same industry. Uniform effluent limits would eliminate all polluting discharges to water, without regard to the quality of the local receiving waters. Thus, nationally-uniform technology-based effluent limitations would eliminate the competitive advantage of industries located in relatively clean water areas using the assimilative capacity of the public's waters to dilute their polluting discharges.<sup>272</sup>

Henceforth, relying on the Refuse Act model—but extending its reach to all the navigable waters of the United States and their tributaries, territorial waters, and the Great Lakes—all discharges of pollutants into waters would be prohibited unless authorized by a permit issued by EPA under a new NPDES.<sup>273</sup> Like the administration of water quality standards under the 1965 WQA, states were expected to administer the new effluent-based permit system eventually, but the states had to first qualify for EPA's delegation of authority to them.<sup>274</sup> The new permit system would require all dischargers of pollutants to apply at least secondary treatment or “best practical” control technology (“BPT”) to their wastewater streams by specified deadlines.<sup>275</sup> Phase I would impose a 1974 deadline for municipal wastewater treatment plants, and a 1976 deadline for industrial polluters.<sup>276</sup> Phase II would require industrial sources to eliminate all pollutant discharges by 1981, unless this goal was not attainable at a reasonable cost, in which case the industrial polluter was to employ the “best available technology” (“BAT”).<sup>277</sup> All new sources of industrial water pollution were required to meet the BAT requirement immediately in order to qualify for a permit.<sup>278</sup> During Phase I, if effluent limits based on secondary treatment or BPT were not sufficient to meet federal water quality standards or state standards adopted for intra-state waters, regulators were required to tighten the effluent limits in the permits issued.<sup>279</sup> The same rule applied in Phase II with respect to effluent limits based on BAT, but only after the costs and benefits of the higher restriction had been considered by the regulating agency.<sup>280</sup>

The Senate committee's bill also stated an unequivocal national goal of “No Discharge” of pollutants to water

and established timelines for the achievement of the goal.

<sup>281</sup> The bill called for all of the nation's waters to be “fishable and swimmable” by 1981 en route to the achievement of the “No Discharge” goal by 1985. It also called for the heightened regulation elimination of all discharges of toxic pollutants.<sup>282</sup> Not surprisingly, the “No Discharge” and “fishable and swimmable” goals and the timetables for achieving them were among the most controversial aspects of the proposed legislation. The committee bill also broke with the traditional deference to state primacy in enforcement matters.<sup>283</sup> Besides placing primary reliance on federally-established effluent limitations, the proposal would streamline and greatly strengthen federal enforcement authority.<sup>284</sup> Many of the procedural barriers found in the former legislation were removed, and EPA was granted broader authority to employ administrative action and given much more ready access to courts.<sup>285</sup> Citizen suits, modeled on the 1970 CAA provisions, were also intended to give citizens the right to enforce the statute's requirements against both polluters and recalcitrant agency officials.<sup>286</sup> The committee bill also upped the ante with respect to construction grants by calling for a fourteen billion dollar appropriation over a four-year period.<sup>287</sup>

After only two weeks, the Senate committee bill came before the full Senate for a vote. On the way to the final vote, Senator Allen J. Ellender, supported by Senator John C. Stennis, introduced an amendment, over Senator Muskie's objection, to restore to the Corps' sole permitting authority over the discharge of dredged and fill materials into navigable waters.<sup>288</sup> The parties quickly reached a compromise, however, to leave the permit authority over dredged materials with EPA, which would issue permits unless it found that environmental harm would result.<sup>289</sup> The final Senate vote was eighty-six to zero in favor of the bill.<sup>290</sup>

272. *See id.*

273. *See* S. 2770, 92d Cong. § 301(a) (1971), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1608 (1973).

274. *See* Andreen, *The Evolution of Water Pollution Control*, *supra* note 79, at 266.

275. *See* Federal Water Pollution Control Act Amendments of 1971, S. 2770, § 301(b)(1)(A), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1608.

276. *See id.* § 301(b)(1)(B), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1608.

277. *See id.* § 301(b)(2)(A), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1609.

278. *See id.* § 306(b), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1624.

279. *See id.* § 301(b)(1)(C), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1626.

280. *See id.* § 302, *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1610–12.

281. *See* Andreen, *The Evolution of Water Pollution Control*, *supra* note 79, at 268; Federal Water Pollution Control Act Amendments of 1971, S. 2770, § 101(a) (1)–(2), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1535–36.

282. *See* Andreen, *The Evolution of Water Pollution Control*, *supra* note 79, at 268; Federal Water Pollution Control Act Amendments of 1971, S. 2770, § 302, *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1610–12.

283. *See* Andreen, *The Evolution of Water Pollution Control*, *supra* note 79, at 270; Federal Water Pollution Control Act Amendments of 1971, S. 2770, § 309, *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1633–39.

284. *See* Andreen, *The Evolution of Water Pollution Control*, *supra* note 79, at 270; Federal Water Pollution Control Act Amendments of 1971, S. 2770, § 309, *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1633–39.

285. *See* Andreen, *The Evolution of Water Pollution Control*, *supra* note 79, at 270.

286. *Id.*; Federal Water Pollution Control Act Amendments of 1971, S. 2770, § 309, *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1633–39.

287. Andreen, *Evolution of Water Pollution Control*, *supra* note 79, at 271.

288. *Id.* at 272.

289. *Id.*

290. *Id.*; S. REP. NO. 92-414 (1971), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1414 (1973).



## B. *The House Tries to Restore the Status Quo*

The Nixon Administration was greatly frustrated by its inability to push back against the Senate bill during the hearings in that chamber, and looked to the House to restore primary authority to the states, water down the federal enforcement provisions, and reduce the federal spending authorized.<sup>291</sup> At first, the House Public Works Committee was reluctant to reopen hearings for fear of backlash from the environmental community, which was enthusiastic toward the Senate legislation. Even though many members of the House committee believed that the Senate had gone overboard with its radical changes in the strategy for combating water pollution, they were also growing tired of playing the role of stalking horse for the Nixon Administration when it came to correcting the excesses of the Senate in championing environmental reforms.<sup>292</sup>

Congressman Blatnik, who chaired the House Committee on Public Works, had long been a stalwart supporter of greater water pollution control powers in the federal agency and was personally reluctant to provide the Nixon Administration a forum for savaging the Senate bill.<sup>293</sup> At this critical moment, however, Blatnik suffered a heart attack, removing him from the fray. Shortly thereafter, four days of hearings were scheduled during December 1971.<sup>294</sup> As expected, critics of the Senate bill came out of the woodwork to attack it on a number of fronts, but EPA Director William Ruckelshaus and New York Governor Nelson Rockefeller, both of whom questioned the wisdom of adopting a national goal of no discharge of pollutants to water, expressed the most serious concerns and characterized the effort as the waste of billions of dollars to try to reach an unachievable goal.<sup>295</sup> Rockefeller estimated the national cost at as much as three trillion dollars.<sup>296</sup> The House committee announced shortly after the hearings a lengthy list of changes it intended to make to the Senate bill and then turned over the project of rewriting the Senate bill to committee staff.

The House released its version of the water pollution reform legislation in March 1972.<sup>297</sup> The new House bill retained the basic format of the Senate bill, but adopted many changes that reduced the force of the reforms. For example, the House bill retained the BPT goal of 1976, but as to the more stringent 1981 and 1985 goals, the House bill required that they would not take effect unless a National Academy of Sciences study confirmed that the goals were desirable and achievable at a reasonable cost.<sup>298</sup> Whatever the study found, the goals

would not go into effect, unless after receiving the National Academy's report, Congress reaffirmed the goals legislatively.<sup>299</sup> The House bill also greatly weakened the EPA's role in administering the permit system, and created a special permit authority in the Corps for disposal of dredged spoil.<sup>300</sup> The one place where the House bill surprisingly built directly on the Senate bill was in construction grants, where the House committee bumped the Senate recommendation of fourteen billion dollars up to twenty billion dollars.<sup>301</sup> Needless to say, the White House was apoplectic.<sup>302</sup> At the urging of a large coalition of environmental groups, Congressmen John Dingell and Reuss sponsored a series of amendments on the House floor intended to restore some key provisions in the Senate bill, but all these amendments failed and the House bill was passed in the form the committee had written it.<sup>303</sup> A conference committee was convened in mid-May of 1972.

## C. *The Conference Committee Recommends the Senate's Version of Reform*

When the conference committee had not come to agreement on a compromise bill by September, concern developed that another Congressional session might pass without new legislation dealing with the growing water pollution problem. Public pressure mounted for the adoption of some type of new water pollution control legislation, and at the end of September, the conference committee unanimously recommended a bill to be voted on one last time by both the House and Senate.<sup>304</sup> The bill crafted by the conference committee exhibited compromise on nearly all the major issues between the Senate and House bills, but on balance, it retained the essence of the Senate's approach. The House's preference for expressly retaining the existing water quality standards program was incorporated into the new bill, but in a way in which the ambient standards could be used to reinforce the new effluent standards and to deal with pollution from sources other than dischargers regulated under the new NPDES permit system.<sup>305</sup> The Senate and the House compromised on the dredged spoil issue by leaving the permit authority with EPA, but giving the Corps a direct say in whether the permits should be issued or not.<sup>306</sup> The conference committee bill resolved the differences between the House and Senate in construction grant funding by setting the authorization figure at eighteen billion dollars over four years, which was closer to the spending the House favored.<sup>307</sup>

291. Andreen, *Evolution of Water Pollution Control*, *supra* note 79, at 273–74.

292. *Id.* at 274.

293. See JOHN QUARLES, CLEANING UP AMERICA: AN INSIDER'S VIEW OF THE ENVIRONMENTAL PROTECTION AGENCY 20–21 (1976) [hereinafter QUARLES, CLEANING UP AMERICA].

294. Andreen, *Evolution of Water Pollution Control*, *supra* note 79, at 273–74; QUARLES, CLEANING UP AMERICA, *supra* note 293, at 153–54 (1976).

295. See QUARLES, CLEANING UP AMERICA, *supra* note 293, at 154.

296. *Id.*

297. H.R. REP. NO. 92-911, at 1 (1972), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 893 (1973).

298. Andreen, *Evolution of Water Pollution Control*, *supra* note 79, at 277–78; *see also* H.R. 11896, 92d Cong §§ 301(b), 315(a) (1971), *reprinted in* 1 CONG. RE-

SEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 962, 1042–43.

299. See H.R. 11896 § 315(a), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 1042–43.

300. See *id.* § 404(a), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 1064–64.

301. QUARLES, CLEANING UP AMERICA, *supra* note 293, at 155; H.R. 11896.

302. QUARLES, CLEANING UP AMERICA, *supra* note 293, at 157.

303. See Andreen, *Evolution of Water Pollution Control*, *supra* note 79, at 297.

304. See *id.* at 280.

305. See *id.* at 280–82; *see also* CWA § 303, 33 U.S.C. § 1313 (2006).

306. See CWA § 404, 33 U.S.C. § 1344 (2006).

307. See CWA § 207, 33 U.S.C. § 1287 (2006).

The White House accepted all of the provisions in the conference committee bill except the construction grant funding authorization. After the conference committee bill sailed through both houses of Congress overwhelmingly on October 4, 1972,<sup>308</sup> President Nixon delayed signing it as long as he could and then vetoed it. In his veto message, Nixon criticized Congress for what the President thought was exorbitant spending on the construction grant program, stating “even if the Congress defaults in its obligations to taxpayers – I shall not default in mine.”<sup>309</sup> Only one day later, both chambers of Congress easily overrode the President’s veto.<sup>310</sup> The CWA of 1972 thus became law on October 18, 1972.<sup>311</sup>

## VI. Tracing the Origins of Key Provisions of the CWA

As was true with most of the seven federal statutes dealing with water pollution control that preceded it, the 1972 CWA contained numerous provisions that were not strictly regulatory in their thrust.<sup>312</sup> Identified and discussed briefly below are twenty key provisions of the CWA that form the core of the regulatory scheme imbedded in the 1972 Act. These provisions were carefully constructed and interconnected to work together to create a coherent and unified federal approach to controlling water pollution moving forward, with the ultimate goal of eliminating the discharge of all pollutants to the nation’s waters.

### A. Section 101: Declaration of Goals and Policy

With the 1972 CWA, Congress dramatically changed the course of water pollution control in the United States by adopting bold new goals and policies and a new implementa-

tion strategy focused on limiting pollutants at their source. Section 101(a) emphatically states that the objective of the 1972 CWA is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”<sup>313</sup> The words “restore and maintain” and “integrity” have enormous importance in understanding and interpreting the complex structure of the CWA. These key terms form the foundation for finding congressional intent in the CWA to support continuation of the “nondegradation policy.”<sup>314</sup> Recognizing a nondegradation policy means that dischargers are forbidden to lower the ambient quality of any waterway below what it was at the time the law took effect. Such a policy goal was not explicitly stated anywhere in the language of the CWA, but EPA has implemented this policy since 1966.<sup>315</sup>

Of equal consequence was the statement of three vital national goals to be achieved under the Act: (1) “discharge of pollutants into navigable waters be eliminated by 1985;”<sup>316</sup> (2) “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;”<sup>317</sup> and (3) “the discharge of toxic pollutants in toxic amounts be prohibited.”<sup>318</sup> The specific formulation of the three goals quoted above originated in the Senate bill, S. 2770, introduced in 1971 by Senator Muskie.<sup>319</sup> The ambitious goals set forth in section 101(a) of the 1972 CWA, however, found their philosophical origins in the 1899 Refuse Act, which the Supreme Court interpreted in 1966 to prohibit all industrial discharges to navigable waters without a permit from the Corps during the 1960s.<sup>320</sup> In the course of adapting the Refuse Act’s regulatory approach to modern pollution control methods, wisely or unwisely, Congress expanded the Refuse Act rules to cover all dischargers, and made the achievement of the objective of zero discharges of pollutants into water a durable long-range national goal.

### B. Section 502(7): EPA Jurisdiction

Section 502(7) of the CWA expressly defines “navigable waters” as “the waters of the United States.”<sup>321</sup> This precise language originated in the 1972 conference committee that reconciled S. 2770 and the House amendments to the Senate bill,<sup>322</sup> but its roots can be traced all the way back to the

308. See Andreen, *Evolution of Water Pollution Control*, *supra* note 79, at 285.

309. QUARLES, *CLEANING UP AMERICA*, *supra* note 293, at 160.

310. See Andreen, *Evolution of Water Pollution Control*, *supra* note 79, at 285–86.

311. See *id.* at 286.

312. See, e.g., CWA § 102, 33 U.S.C. § 1252 (2006) (providing for federal-state cooperative programs aimed at managing the storage capacity of reservoirs as it affected stream flows); *id.* § 103, 33 U.S.C. § 1253 (2006) (encouraging interstate compacts and uniform state laws regarding water pollution control); *id.* § 104, 33 U.S.C. § 1254 (2006) (establishing cooperative programs for research, investigations, training, and information sharing); *id.* § 105, 33 U.S.C. § 1255 (2006) (creating a grant program to the states to promote a demonstration project focused on improved methods for reducing the discharge of pollutants, advanced waste treatment, and water purification); *id.* § 106, 33 U.S.C. § 1256 (2006) (authorizing grants to state and interstate programs to support their operation); *id.* § 107, 33 U.S.C. § 1257 (2006) (authorizing grants to support demonstration projects to eliminate or control acid mine drainage); *id.* § 108, 33 U.S.C. § 1258 (2006) (authorizing demonstration programs for improving water quality in the Great Lakes); *id.* §§ 111–12, 33 U.S.C. §§ 1261–62 (2006) (authorizing EPA to award scholarships to undergraduates interested in careers as water pollution control personnel, and defined the terms to apply to such a scholarship program); *id.* § 113, 33 U.S.C. § 1263 (2006) (authorizing demonstration projects for controlling wastewater discharges in Alaskan villages); *id.* § 114, 33 U.S.C. § 1264 (2006) (authorizing a special study of the Lake Tahoe region); *id.* § 115, 33 U.S.C. § 1265 (2006) (directing EPA to identify toxic pollutants in critical port and harbor areas); *id.* §§ 201–07, 210–12, 33 U.S.C. §§ 1281–87, 1290–92 (2006) (carrying forward and expanded the federal construction grants program for municipal wastewater treatment facilities); *id.* §§ 208–09, 33 U.S.C. §§ 1288–89 (2006) (calling for the development of area-wide waste treatment management plans); *id.* § 312, 33 U.S.C. § 1322 (2006) (dealing with marine sanitation devices).

313. CWA § 101(a), 33 U.S.C. § 1251(a) (2006). The statement of purposes in prior federal water pollution statutes began either with pledges to preserve state responsibilities, or to establish national policy for the prevention, control, and abatement of water pollution. See *id.* § 101(b), 33 U.S.C. § 1251(b).

314. See Hines, *A Decade of Nondegradation Policy*, *supra* note 25.

315. U.S. Dep’t of the Interior Federal Water Pollution Control Admin., Guidelines for Establishing Water Quality Standards for Interstate Waters 5 (1966).

316. *Id.* § 101(a)(1), 33 U.S.C. § 1251(a)(1).

317. *Id.* § 101(a)(2), 33 U.S.C. § 1251(a)(2).

318. *Id.* § 101(a)(3), 33 U.S.C. § 1251(a)(3).

319. See S. REP. NO. 92-1236, at 99–100 (1972) (Conf. Rep.), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 282–83 (1973).

320. See *supra* Part IV.D (discussion of *United States v. Standard Oil Co.*, 384 U.S. 224 (1966)).

321. CWA § 502(7), 33 U.S.C. § 1362(7) (2006).

322. S. REP. NO. 92-1236, at 108–09 (1972) (Conf. Rep.); *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CON-

1899 Refuse Act, which conferred on the Corps regulatory authority over the navigable waters of the United States.<sup>323</sup> Even earlier in the 19th century, the Supreme Court gave the legal concept of navigability a broad interpretation, which has guided federal law ever since.<sup>324</sup>

Earlier versions of the Federal Water Pollution Control Act conferred federal jurisdiction over only “interstate waters,”<sup>325</sup> and the drafters of the CWA intended to substantially broaden the federal authority to abate water pollution. In 1975, the Supreme Court interpreted the CWA’s claim of jurisdiction over “the waters of the United States” to mean that Congress intended to assert the fullest range of federal powers in relation to the “Commerce Clause,”<sup>326</sup> citing consistent statements to that effect from the congressional hearings on the bills that became the 1972 CWA.<sup>327</sup>

### C. Sections 301(a), 304, 502(12), and 502(6): “Unlawful” to “Discharge a Pollutant” Into “the Waters of the United States”

Section 301(a) states that “[e]xcept as in compliance with” certain enumerated sections of the CWA, “discharge of any pollutant by any person shall be unlawful.”<sup>328</sup> This precise language was first included in S. 2770, introduced in 1971. Except for a minor wording change by the House, it remained intact throughout the process of the CWA becoming law.<sup>329</sup> Section 502(12) defines “discharge of a pollutant” to mean “(A) any addition of any pollutant to navigable waters from any point source, and (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.”<sup>330</sup> Read in combination, these sections clearly stated that, without a NPDES permit setting forth a technology-based effluent limitation, all discharges of pollutants to U.S. waters were forbidden. The CWA represented a dramatic change from prior federal regulation under the Federal Water Pollution Control Act, which had focused solely on protecting the quality of the receiving waters, not the quality of the discharges into such waters.<sup>331</sup> Under the CWA, Congress intended for both forms of regulation to be utilized and interconnected.

Section 502(6) of the CWA provides a comprehensive definition of the term “pollutant.”<sup>332</sup> The section lists nineteen types of materials legally regarded as pollutants if discharged

into water.<sup>333</sup> Both the declaration that the discharge of any pollutant without compliance with the CWA is unlawful and the careful definition of what constitutes a pollutant provided context and content to the new policy goal of prohibiting all discharges of pollutants to the nation’s waters by 1985.<sup>334</sup> The definition of “pollutant” comes from S. 2770, except again, the House made some minor wording changes.<sup>335</sup> Not surprisingly, even the seemingly exhaustive list of potential pollutants in section 502(6) did not forestall litigation over exactly what was meant by some of the general terms used.<sup>336</sup>

### D. “Cooperative Federalism”

The 1972 CWA carried forward for yet one more round of reform the longstanding congressional commitment expressed in the original 1948 Act to “recognize, preserve, and protect the primary responsibilities and rights of the States in controlling water pollution.”<sup>337</sup> Thus, the CWA provided that the primary responsibilities for the continuation and expansion of the existing water quality standards program and the ultimate administration of the new NPDES permit program were to lie with the states.<sup>338</sup> As with the adoption and implementation of water quality standards under the 1965 WQA, states desiring to assume responsibility for issuing and enforcing their own permits under the NPDES program were invited to apply for EPA approval. Delegation of responsibility for the new permit program was subject to a battery of specific authorization requirements that set a solid federal floor with respect to state program integrity.<sup>339</sup> If a state did not request implementation authority, or could not meet the federal requirements, EPA would administer the federally required NPDES program within the state.<sup>340</sup> This delegation process was first prescribed in S. 2770, but the House changed it slightly to grant the states more freedom to operate the permit program locally, subject to EPA oversight, including giving EPA the power to veto a proposed permit if the state issuance process did not meet federal requirements and guidelines.<sup>341</sup>

TROL ACT AMENDMENTS OF 1972, at 291–92.

323. Rivers and Harbors Appropriations Act of 1899, ch. 425, 30 Stat. 1121 (1899) (codified at 33 U.S.C. §§ 401–467 (1976)).

324. See *The Daniel Ball*, 77 U.S. 557 (1870).

325. Federal Water Pollution Control Act of 1948, Pub. L. No. 80-845, 62 Stat. 1155 (1948) (codified as amended at 33 U.S.C. §§ 1251–1387 (1972)).

326. *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 133 (1985).

327. *Id.* at 123–24.

328. CWA § 301(a), 33 U.S.C. § 1311(a) (2006).

329. Federal Water Pollution Control Act Amendments of 1971, S. 2770, § 301(a), 92d Cong. (1971); reprinted in 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1608 (1973).

330. CWA § 502(12), 33 U.S.C. § 1362(12) (2006). Again, with a minor wording change made by the House amendments, section 502(12) originated in S. 2770.

331. *Id.*

332. *Id.* § 502(6), 33 U.S.C. § 1362(6).

333. *Id.*

334. S. REP. NO. 92-414, at 7, reprinted in 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1425 (1973).

335. *Id.* at 76, reprinted in 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1494.

336. See, e.g., *League of Wilderness Defenders v. Forsgren*, 309 F.3d 1181 (9th Cir. 2002) (insecticides meet CWA definition of pollutant); *Sierra Club v. Cedar Point Oil Co.*, 73 F.3d 546 (5th Cir. 1996) (“pollutant” is broadly defined by the Act).

337. Federal Water Pollution Control Act of 1948, Pub. L. No. 80-845 § 1, 62 Stat. 1155 (1948) (codified as amended at 33 U.S.C. § 1251–1376 (2006)).

338. See CWA § 402(b), 33 U.S.C. § 1342(b) (2006).

339. *Id.* § 402(b)(1), (2), 33 U.S.C. § 1342(b)(1), (2).

340. See Federal Water Pollution Control Act Amendments of 1971, S. 2770, 92d Cong. § 401–03 (1971), reprinted in 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1679–94.

341. S. REP. NO. 92-1236, at 138–39 (1972) (Conf. Rep.), reprinted in 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 321–22 (1973).



### E. Sections 301(b), 402, and 502(14): Regulation of Point Sources

Recognition of the dichotomy between point sources and nonpoint sources was long a part of the better state water pollution permit programs around the country, but it was not until section 502(14) of the CWA that the term was expressly defined at the federal level. This definition was necessary because the new NPDES permit program focused regulation directly and exclusively on point sources.<sup>342</sup> Point sources, as defined in the CWA, refer to “any discernible, confined and discrete conveyance, including, but not limited to, any [twelve enumerated possible sources], from which pollutants are or may be discharged.”<sup>343</sup> The list of twelve types of point sources in the statutory definition was purposefully made non-inclusive.<sup>344</sup> Congress included this definition in S. 2770 and did not change it during the legislative process.<sup>345</sup>

### F. Sections 208 and 304(e): Managing Nonpoint Sources

In contrast to the elaborate NPDES permit program established in the CWA to deal with point sources of pollution, Congress largely left the creation of active programs to control nonpoint sources to the states, which were tasked to continue to assess and suggest management strategies for the control of nonpoint sources of water pollution. Nonpoint sources include all sources of water pollution that do not emanate from “any discernible, confined, and discrete conveyance,” such as run-off pollution from construction sites, agriculture cropland and animal production, mining, silviculture, and pollution caused by salt water intrusion and various types of facilities altering the flow or circulation of surface or ground waters that are not subject to the NPDES permit requirement.<sup>346</sup> Six short subsections of section 208 for the first time included requirements that states identify and begin to develop methods to control nonpoint sources of water pollution from specific activities.<sup>347</sup> These same six most prominent sources of nonpoint water pollution are also cited in section 304(e), where the CWA directs the EPA Administrator to disseminate information—including guidelines for identifying and evaluating nonpoint sources—and suggest “processes, procedures, and methods to control”

them.<sup>348</sup> The framework for planning to control nonpoint sources originated as section 209 of S. 2770, and the conference committee embellished and reorganized it to produce sections 208 and 304(e) of the CWA.<sup>349</sup>

The pressure on states and EPA to get the NPDES permit program up and running for tens of thousands of point sources of pollution, however, meant that dealing with nonpoint sources was more or less put off for another day, which turned out to be another decade or two. Another classic federalism issue that kept rearing its head whenever there was serious talk of controlling nonpoint sources was the claim most sources of nonpoint pollution were so uniquely local that managing their control was better left to states and local units of government.<sup>350</sup> A push in the 1980s to accelerate the process of controlling nonpoint sources led to the adoption in 1987 of new CWA section 319.<sup>351</sup> With little funding available and no direct federal enforcement powers over nonpoint sources, however, nonpoint sources of pollution continue to make a huge and largely unregulated contribution to the nation’s water pollution problems.

### G. Sections 301, 302, and 304: Technology-Based Effluent Standards

The use of effluent standards as the primary mechanism to control water pollution was proposed and rejected time and again in congressional debates during the 1960s. Effluent limitations did not become the primary engine to drive the federal NPDES program until the adoption of section 302 of the 1972 CWA.<sup>352</sup> In the course of developing the effluent-standards approach to water quality control, Congress asserted that the ambient standards established for receiving waters had proved deficient in improving water quality because it was too difficult to translate them into precise permit limitations on dischargers that would be defensible in court.<sup>353</sup> The enforcement difficulty stemmed from there being no workable models for determining the precise relationship between specific discharges and ambient water quality.<sup>354</sup> After directing EPA to establish effluent limitations for all point sources, including POTWs,<sup>355</sup> and to institute timetables for their achievement, section 302(e) provided that “[e]ffluent limitations established pursuant to this section or section 302 of this Act shall be applied to all point sources

342. See CWA §§ 301(b)(1), 302(a), 304(b)(3), 33 U.S.C. §§ 1311(b)(1), 1312(a), 1314(b)(3) (2006).

343. *Id.* § 502(14), 33 U.S.C. § 1362(14) (2006).

344. See *Kennecott Copper Corp. v. U.S. Envtl. Prot. Agency*, 612 F.2d 1232, 1243 (10th Cir. 1979).

345. See Federal Water Pollution Control Act Amendments of 1971, S. 2770, 92d Cong. § 502(p) (1971), reprinted in 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1700 (1973).

346. See 41 Fed. Reg. 24,710 (June 18, 1976) (to be codified at 40 C.F.R. pt. 124.85). In response to public comments, the EPA identified the characteristics of nonpoint sources of water pollution: “(i) The pollutants discharged are induced by natural processes, including precipitation, seepage, percolation [sic], and runoff; (ii) The pollutants discharged are not traceable to any discrete or identifiable facility; and (iii) The pollutants discharged are better controlled through the utilization of best management practices, including process and planning techniques.” *Id.*

347. See CWA § 208(e)(2)(A)–(F), 33 U.S.C. § 1288(e)(2)(A)–(F) (2006).

348. CWA § 304(e), 33 U.S.C. § 1314(e) (2006).

349. S. REP. NO. 92-1236, at 116 (1972) (Conf. Rep.), reprinted in 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 299 (1973).

350. See *Nat’l Wildlife Fed’n v. Gorsuch*, 693 F.2d 156, 176 (D.C. Cir. 1982).

351. Water Quality Act of 1987, Pub. L. No. 100-4, § 319, 101 Stat. 7, 52–61 (1987).

352. H.R. 11896, 92d Cong. § 302 (1971), reprinted in 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 966–69.

353. S. REP. NO. 92-414, at 8 (1972), reprinted in 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1426 (1973).

354. *Id.*

355. Though not specifically define in the Act, POTWs were widely understood to refer to waste water treatment facilities that are owned and operated by municipalities, counties, joint city/ county units, Native American tribes, or other governmental entities.

of discharge of pollutants in accordance with the provisions of this Act.”<sup>356</sup> The idea of the new technology-based direct regulation of point sources of pollution discharge originated in the bill proposed by the Senate subcommittee in 1971,<sup>357</sup> when, at Senator Muskie’s urging, the subcommittee adopted a new “no entitlement to discharge” philosophy toward polluters.<sup>358</sup> Starting with the 1972 CWA, polluters were no longer allowed to use the assimilative capacity of receiving waters to dilute polluting discharges. Instead, the CWA turned to nationally uniform technology-based effluent standards for “categories and classes” of point sources as the primary basis for requirements to be written into the new NPDES permits.<sup>359</sup> This was a strategy deliberately designed to remove possible competitive advantages enjoyed by polluters in relatively clean water areas.

The CWA, according to prescribed timetables for compliance, required all point source dischargers to apply specified levels and types of treatment to their wastewater streams based on practicable technology tailored to each industry, as determined by EPA scientists.<sup>360</sup> The conference committee slightly adjusted the timetables, but otherwise, the grand design proposed in S. 2770 in 1971 ultimately became the regulatory centerpiece of the CWA.<sup>361</sup>

#### H. Section 402: NPDES Permit Program

The NPDES permit system clearly is based on express new statutory language in section 402 of the 1972 CWA, but its philosophical origins reach back to the 1899 Refuse Act’s prohibition of all industrial discharges to navigable waters and the revitalization of the Refuse Act by the U.S. Supreme Court in 1966.<sup>362</sup> Once the law firmly established that no industrial plant could discharge any form of pollutant into navigable waters without a permit from the Corps, something had to be done to legalize the tens of thousands of industrial discharges taking place around the nation. The confusion surrounding the litigation halting the RAPP created in 1970 by President Nixon’s Executive Order, which assigned authority for administering the embryonic national effluent permit program to the newly-created EPA,<sup>363</sup> led Congress to outlaw all discharges to navigable waters in the CWA.<sup>364</sup> The CWA terminated EPA’s authority for the issuance of discharge permits under the Refuse Act, and created a new and comprehensive permit program to be run

primarily by the states under close EPA supervision.<sup>365</sup> The NPDES permit program initially laid out in S. 2770 survived both the House amendments and the conference committee review more or less intact. The conference committee report suggests that the federal authority to approve or not approve a state application to operate the NPDES system was altered in the legislative process, but the language in S. 2770 and the language in the CWA on this point appear identical.<sup>366</sup> In the CWA, Congress also separated administrative authority for regulating conventional water pollution from the regulation of dredge and fill projects in the nation’s wetlands—giving responsibility for administering the latter program to the Corps, but with EPA oversight.<sup>367</sup>

#### I. Sections 303 and 302: Ambient Water Quality Standards

The 1965 WQA mandated that all states develop a water quality standards program requiring the classification of all interstate waters with respect to specific intended uses, the creation of water quality criteria adequate to protect those uses, and a plan to implement the standards.<sup>368</sup> The WQA water quality standards were just beginning to be implemented by the states when the CWA made its dramatic change to effluent limitations as the primary engine to power federal regulation. Section 303 of the 1972 CWA retained the water quality standards structure as a backup to reinforce the NPDES permit system and expanded the program to require states to adopt and enforce water quality standards for all intrastate waters.<sup>369</sup> Section 303 was not a part of S. 2770, as the Senate committee was determined to emphasize its new effluent standards, but a House amendment restored and expanded the existing water quality standards program.<sup>370</sup> The most important expansion of section 303 required the states to create water quality standards for their intrastate waters.<sup>371</sup>

Section 302 of the Act created new authority to adopt more demanding effluent limitations for portions of navigable waters where the existing effluent limitations will not accomplish the attainment or maintenance of established water quality standards.<sup>372</sup> Section 302 originated in S. 2770 and was only modified by the conference committee in a minor way.<sup>373</sup> As under the 1965 WQA, EPA had final

356. CWA § 302(e), 33 U.S.C. § 1312(e) (2006).

357. Federal Water Pollution Control Act Amendments of 1971, S. 2770, 92d Cong. § 301, *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1608–10.

358. See S. REP. NO. 92-414, at 42 (1972), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1460.

359. CWA § 301(b)(2)(A), 33 U.S.C. § 1311(b)(2)(A) (2006).

360. *Id.*

361. S. REP. NO. 92-1236, at 108 (1972) (Conf. Rep.), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 291 (1973).

362. See *supra* notes 169–74 and accompanying text.

363. See *supra* notes 218–44 and accompanying text.

364. Clean Water Act § 301(a), 33 U.S.C. § 1311(a) (2006).

365. Clean Water Act § 402, 33 U.S.C. § 1342 (2006).

366. See Federal Water Pollution Control Act Amendments of 1971, S. 2770, 92d Cong. § 402(b) (1972), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL AMENDMENTS OF 1972, at 1686–87 (1973).

367. CWA § 404, 33 U.S.C. § 1344 (2006); see *supra* p. 12.

368. See U.S. DEP’T OF INTERIOR, GUIDELINES, *supra* note 137, for an official explanation of how the water quality standards were to be implemented.

369. CWA § 303(a)(3)(A), 33 U.S.C. § 1313(a)(3)(A) (2006).

370. S. REP. NO. 92-1236, at 122–23 (1972) (Conf. Rep.), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 305–06 (1973).

371. See CWA § 303(a)(3), 33 U.S.C. § 1313(a)(3).

372. *Id.* § 302, 33 U.S.C. § 1312 (2006).

373. See S. REP. NO. 92-1236, at 122, *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 305.

approval authority over states' designations of water uses to be protected and of the water quality criteria necessary to protect the uses.<sup>374</sup>

### J. Section 303(d): Total Maximum Daily Loads

Although not formally recognized by EPA as a viable water pollution control strategy until forced to do so as a result of litigation in 1984,<sup>375</sup> the framework for establishing total maximum daily loads ("TMDL") for waters not meeting ambient water quality standards was nevertheless expressly built into section 303 of the 1972 CWA. Early in their resurrection from obscurity, environmental scholars described TMDLs as the "sleeping giant" of the CWA.<sup>376</sup> In part, this mantle was based on the recognition that the establishment of TMDLs was one place where nonpoint sources could be taken into account in calculating the permissible loading.<sup>377</sup> Section 303(d)(1)(A) of the 1972 Act required states to identify all waters for which secondary treatment by POTWs and BPT by industrial dischargers would not achieve compliance with local water quality standards.<sup>378</sup> Once states identified such waters, they were to "establish priority rankings for such waters, taking into account the severity of the pollution and the uses to be made of such waters."<sup>379</sup> These rankings were to provide the basis for the development of TMDLs for any pollutants identified by EPA as suitable for calculation in this context. Section 303(d)(1)(C) then expressly provides that the "total maximum daily load . . . shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality."<sup>380</sup> A special provision for regulating thermal discharges is also included in this section, particularly as necessary to protect fish, shellfish, and wildlife populations.<sup>381</sup> As with the rest of section 303, this procedure for establishing TMDLs originated in the House, with the conference committee incorporating the procedure into the final legislation.<sup>382</sup>

### K. Sections 402 and 301(b)(1)(B): Publicly Owned Treatment Works

"POTW" was the term used for the first time in the 1972 CWA to describe municipal wastewater treatment plants and other water pollution control facilities owned and operated by governmental units.<sup>383</sup> POTWs had long been the recipients

of special federal support for their construction and management.<sup>384</sup> Although the 1899 Refuse Act expressly exempted liquid discharges from municipal treatment works and sewers from regulation by the Corps,<sup>385</sup> the 1965 WQA brought municipal treatment works indirectly under federal control through the required implementation of water quality standards by the states for interstate waters.<sup>386</sup> Sections 301(b)(1)(B) and 402 of the CWA put the finishing touches on the regulatory scheme by including POTWs within the NPDES permit system applying technology-based effluent limits<sup>387</sup> and establishing time lines for them to move first to secondary treatment, then to various forms of advanced treatment.<sup>388</sup> The idea of subjecting POTWs to technology-based treatment standards administered under the NPDES permit program originated in S. 2770 and it emerged virtually unchanged in the final legislation.<sup>389</sup>

### L. Sections 301(b) and 306: Progressive and New Source Treatment Requirements in NPDES Permits

The concept of progressive improvement in the quality of an environmental resource was already part of several federal regulatory regimes prior to the 1972 CWA. Most notably, the CAA required the creation of primary air quality standards to be achieved in three years, and secondary standards to be achieved in a "reasonable time."<sup>390</sup> Prior to the CWA, most state water pollution control efforts focused their resources on upgrading POTWs to the level of providing secondary treatment of all the wastewater they received. Therefore, the CWA's requirement of secondary treatment in all POTWs nationwide by 1977<sup>391</sup> was not a troublesome mandate for the affected local governments to accept. Even with the huge increase CWA provided in construction grant funding, however, meeting the 1977 deadline meant working with a very tight timetable for many municipalities. The idea of moving POTWs to more advanced treatment across time was also easy to understand as a control strategy, if not necessarily easy to implement. Within the reasonably foreseeable future, the Congress expected all POTWs move up from secondary treatment to advanced levels of treatment utilizing the best available technology.<sup>392</sup> This was all part of the original section 301 as proposed in S. 2770.<sup>393</sup>

384. See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 525.

385. The Rivers and Harbors Appropriation Act of 1899, ch. 425, 30 Stat. 1152 (codified at 33 U.S.C. § 407 (2006)) (prohibiting discharge of refuse matter "other than that flowing from streets and sewers and passing therefrom in a liquid state" into navigable waters).

386. Water Quality Act of 1965, Pub. L. No. 89-234, § 5, 79 Stat. 903, 907-08 (1965).

387. CWA §§ 301(b)(1)(A), 402, 33 U.S.C. §§ 1313(b)(1)(A), 1342 (2006).

388. *Id.* § 301(b)(1)(B), 33 U.S.C. § 1311(b)(1)(B) (2006).

389. S. REP. NO. 92-1236, at 120 (1972) (Conf. Rep.), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 303 (1973).

390. 42 U.S.C. § 1857c-5(a)(2)(A) (1976).

391. CWA § 301(b)(1)(B), 33 U.S.C. § 1311(b)(1)(B) (2006).

392. See *id.* §§ 301(b)(2)(B), 201(g)(2)(A), 33 U.S.C. §§ 1311(b)(2)(B), 1281(g)(2)(A) (2006).

393. Federal Water Pollution Control Act Amendments of 1971, S. 2770, 92d Cong. § 301 (1972), *reprinted in* 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 1608-10 (1973).

374. CWA § 303(a)(3)(C), (b)(1), 33 U.S.C. § 1313(a)(3)(C), (b)(1).

375. See *Scott v. City of Hammond*, 741 F.2d 992 (7th Cir. 1984).

376. See Oliver A. Houck, *TMDLs IV: The Final Frontier*, 29 ELR 10469, 10471 (Aug. 1999).

377. See *Pronsolino v. Natri*, 291 F.3d 1123, 1141 (9th Cir. 2002).

378. CWA § 303(d)(1)(A), 33 U.S.C. § 1313(d)(1)(A) (1972).

379. *Id.*

380. *Id.* § 303(d)(1)(C), 33 U.S.C. § 1313(d)(1)(C).

381. *Id.* § 303(d)(1)(D), 33 U.S.C. § 1313(d)(1)(D).

382. S. REP. NO. 92-1236, at 122 (1972) (Conf. Rep.), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 305-06 (1973).

383. See CWA §§ 201(g)(1), 212(2)(A), 33 U.S.C. §§ 1281(g)(1), 1292(2)(A) (2006).



To move the quality of the nation's waters toward the ambitious goals set in the CWA, it was imperative that the CWA also adopt parallel and progressive technology-based treatment standards for industrial polluters. Between 1972 and 1977, the CWA called for industry effluent standards in NPDES permits that reflected the BPT currently available for the pollutants discharged by each industry.<sup>394</sup> Not later than 1983, Congress required industrial dischargers' effluent permit requirements to be upgraded to BAT, consistent with specified technological-feasibility and economic-sustainability factors.<sup>395</sup> Again, these requirements for industrial dischargers, and the time tables for achieving them, both originated in S. 2770, but the conference committee changed the dates to the final 1977 and 1983 deadlines.<sup>396</sup> Congress required new point sources of industrial discharge to meet "national standards of performance"—to be established by the EPA—based on the best available demonstrated technology, processes, operating methods, or other alternatives—including, where practicable, a standard permitting "no discharge of pollutants."<sup>397</sup> The higher level of performance expected of new sources of industrial pollutants originated in S. 2770 and was carried forward in the final legislation with very minor edits.<sup>398</sup>

The story of how these relatively simple requirements later morphed into a dichotomy between "conventional" pollutants required to employ "best conventional treatment"<sup>399</sup> and "nonconventional" pollutants, for which other and varied standards were applicable, is too long and complicated to recount here. The same holds true for the role ultimately played by "variances" granted to polluters for whom no technology-based effluent standards had been promulgated, or for good reasons, who currently could not meet the standards applicable to their discharges.<sup>400</sup>

#### M. Section 307(b), (c) and (d): Pretreatment Programs

The idea of controlling some industrial wastes by running them through the treatment processes on a POTW was well established within some state programs prior to 1972.<sup>401</sup> At the federal level, prior to the CWA, the practice of treating industrial discharges in municipal waste treatment works received recognition primarily in the approval of construction grants for so-called joint pollution control facilities. Section 307(b), (c) and (d) of the CWA added key regulatory

elements by requiring EPA to establish specific pretreatment requirements for indirect point sources, including many different types of industrial wastewater streams discharged into public treatment facilities<sup>402</sup> and for the states to implement these requirements through their permit systems. The national pretreatment standards, and the strategy of enforcing those standards through the NPDES permits issued to POTWs, originated in S. 2770 and moved through the legislative process more or less intact.<sup>403</sup>

#### N. Section 101(a): "Maintain . . . Integrity" = The Nondegradation Policy

Unlike in EPA's administration of the CAA, which required a Supreme Court decision<sup>404</sup> to force the federal agency to implement a "no significant deterioration policy," nondegradation has consistently been an element of the water pollution regulatory structure since the implementation of the 1965 WQA. Guidelines issued by the FWPCA in 1966,<sup>405</sup> confirmed and modified by a policy statement by Interior Secretary Udall in 1968,<sup>406</sup> made clear that the federal water pollution program was committed to the prevention of degradation of waters already meeting or exceeding federal water quality standards. Even though Congress did not see fit to include an express nondegradation policy in the 1972 CWA reforms, in new water quality guidelines issued in January 1973, EPA stated that the antidegradation requirements previously adopted would remain in force.<sup>407</sup> This determination to continue the prior policy was presumably based on the prime directive in section 101(a) that the CWA's purpose was to "restore and maintain" water quality integrity in the nation's waters.<sup>408</sup> It was not until 1975, however, after a skirmish with the National Resources Defense Council over possible litigation<sup>409</sup> concerning the nondegradation policy, that EPA published regulations clearly giving legal content to the nondegradation policy.<sup>410</sup> Although it is sometimes claimed that the nondegradation policy in water pollution control was based on the "no significant deterioration" language in the 1970 CAA, the reverse is more likely true. As noted in the earlier discussion of the 1965 WQA, the fed-

394. CWA § 301(b)(1)(A), 33 U.S.C. § 1311(b)(1)(A).

395. *Id.* § 301(b)(2)(A), 33 U.S.C. § 1311(b)(2)(A).

396. Federal Water Pollution Control Act Amendments of 1971, S. 2770, 92d Cong. § 301 (1972), reprinted in 2 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 1608–10.

397. CWA § 306(a)(1), 33 U.S.C. § 1316(a)(1) (2006).

398. S. REP. NO. 92-1236, at 99 (1972) (Conf. Rep.), reprinted in 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 282 (1973).

399. See generally Robert W. Adler, *Integrated Approaches to Water Pollution: Lessons from the Clean Air Act*, 23 HARV. ENVTL. L. REV. 203 (1999).

400. See 33 U.S.C. § 1311(g) (2006). This new section was added in the 1977 amendments to the CWA. Clean Water Act of 1977, Pub. L. No. 95-217, 91 Stat. 1566 (1977).

401. See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 534.

402. CWA § 307(b)-(d), 33 U.S.C. § 1317(b)-(d) (2006).

403. S. REP. 92-1236, at 129–31, reprinted in 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 312–14 (1973).

404. See *FRI v. Sierra Club*, 412 U.S. 541 (1973), *aff'd by an equally divided court* *Sierra Club v. Ruckelshaus*, 344 F. Supp. 253, 256 (D.D.C. 1972).

405. *Hearings Before the Subcomm. on Air & Water Pollution of the Comm. on Pub. Works, United States S. on Activities of the Fed. Water Pollution Control Admin.—Water Quality Standards*, 90th Cong. 497, 529 (1967) (exhibit offered by Sen. Muskie, Chairman, S. Subcomm. on Air & Water Pollution). Policy Guideline #1 stated: "In no case will standards providing for less than existing water quality be acceptable." *Id.* at 530.

406. See Hines, *A Decade of Nondegradation Policy*, *supra* note 25, at 659 n.53 (quoting Sec'y of the Interior Stewart L. Udall).

407. See U.S. ENVTL. PROT. AGENCY, GUIDELINES FOR DEVELOPING OR REVISING WATER QUALITY STANDARDS UNDER THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 7 (1973).

408. CWA § 101(a), 33 U.S.C. § 1311(a) (2006).

409. See Hines, *A Decade of Nondegradation Policy*, *supra* note 25, at 677.

410. See Policies and Procedures for State Continuing Planning Process. 40 Fed. Reg. 29,882–94 (July 16, 1975) (to be codified at 40 C.F.R. pt. 130).

eral agency first promulgated its nondegradation policy as part of the 1966 *Guidelines For Establishing Water Quality Standards*,<sup>411</sup> and, though repeatedly challenged, stuck with the concept through the ensuing years.<sup>412</sup> There is every reason to believe the “no significant deterioration” requirement of the 1970 CAA found its inspiration in these earlier water pollution guidelines, and the well-publicized controversy they stimulated.

#### O. Section 401: State Certification of Federal Licenses or Permits

Congress first introduced the concept of state certification of federal licenses or permits in the Water Quality Improvement Act of 1970.<sup>413</sup> The idea was that before a federal license or permit is issued for activities that might adversely impact a state’s water quality, the state affected must formally certify to the federal agency issuing the license or permit that its water quality standards will not be threatened.<sup>414</sup> The original Senate bill S. 2770 carried forward the certification requirement and the conference committee retained it in the final legislation.<sup>415</sup> Section 401 of the CWA incorporated the certification requirement fully, and the more expansive definition of navigable waters in CWA section 502(7) broadened it somewhat.<sup>416</sup>

#### P. Section 307(a): Toxic Pollutants

The 1972 CWA attempted to deal with toxic pollutants reaching the nation’s water. Section 101(a)(3) bluntly requires that the “discharge of toxic pollutants in toxic amounts be prohibited.”<sup>417</sup> This policy declaration was promulgated in S. 2770 and was unchanged as the bill worked its way into final legislation.<sup>418</sup> Section 307(a) of the Act required the EPA Administrator to publish a list of all toxic pollutants for which an effluent standard would be established. The CWA expressly stated that the standard for toxic pollutants “may include a prohibition of the discharge of such pollutants or combination of such pollutants.”<sup>419</sup> The CWA directs the Administrator, after the list of toxic pollutants is compiled, to “publish a proposed effluent standard (or a prohibition)” for each toxic pollutant on the list, which “shall take into account the toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organ-

isms in any waters, the importance of the affected organisms, and the nature and extent of the toxic pollutant’s effect on such organisms.”<sup>420</sup> All effluent standards promulgated under this process were required to “provide[] an ample margin of safety.”<sup>421</sup> Again, section 307(a) was included in the original version of S. 2770 and became part of the final legislation without major changes.<sup>422</sup>

Congress’s attempt to initiate close regulation of toxic chemicals reaching the nation’s waters did not fare nearly as well as the regulation of conventional pollutants under NPDES permits. Initially, EPA promulgated standards for only six toxic pollutants, but Congress eventually incorporated a consent decree, which required EPA to adopt effluent standards for sixty-five other toxics for twenty-one industries, into the 1987 amendments to the CWA.<sup>423</sup>

#### Q. Section 404: Joint EPA/Corps Responsibility for Dredge and Fill Permits

President Nixon sought to calm the chaos that resulted from the Supreme Court’s revitalization of the Refuse Act permit requirement through a 1971 Executive Order<sup>424</sup> that assigned EPA the responsibility for issuing the needed permits. As noted above, litigation over the possible application of NEPA stopped this initiative in its tracks after only a handful of permits had been issued, and Congress stepped in to deal with the issues through the adoption of the 1972 CWA. By expanding the definition of “navigable waters,”<sup>425</sup> the 1972 CWA not only created the broadest possible NPDES program, but it also greatly enlarged the jurisdiction of the federal government to regulate dredging and filling projects in wetlands that might negatively affect the quality of contiguous surface waters. In section 404 of the CWA, Congress assigned responsibility to issue dredge and fill permits to the Corps,<sup>426</sup> but provided for close oversight by EPA to protect water quality.<sup>427</sup> This is one provision that was changed from the original provision in S. 2770, which gave all permitting authority to EPA, but required consultation with the Corps when issues of navigation were present. The House altered this arrangement and then the conference committee reversed the grant of initial authority—giving the Corps permit authority over dredge and fill activities affecting navigable waters, as broadly defined in the 1972 CWA, subject to consultation with EPA.<sup>428</sup>

411. U.S. Dep’t of the Interior Federal Water Pollution Control Administration, *Guidelines for Establishing Water Quality Standards for Interstate Waters* 5 (1966).

412. See Hines, *A Decade of Nondegradation Policy*, *supra* note 25, at 659–60.

413. Water Quality Improvement Act of 1970, Pub. L. No. 91-224, § 21, 84 Stat. 91, 107 (1970).

414. *Id.* § 21(b)(1), 84 Stat. 107.

415. S. REP. NO. 92-1236, at 138 (1972) (Conf. Rep.), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 321 (1973).

416. CWA § 401, 33 U.S.C. § 1341 (2006).

417. *Id.* § 101(a)(3), 33 U.S.C. § 1311(a)(3) (2006).

418. S. REP. NO. 92-1236, at 99, *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 282.

419. CWA § 307(a)(1), 33 U.S.C. § 1317(a)(1) (2006).

420. *Id.* § 307(a)(2), 33 U.S.C. § 1317(a)(2).

421. *Id.* § 307(a)(4), 33 U.S.C. § 1317(a)(4).

422. S. REP. NO. 92-1236, at 129 (1972) (Conf. Rep.), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 312.

423. See Water Quality Act of 1987, Pub. L. No. 100-4, § 301(f), 101 Stat. 7, 30 (1987).

424. Exec. Order No. 11548, 35 Fed. Reg. 11,677, 11,678 (Dec. 25, 1970).

425. Federal Water Pollution Act Amendment § 502(1)(7) (1972).

426. *Id.* at § 404(a).

427. See CWA § 404(b)–(c), 33 U.S.C. § 1344(b)–(c) (2006).

428. S. REP. NO. 92-1236, at 141–42 (1972) (Conf. Rep.), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 324–25 (1973).

## R. Sections 309 and 509(a): Federal Enforcement Powers

The power of the federal agency to bring enforcement actions against polluters was deliberately kept weak in all the federal legislation prior to the 1972 CWA.<sup>429</sup> Before the 1972 Act, federal enforcement revolved around a complex and convoluted “conference” mechanism and required the consent of the affected state in order to proceed.<sup>430</sup> The 1972 Act converted this very limited enforcement power into a much more streamlined and effective battery of administrative compliance orders, criminal fines, civil actions, and authority to seek judicial abatement through injunctive relief.<sup>431</sup> The CWA eliminated the former requirement of state consent before a federal enforcement process could start, and replaced it with a requirement that EPA provide a notice to state officials thirty days prior to commencement of an enforcement action.<sup>432</sup> Section 509(a) of the 1972 Act also granted EPA the authority to seek subpoenas from the U.S. District Courts to compel attendance and testimony of witnesses and the production of relevant books, papers, and documents.<sup>433</sup> Senate bill S. 2770 first proposed substantially upgrading the federal enforcement powers, and neither the House nor the conference committee reduced or otherwise changed these new powers in significant ways.<sup>434</sup>

## S. Section 505: Citizen Suits

Prior to the 1972 CWA, the Federal Water Pollution Control Act made no provision for citizen suits to enforce the federal law. The brief flurry of *qui tam* suits under the Refuse Act in the early 1970s, however, demonstrated how effective citizen actions could be used to reinforce environmental regulatory measures.<sup>435</sup> Given the consistency of membership on the Senate and House Public Works Committees in the early 1970s, it is not surprising that the citizen suit provision in section 505 of the CWA was based on the similar, but less well developed, citizen suit provision in the 1970 CAA.<sup>436</sup> Also relevant was the 1972 U.S. Supreme Court decision in *Sierra Club v. Morton*,<sup>437</sup> which recognized citizens’ standing to challenge implementation of environmental protection laws. The *Sierra Club* case was specifically cited in Congressional exchanges about the language in the definition of “citizen” and the scope of the citizen suit provision in hearings on the conference report on the bill that became the 1972 CWA.<sup>438</sup>

## T. Section 509: Judicial Review

In order to expedite implementation of the 1972 Act, which was anticipated to attract multiple legal challenges, Congress sought to streamline the judicial review process. The act assigned exclusive jurisdiction to the federal circuit in which the issue arose to review challenges to EPA’s promulgation of effluent or performance standards, issuance of a permit, or determination as to the adequacy of a state permit program. This step again was based on similar judicial review provisions in the 1970 CAA.<sup>439</sup> Litigation relating to EPA’s enforcement authority, on the other hand, whether seeking civil or criminal remedies, was left with the federal district courts.<sup>440</sup> The substantial changes in the jurisdiction for federal courts to review EPA actions originated in S. 2770 and moved through the legislative process virtually unchanged.<sup>441</sup>

## VII. Conclusion

The CWA of 1972 established, by far, the loftiest goals ever adopted in the United States for protecting and enhancing an environmental resource. Given today’s gridlock in Washington D.C., it is amazing to contemplate that, by wide margins, Congress once collectively resolved to improve all the nation’s waterways to the “fishable and swimmable” level of quality by 1983, and further committed to the total elimination of all discharges of pollutants to the nation’s waters by 1985. Like many other broad legislative solutions to complex national problems, many unanticipated issues arose in its implementation that engendered a good deal of litigation—much of it by regulated parties challenging EPA’s interpretation of its authority, but some of it by environmental groups pushing EPA to carry out actions mandated by the CWA. It may be some measure of the CWA’s quality as a piece of environmental legislation that Congress has seen fit to amend it in a substantial way only twice—in 1977<sup>442</sup> and again in 1987.<sup>443</sup> More importantly, the core of the carefully balanced regulatory regime it sought to create for protecting and improving the quality of the nation’s waters has remained virtually unchanged for forty years, except for some lessening of the stringency of the effluent limitations and repeated relaxations in the timetables to be attained.

An amazing forty years of federal and state activity have unfolded since the CWA became law. Yet, thinking back to what was happening in the decade leading up to the 1972 CWA, many of the current water quality issues have a familiar ring to them. Ten examples of these lingering issues are: (1) maintaining and upgrading ambient water quality standards; (2) calibrating effluent limitations to protect and enhance the achievement of water quality standards for receiving waters; (3) keeping technology-

429. See Andreen, *The Evolution of Water Pollution Control*, *supra* note 79, at 270.

430. See HINES, PUBLIC REGULATION OF WATER QUALITY, *supra* note 7, at 566–67.

431. CWA § 309(a), 33 U.S.C. § 1319(a) (2006).

432. See *id.* § 309(a)(1)–(2), 33 U.S.C. § 1319(a)(1)–(2).

433. See *id.* § 509(a)(2), 33 U.S.C. § 1369(a)(2) (2006).

434. See S. REP. NO. 92-1236, at 131–32 (1972) (Conf. Rep.), *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 314–15 (1973).

435. For a discussion of *qui tam* suits under the Refuse Act, see *supra* note 235–36.

436. See Clean Air Act § 304; 42 U.S.C. § 7604 (2006).

437. *Sierra Club v. Morton*, 405 U.S. 727 (1972).

438. See S. REP. NO. 92-1236, at 146 *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 329.

439. See Clean Air Act § 307; 42 U.S.C. § 7607 (2000).

440. CWA § 509(b)(2), 33 U.S.C. § 1369(b)(2) (2006).

441. SEN. REP. NO. 92-1236, at 129, *reprinted in* 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 329.

442. See Clean Water Act of 1977, Pub. L. No. 95-217, 91 Stat. 1566 (1977).

443. See Water Quality Act of 1987, Pub. L. No. 100-4, § 319, 101 Stat. 7 (1987).



based effluent limitations up to date with evolving science and changing economic conditions; (4) implementing a workable nondegradation policy; (5) designing effective control programs to identify and reduce pollution from nonpoint sources; (6) protecting wetlands from encroachment by contiguous land development; (7) incentivizing improvements in control technology; (8) planning coordinated and sustainable, watershed-wide management strategies; (9) balancing legitimate state concerns with federal interests in enforcement actions against polluters; and (10) finding adequate funding in a tight economy to make the infrastructure investments necessary to eliminate the most troubling pollution problems. These themes may have changed in scope, focus, and vocabulary, but at their core they are the same issues we faced forty years ago at the inception of the 1972 CWA.

Taking stock of the 1972 CWA's fortieth anniversary, the nation has not come close to attaining the "No Discharge" goal, only about half of the nation's waters are fishable and swimmable, and way too many toxic chemicals are still finding their way into our waterways. To idealists, this is disappointing, but to realists it is not at all surprising. Achieving heroic

water pollution control gains in a country as geographically diverse and economically active as the United States is truly difficult work, and requires great patience and perseverance.

So, should we celebrate or mourn the still problematic quality of many of our waters? One way to think about this question is to ask: what would have happened in the absence of the establishment of these highly ambitious goals and the sea change in regulatory philosophy initiated by the 1972 CWA? One can only speculate, but my best guess is that without the philosophical commitment to the proposition that no one has the right to use public waters to dispose of their wastes, enforced by progressively stricter effluent standards, our waters would be less clean today. It is very doubtful we would be as far along toward the zero-discharge goal as we are today if we had relied solely on receiving water quality standards to cleanse the nation's waters. Although the 1972 CWA has sparked much improvement in many waterways, it clearly has not lived up to its own lofty aspirations over the past forty years. It will probably never do so until the commitment to high quality water resources nationwide regains the strong level of public support it enjoyed during the unique decade of environmental reform leading up to adoption of the 1972 Act.