THE CLEAN WATER ACT AND RELATED DEVELOPMENTS IN THE FEDERAL WATER POLLUTION CONTROL PROGRAM DURING 1977

During 1977 the federal water pollution control program was both substantially modified and emphatically reaffirmed by legislative and administrative developments. The Clean Water Act of 1977 made important revisions in every major part of the program established by the 1972 Federal Water Pollution Control Act Amendments including construction grants, point and nonpoint source control for municipalities and industry, and toxic discharge control. The following three articles examine these changes and their impact on industrial point sources, municipalities and nonpoint sources.

The first article focuses on industrial point source abatement goals, requirements for various pollutant categories, deadlines for compliance, enforcement, and cost-sharing in financing public works under the Clean Water Act of 1977. The second article surveys the entire field of municipal treatment processes and evaluates the new emphasis on innovative technologies against this background. Included in the second article is a detailed analysis of the funding obstacles encountered by municipalities under the 1972 Act and an assessment of the solutions to those problems offered in the 1977 Amendments. The third article concludes the narrative with an examination of nonpoint source pollution, tracing its history and its emergence as perhaps the most vexing of all water pollution problems. The authors commend the 1977 Amendments for providing much-needed recognition of the difficulties inherent in the area as well as concrete mechanisms to deal with some of those problems.

I. INDUSTRIAL DISCHARGERS

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During 1977 there were numerous important changes in the law and administration of the 1972 Federal Water Pollution Control Act[1] affecting

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1. Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816, 33 U.S.C. §§ 1251-1376 (Supp. V 1975). Though the 1972 Act provides the legal basis for the federal water pollution control program, in fact it is a substantial amendment to the pre-existing Federal Water Pollution Control Act. The terms "FWPCA" or "the 1972 Act" as used here refer to the 1972 legislation.

III. NONPOINT SOURCE POLLUTION

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Although the Federal Water Pollution Control Act of 1972 (FWPCA)[1] has had its most immediate and visible impact on point source control, the federal government is becoming increasingly concerned with effective implementation of the Act's nonpoint source control provisions. Until very recently, federal water pollution control efforts failed to recognize nonpoint source pollution as a major threat to water quality. However, the passage of the 1977 Clean Water Act Amendments to FWPCA gave the nonpoint source program a new stimulus. This comment will discuss, first, the history of nonpoint source control under FWPCA, and second, significant developments in nonpoint source control which occurred during 1977 in all three branches of the federal government. Finally, there will be a brief assessment of the prospects for achieving needed nonpoint source pollution abatement in light of these developments.

I. BACKGROUND

"Nonpoint source" is a term used in discussing that type of water pollution which does not emanate from any "discernible, confined and discrete conveyance."[2] Examples of nonpoint sources are runoff from urban developments and agricultural, mining, and silvicultural locations. The most important nonpoint source pollutants are sediment; mineral pollutants such as acid mine drainage; brine and heavy metals; nutrients such as nitrogen and phosphorous; pesticides from agriculture, mining, silviculture and construction; biodegradable pollutants; thermal pollutants; radioactive pollutants; and microbial pollutants.[3]

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1. 33 U.S.C. §§ 1251-1376 (Supp. V 1975) (Federal Water Pollution Control Act of 1972, Pub. L. No. 92-500, §§ 101-517, 86 Stat. 816).

2. *Id.* § 1362(14) (Supp. V 1975). A nonpoint source is difficult to conceive since it is precisely the negative of a point source. "Nonpoint source" is not defined in the FWPCA. "Point source" is defined as: "any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged." *Id.*

In the 1977 amendments, the point source definition was amended to provide, "This term does not include return flows from irrigated agriculture." Pub. L. No. 95-217, § 33, 91 Stat. 1566 (amending 33 U.S.C. § 1362(14) (Supp. V 1975)). *See* notes 109 to 110 *supra*, and accompanying text.

3. OFFICE OF AIR AND WATER PROGRAMS, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, METHODS OF IDENTIFYING AND EVALUATING THE NATURE AND EXTENT OF NON-POINT SOURCES OF POLLUTANTS, (Oct. 1973, EPA 430/9-73-014).

In practice, it is often very difficult to distinguish between point and nonpoint sources.[4] Many sources of water pollution are not clearly "point" or "nonpoint," but display a variety of characteristics along the spectrum between these two classifications.[5] Furthermore, pollution from nonpoint sources can become a point source by flowing into a more discernible, confined conveyance such as a ditch or channel.

The diffuse, non-discrete nature of nonpoint sources renders them extremely difficult to monitor, let alone control.[6] Furthermore, nonpoint pollution problems are local in nature because the proximate cause of most nonpoint pollution is runoff that is greatly dependent upon local geologic and geographic conditions.[7]

The dimensions of the nonpoint source water pollution problem become more apparent as further information is gathered on the subject. Recent studies indicate that in some circumstances nonpoint sources are responsible for a greater percentage of pollution than are point sources.[8]

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4. The difficulty in differentiating between point and nonpoint sources was evident in NRDC v. Costle, Nos. 75-2056, 75-2066, 75-2067, 75-2235 (D.C. Cir. Nov. 16, 1977). In that case although the primary sources involved were nonpoint in nature—agricultural, silvicultural, and stormwater runoff—the EPA in administering the FWPCA had classified them as "point" sources, since they flowed into a point source.

The court of appeals, affirming the district court, held that the EPA was not authorized to exempt the sources in question from NPDES once it had classified them as point sources (*id.* at 27). The court did suggest, however, that the EPA might utilize a general or area permit system in such circumstances, and that it had some discretion in the definition of nonpoint sources subject to judicial review (*id.*).

5. While the classification of a source as point or nonpoint may at times seem arbitrary, *see* Zener, *The Federal Law of Water Pollution Control*, in FEDERAL ENVIRONMENTAL LAW 682 (E. Doglin and T. Guilbert eds. 1974) [hereinafter cited as Zener], the consequences of the classification can be enormous. In Sierra Club v. Abston Construction Co., 10 ENVIR. REP. (BNA) (ERC) 1416 (N.D. Ala. 1977), the District Court for the Northern District of Alabama dismissed a citizen suit under the FWPCA against a mining company after finding the mine drainage in question to be a nonpoint source. In reaching this conclusion, the court seems to have relied on the fact that though the runoff may have collected into and flowed in a drainage ditch made by the mining company, the drainage runoff also travelled through natural drainage ditches or a sediment basin before finally reaching the polluted river. The pollution therefore occured "naturally" in the view of the court (*id.* at 1419 n.18). The court's distinction seems anomalous to the extent that the point/nonpoint distinction should be based on the controllability of the source. Furthermore, the court's heavy reliance on the fact that Congress referred to mining activities as a nonpoint source is similarly misplaced. Many of the activities which FWPCA identifies as causes of nonpoint source pollution may also be point sources under certain circumstances as described in the text above.

6. W. RODGERS, HANDBOOK ON ENVIRONMENTAL LAW, § 4.4 at 375 (1977).

7. ENVIRONMENTAL AND NATURAL RESOURCES POLICY DIVISION OF THE CONGRESSIONAL RESEARCH SERVICE OF THE LIBRARY OF CONGRESS, SENATE COMMITTEE ON THE ENVIRONMENT AND PUBLIC WORKS, 95TH CONG., 1ST SESS., ENVIRONMENTAL PROTECTION AFFAIRS OF THE NINETY-FOURTH CONGRESS 91 (Comm. Print 1977) [hereinafter ENVIRONMENTAL PROTECTION AFFAIRS]. *See also* "Non-Point Source—Stream Nutrient Level Relationships: A Nationwide Study" (Document No. EPA 600/3-77-105). This 1977 report found a significant correlation between land uses and the nonpoint source nutrient concentrations in streams [1978] 8 ENVIR. REP. (BNA) (Curr. Dev.) 1392 (Jan. 13).

8. *Literature Review*, 49 J. WATER POLLUTION CONT. FED'N 1157 (June 1977); Whipple and Hunter, *Nonpoint Sources and Planning for Water Pollution Control*, 39 J. WATER

According to one report, if 1977 standards for municipal and industrial point sources were met, nonpoint sources alone would be responsible for 145 million pounds of suspended solids per day (92% of the total); 28.3 million pounds of nitrogen per day (79% of the total); 1.9 million pounds of phosporous per day (53% of the total); and over 98% of national loadings for fecal and coliform counts.[9] Furthermore, a Council on Environmental Quality report found that nonpoint sources were responsible for significant discharges of toxic pollutants.[10]

The principal pollutant from nonpoint sources is sediment from erosion caused by agricultural activities.[11] Over 400 million acres of cropland deliver two billion tons of sediment annually to streams and lakes.[12]

II. Statutory Framework

The Federal Water Pollution Control Act Amendments of 1972 was Congress' first real effort to control pollution from nonpoint sources.[13]

Pollution Cont. Fed'n 15 (Jan. 1977) (the author cites two reports showing that nonpoint source pollution in urban areas is as great if not greater than point source water pollution: Whipple *et al.*, *Unrecorded Pollution and Dynamics of Biochemical Oxygen Demand*, Water Research Inst., Rutgers Univ., (March 1974) (study finding that in three New Jersey basins, nonpoint sources of pollution accounted for more than half of the total amount of water pollution); Bryan, *Quality of Stormwater Drainage from Urban Land*, (paper presented at the 7th Conf. Amer. Water Resources Assn. 1971); *Rogers, supra* note 6, at 375 ("Pollutant loads of suspended solids, nutrients and coliform bacteria from non-point sources far exceed those from point sources.") *citing* at n.4 National Commission on Water Quality, Staff Draft Report on Water Quality Analysis and Environmental Impact Assessment of Public Law 92-500, IV-29 (Jan. 1976); Donley, Moss, Outen & Speth, *Land-Use Controls Under the Federal Water Pollution Control Act: A Citizen's Guide*, [1975] 5 Envt'l L. Rep. 50092, 50094.

A workshop on nonpoint sources found that 40 to 80% of the annual total of oxygen-demanding materials comes from stream-generated discharges. Furthermore, the annual amount of livestock wastes was estimated at around two billion tons, ten times the amount of human wastes. Total phosphorous emissions were estimated at 800,000 tons/yr. Environmental Protection Affairs, *supra* note 7, at 91, *citing* "Workshop on Nonpoint Sources of Pollution" Mar. 20-21, 1975, University of Illinois.

9. Environmental Protection Affairs, *supra* note 7, at 94.

10. *Focusing on nonpoint sources*, 48 J. Water Pollution Cont., Fed'n 3 (Jan. 1976). The CEQ study estimated that in a medium size city, discharges from storm runoff were responsible for between 6,000 and 30,000 lbs. of mercury each year (*id.* at 3).

11. Office of Water Program Operations, United States Environmental Protection Agency, Methods and Practices for Controlling Water Pollution from Agricultural Non Point Sources, vi. (Oct. 1973); United States Environmental Protection Agency, Compilation of Federal, State, and Local Laws: Controlling Nonpoint Pollutants, (EPA-470 19-75-011) [hereinafter cited as "Compilation of Laws"]

12. Office of Air and Water Programs, United States Environmental Protection Agency, Methods of Identifying and Evaluating the Nature and Extent of Non-Point Sources of Pollutants 7 (Oct. 1973, EPA 430/9-73-014).

13. Apart from the FWPCA, the Rivers and Harbors Act of 1899, 30 Stat. 1151, might also be employed to control nonpoint sources. Its broad coverage and harsh prohibition could be interpreted as encompassing nonpoint sources: "It shall not be lawful to throw, discharge, or deposit, or cause, suffer, or procure to be thrown, discharged, or deposited, any refuse

Because of the complex nature of nonpoint water pollution and a lack of experience in controlling it,[14] Congress pursued a different abatement and control strategy than for point sources.[15] The statute's nonpoint source provisions emphasize long-term planning and rely heavily on local and regional cooperation.

A. Section 208

In the original 1972 amendments to the FWPCA, the section 208 planning provisions are the only direct means of achieving nonpoint source control.[16] Generally, the provisions of section 208 are designed to develop and to implement areawide plans that will coordinate FWPCA's various water pollution abatement efforts. Plans must "be applicable to all wastes generated within the area involved."[17] Thus nonpoint sources are not the only subject of concern under section 208.[18]

Under section 208, the EPA is to assist state and local governments in carrying out their programmatic and planning responsibilities. There are

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matter of any kind or description whatever other than that flowing from streets and sewers and passing therefrom in a liquid state, into any navigable waters of the United States . . ." (33 U.S.C. § 407 (1970)). The FWPCA only exempts the NPDES program from the Rivers and Harbors Act. For a discussion of nonpoint source control and the Rivers and Harbors Act of 1899, see RODGERS, *supra* note 6, at 397 (§ 4.5).

14. UNITED STATES NATIONAL WATER COMMISSION, WATER POLICIES FOR THE FUTURE, FINAL REPORT TO THE PRESIDENT AND THE CONGRESS OF THE UNITED STATES 74 (1975).

15. For discussion of point source control *see generally* Part I of this Narrative.

16. 33 U.S.C. § 1288 (Supp. V 1975).

In the House Report these provisions were referred to as the "most important aspect of a water pollution control strategy," H.R. REP. No. 911, 92d Cong., 2nd Sess. 95 (1972).

For some recent discussion of the requirements of § 208 see the following articles: Comment, *A Procedural Framework for Implementing Nonpoint Source Water Pollution Control in Iowa*, 63 IOWA L. REV. 184 (1977); Tripp, *Tensions and Conflicts in Federal Pollution Control and Water Resource Policy*, 14 HARV. J. LEGIS. 225, 245-253, 265-268 (1977); Goldfarb, *Water Quality Management Planning: The Fate of 208*, 8 U. TOL. L. REV. 105 (1976); Montgomery, *Control of Agricultural Water Pollution: "A Continuing Regulatory Dilemma,"* 1976 U. ILL. L. F. 533; Donley and Hall, *Section 208 and Section 303, Water Quality Planning and Management, Where is it Now?*, [1976] 6 ENVT'L L. REP. 50115 (1976); Federman, *The 1972 Water Pollution Control Act: Unforeseen Implications for Land Use Planning*, 8 URB. LAW. 140 (1976); Jungman, *Areawide Planning Under the Federal Water Pollution Control Act Amendments of 1972: Intergovernmental and Land Use Implications*, 54 TEX. L. REV. 1047 (1975); Phillips, *Developments in Water Quality and Land Use Planning: Problems in the Application of the Federal Water Pollution Control Act Amendments of 1972*, 10 URB. L. ANN. 43 (1975). *See also* NATURAL RESOURCES DEFENSE COUNCIL, LAND USE CONTROLS IN THE UNITED STATES 68 (1977).

17. 33 U.S.C. § 1288(b)(1) (Supp. V 1975).

18. *Id.* § 1288(b)(2). The areawide waste management plans are also concerned with the future need for the construction of waste-treatment works to cope with anticipated municipal and industrial wastes. The plans must include:

> (A) the identification of treatment works necessary to meet the anticipated municipal and industrial wastes treatment needs of the area over a twenty-year period . . .
> (B) the establishment of construction priorities for such treatment works . . .
> (C) the establishment of a regulatory program . . .

several stages in this planning process. First, under section 208, the EPA is required to publish guidelines identifying areas with substantial water quality problems.[19] Next, the governor of each state must identify the problem areas within his or her state[20] and must designate an agency or other organization which will be responsible for developing an areawide waste treatment plan.[21] The state is the planning agency for all "undesignated" areas—those parts of the state not identified as problem areas.[22] Each planning agency must develop a "continuing areawide waste management planning process."[23] With regard to nonpoint control, areawide plans developed from the planning process must identify and set forth procedures and methods for controlling "to the extent feasible" any nonpoint sources of pollution related to agriculture, silviculture, mining, construction, salt-water intrusion, and hydrologic modifications.[24] Land-use controls are explicitly mentioned as one possible method of control.[25]

To finance the costs of the 208 planning process, the statute provides 100 percent funding in fiscal years 1973, 1974 and 1975, with up to 75 percent funding thereafter.[26] Fifty, one hundred, and one hundred and fifty million dollars in appropriations were originally authorized for fiscal years 1973 through 1975.[27] Under FWPCA section 208(f) this "budget authority" took the form of "contract authority."[28]

B. Other FWPCA Sections

The EPA's primary role in implementing section 208 has been to integrate its planning provisions with other FWPCA sections. The effectiveness of the nonpoint provisions of section 208, in particular, depends heavily on these other sections.

Section 208 is contained in the FWPCA subchapter entitled "Grants

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19. *Id.* § 1288(a)(1).

20. *Id.* § 1288(a)(2). The Act further provides for consultation among governors of neighboring states when they decide that interstate cooperative efforts would be most effective (*id.* § 1288(a)(3)).

21. *Id.* § 1288(a)(2). This organization includes elected officials or their designees.

Water quality problems to be considered by the governors, and local officials, and planning agencies developing plans include, but are not limited to nonpoint sources. If the governor fails to identify an area which has substantial water quality problems, local elected officials within that area may do so, and may also appoint a planning agency. *Id.* § 1288(a)(4). Areawide plans under § 208 implement the goal Congress stated in 33 U.S.C. § 1251(a)(5) which declares: "It is the national policy that areawide waste treatment management planning provisions be developed and implemented to assure adequate control of sources of pollutants in each state."

22. *Id.* § 1288(a)(6).

23. *Id.* § 1288(b)(1).

24. *Id.* § 1288(b)(2)(F)-(I).

25. *Id.* § 1288(b)(2)(F)-(H).

26. *Id.* § 1288(f)(2).

27. *Id.* § 1288(f)(3).

28. *Id.* § 1288(f). Budget authority can be of three different types: appropriations, contract authority, and bor rowing authority. (THE BUDGET OF THE UNITED STATES-FY1978 at 229).

for Construction of Treatment Works."[29] Generally, the subchapter establishes a statutory scheme providing municipalities with federal financial assistance in the development and implementation of methods for "preventing, abating, reducing, treating, separating, or disposing of municipal waste . . ."[30] Section 201 states that one of the purposes of the subchapter is control "to the extent practicable of nonpoint sources."[31] Since grants cannot be approved by the EPA unless the proposed treatment works is "consistent with the purposes of [the] subchapter,"[32] this provides the EPA with an effective mechanism for requiring nonpoint source control.[33]

In addition, section 303 provides generally for establishment of state-wide regulatory programs: promulgation of water quality standards, identification of areas with insufficient controls, and state-wide continuing planning processes.[34] These processes are broader than ones developed pursuant to section 208. While a state-wide process contains "all elements of any applicable area-wide waste management plans,"[35] it also includes such features as state effluent limitations and schedules of compliance for point sources.[36] Under the original amendments, a governor who determines that state-wide nonpoint source control is necessary to achieve an adequate section 303 state-wide regulatory program must develop and submit to the Administrator procedures for identifying and controlling nonpoint sources to the extent feasible, "for application to all regions within such state."[37] This provision gives a governor power to institute a state regulatory program for nonpoint sources which bypasses the areawide section 208 planning.

The EPA has interpreted section 208 together with section 303 to require that all states adopt anti-degradation policies in their continuing planning processes.[38] According to the language of the EPA regulation,

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29. 33 U.S.C. §§ 1281-1297 (Supp. V 1975).

30. *Id.* § 1292(2)(B).

31. *Id.* § 1281(c).

32. *Id.* § 1281(g)(2)(A).

33. For discussion of how EPA is actually using this mechansim to force muncipalities to comply with nonpoint source control requirements see notes 132 to 133 *infra*, and accompanying text.

34. 33 U.S.C. § 1313 (Supp. V 1970).

35. *Id.* § 1313(e)(3)(B).

36. *Id.* § 1313(e)(3)(A). It is quite possible to develop one continuing planning process for a whole state under § 208. Rhode Island and Connecticut have designated their entire states as one area for § 208 planning purposes. OFFICE OF WATER AND HAZARDOUS MATERIALS, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, WATER QUALITY MANAGEMENT DIRECTORY 7, 17(2d ed. Sept. 1977). Nevertheless, this planning provision is distinct from the process developed under FWPCA § 303(e) as it has a more limited scope.

37. *Id.* § 1288(b)(4). This subsection was in neither the original Senate bill nor the House bill, but emerged from the Conference Committee, 2 U.S. CODE CONG. & AD. NEWS, 92nd Cong., 2nd Sess. 3793-3795 (1972). Although this is not clear from the statutory language, the adequacy of a § 303 program should turn on its ability to attain national water quality goals. This provison has been substantially revised in the new amendments. *See* notes 110 to 114 *infra*, and accompanying text.

38. 40 Fed. Reg. 55,341 (1975); 40 C.F.R. § 130.17(e) (1976). *See* NRDC, *supra* note 16, at 78-79.

degradation of existing high quality waters "necessary to support fish, shellfish, wildlife, and recreation"[39] is allowed only "as a result of necessary and justifiable economic or social development"[40] and no lowering of water quality that will interfere with or injure existing in-stream uses or degrade "high quality waters which constitute an outstanding National Resource"[41] may occur. Since this policy is applicable to any source of pollution, it has the practical effect of providing effluent limitations on nonpoint sources.[42]

Two other provisions of the FWPCA are related to section 208 and nonpoint sources. Under section 304, the EPA must assist states and localities by publishing information concerning identification and control of nonpoint sources.[43] Secondly, section 305(b)(1)(E) requires the states to submit annual water quality reports to the EPA describing the nature and extent of nonpoint source pollutants and recommending programs to control each category of nonpoint sources.[44]

III. Problems With 1972 FWPCA Nonpoint Program

A. Statutory Framework

The nonpoint program established by the 1972 amendments had several serious drawbacks. First, the Act established unreasonably short statutory deadlines for developing long-term comprehensive planning. The original deadlines required that initial areawide waste management

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39. 40 C.F.R. § 130.17(e) (1976).

40. *Id.* at § 130.17(e)(2).

41. *Id.* Examples given of such outstanding national resources are waters of national and state parks.

42. For a detailed discussion of non-degradation, see Hines, *A Decade of Nondegradation Policy in Congress and the Courts. The Erratic Pursuit of Clean Air and Clean Water,* 62 Iowa L. Rev. 643 (1977). The author contends that the language and history of the FWPCA provides a stronger justification for the courts sustaining a non-degradation standard than the Clean Air Act did.

When the EPA was considering the anti-degradation requirements, certain industries, fearing their impact on nonpoint source control, voiced their concern, asserting that the FWPCA did not authorize EPA adoption of such a policy. *Id.* at 678 n.180. In Commonwealth Edison Co. v. Train, No. 75-64127 (N.D. Ill., *dismissed without opinion* Feb. 1977), ten power companies challenged the validity of the EPA anti-degradation requirements, claiming that they were arbitrary and capricious, and unconstitutional. [1977] Envt'l L. Rep. (Pending Litigation) 5320-21, 5368, 5395-96.

In some recent suits involving nonpoint sources, the Environmental Defense Fund has alleged that the EPA is violating the non-degradation requirements. In EDF v. Costle, 439 F. Supp. 980 (E.D.N.Y. 1977), the Court rejected EDF's claim that the EPA's granting of a section 402 permit to an ocean sewer outfall was illegal. EDF claimed that the outfall led to lowered stream flows and increased salt-water intrusion, both in violation of state and federal non-degradation requirements. In EDF v. Costle, No. 77-1436 (D.D.C., filed Aug. 22, 1977) EDF is contending that the EPA should not have approved certain state salinity standards that are alleged to violate federal anti-degradation policy. [1977] Envt'l L. Rep. (Pending Litigation) 65488.

43. 33 U.S.C. § 1314(e).

44. 33 U.S.C. § 1315(b)(1)(E).

plans be completed and certified by each governor before July, 1976.[45] This presented a monumental task for state and local governments. After the EPA published guidelines for identification of problem areas, the governors had only sixty days to identify those areas.[46] Planning agencies had only one year to formulate the continuing areawide planning process and two additional years to complete the initial plan.[47] Furthermore, under section 303(e) the states had only 120 days after October 18, 1972 to submit their continuing planning processes to the EPA for approval.[48]

These deadlines were particularly harsh for nonpoint sources because control of those sources inevitably will require the development of controversial and entirely new land-use management techniques.[49] Without adequate time to study nonpoint problems, planning agencies will be forced to submit hastily drafted plans.[50]

A second problem is the broad discretion that the EPA, the states, and the planning agencies have in determining the degree and type of nonpoint source control to be implemented.[51] For example, the Act proclaims that procedures must be developed to control nonpoint sources "to the extent feasible"[52] but it does not suggest what factors are relevant to feasibility.[53] The EPA has said that section 208 plans must control nonpoint sources by using "best management practices,"[54] which the agency vaguely defines as "a practice, or combination of practices, that is determined by a State . . . to be the most effective practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals."[55]

The problems caused by this discretion are exacerbated since land-use planning, the major technique for controlling nonpoint sources, is a highly controversial political topic. As a consequence, local and state officials tend to avoid developing or implementing mandatory land-use controls.[56] A recent report found that many section 208 planning agencies are promoting voluntary compliance rather than mandatory controls for non-

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45. 33 U.S.C. § 1288(a)(1) (Supp. V 1975); *Id.* § 1288(a)(2); *Id.* § 1288(b)(1).

46. *Id.* § 1288(a)(2).

47. *Id.* § 1288(a)(1).

48. *Id.* § 1313(e)(1).

49. Communities are especially sensitive to any hint of federally mandated land-use planning. The FWPCA recognized that land-use controls might be necessary for nonpoint control. *Id.* § 1288(b)(2)(F)-(H).

50. Whipple, *Nonpoint Sources and Planning for Water Pollution Control*, 49 J. WATER POLLUTION CONT. FED'N 15, 22 (Jan., 1977).

51. For discussion of problems of discretion in point source regulation under the FWPCA, a program which is far more rigid than the nonpoint source program, see Tennille, *Federal Water Pollution Control Act Enforcement from the Discharger's Perspective: The Uses and Abuses of Discretion*, [1977] 7 ENVT'L L. REP. 50091.

52. 33 U.S.C. § 1288(b)(2)(F)-(H).

53. In contrast, for point sources, § 304 provides that both technological and cost factors should be considered. *See* Goldfarb, *supra* note 16, at 126.

54. 40 C.F.R. § 131.11(j) (1976).

55. *Id.* at § 130.2(q).

56. Goldfarb, *supra* note 16, at 126.

point sources.[57] The report found that although planning agencies believe that nonpoint source controls are badly needed, such controls involve issues too "controversial,"[58] "politically sensitive,"[59] and "touchy."[60]

Finally, section 208 provides no effective mechanisms to force state and local officials to carry out their obligation to develop and implement waste control plans and planning processes.[61] Unlike the Clean Air Act,[62] FWPCA has no provision allowing the Administrator to write her own enforceable plan if one is not submitted to her or the one submitted is inadequate. In any case, it is doubtful that the EPA has the necessary resources to perform such a task on a national level. While it is possible that the EPA could withhold funds as a sanction,[63] such threats might not be particularly effective in the short term,[64] nor would they be very wise

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57. Areawide Water Quality Management Program Survey, prepared for Water Planning Division, Environmental Protection Agency, by Centaur Management Consultants Inc., Pts. I and II at 8, Pt. II (March 1977 Summary.) The major factors affecting agency decisions seem to be political acceptability and funding. Also of concern were feelings of antiregionalism and conflicts between environmental and local community interests. *Id.*

58. *Id.* at 20, Pt. I (August 1976 Summary.)

59. *Id.* at 21.

60. *Id.* at 20.

61. Goldfarb, *supra* note 16, at 120; Zener, *supra* note 5, at 768-769 (it is "unlikely that 208 can be used by citizens or the Federal Government to force states and regional agencies to adopt non-point source control programs more stringent than the state or regional agency itself desires to undertake.")

The absence of any enforcement sanctions in section 208 was relied upon in a recent circuit court decision, NRDC v. Costle, No. 75-1873 (D.C. Cir. Sept. 6, 1977). The Court of Appeals, rejecting the argument that 208 violates the Tenth Amendment by compelling states to expend their own funds and use their own powers in implementing federal regulatory programs noted that "the Act contains no provision for enforcement of any obligation . . . [against] a State under section 208 . . . the EPA may of course employ the accepted and traditional means of gaining state compliance by withholding funds under section 208(f) . . ." (*id.* at 13) without violating the Tenth Amendment. Note that this referred only to 208(f) funding. For a contrary evaluation of the utility and constitutionality of withholding funds, *see* Stewart, *Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 YALE L. J. 1196, 1251, 1253 (1977).

In its 1976 Annual Report, The Council on Environmental Quality questioned whether the § 208 planning agencies had the necessary authority to cope with the nonpoint source problems. COUNCIL ON ENVIRONMENTAL QUALITY, SEVENTH ANNUAL REPORT 23 (1976); RODGERS, *supra* note 6, at 431.

62. Clean Air Act § 110(c)(1)(B), 42 U.S.C. § 1857c-5(c)(1)(B) (to be codified in 42 U.S.C. § 7410(c)(1) (B)).

63. Unquestionably, there is statutory authority allowing the EPA to withhold funds. The EPA may (1) withhold § 208 funds, (2) condition the granting of funds for the construction of waste treatment facilities under § 201 and § 208, or (3) withhold all federal program grants, since development of § 208 plans is an express purpose of the Act (§ 101(a)(5)) and all purposes are made conditions of the program grants (§ 106(f)(3)). *See generally* Zener, *supra* note 5, at 768; Goldfarb, *supra* note 16, at 121-123.

64. Goldfarb, *supra* note 16, at 122-23. He argues that the nature of § 208 programs, the form of funding through advances, rather than reimbursements, and the problems of trying to discern inadequacies of plans before the end of the planning process diminish the effect of such sanction. There is also a related question of whether the EPA has sufficient resources to decide on the adequacy of plans. Finally, it is questionable whether the EPA can afford to bring an entire state water clean-up program to a halt.

strategically, considering the need for long-term cooperation by states and localities in order to implement and enforce the plans.[65] Furthermore, cutting off major sources of federal funds could be counter-productive in terms of the overall pollution abatement effort, as well as constitutionally suspect.[66] Moreover, the Act creates no civil remedies for a violation of section 208.[67] Indeed, at least one court has held that a citizen suit cannot be maintained against a nonpoint source polluter.[68]

These inherent weaknesses in section 208 demonstrate the need for more centralized control of the nonpoint program. A centralized, accountable authority could pool informational resources, provide coordination, and avoid duplication of effort. State governments could probably provide effective centralized control. Limited resources and the need for local cooperation place practical constraints on the degree of federal intervention possible. Greater responsibility at the state level would provide an authority closer to the actual planning agencies but readily susceptible to EPA supervision.

B. 208 Implementation Delay

The achievement of water quality goals has also been hampered by delays in the implementation of section 208. Opposition to federally-mandated land-use planning,[69] federal government reluctance to provide funding,[70] unrealistic statutory compliance timetables,[71] section 208's low ranking on the EPA's list of priorities,[72] and lack of EPA planning expertise[73] have all been citied as reasons for the delay.

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65. A discussion of the need for federal, state, and local cooperation toward workable environmental programs appears in Stewart, *supra* note 61. Stewart discusses the present need for land-use planning and monitoring, rather than end-of-pipe solutions, and the related need for cooperation at the local level. *Id.* at 1202.

66. *See* note 61 *supra*. For a discussion of the constitutionality of the federal government forcing states to adopt transportation controls plans pursuant to the Clean Air Act, see pages 23 to 33.

67. 33 U.S.C. §§ 1319, 1365, 1369 (Supp. V 1975). One commentator, however, has suggested that a citizen might be able to obtain an injunction under federal common law requiring a state to adopt an adequate § 208 plan. Zener, *supra* note 5, at 769.

68. In Sierra Club v Abston Construction Co., 10 ENVIR. REP. (BNA) (ERC) 1416 (N.D. Ala. 1977), the court held that a citizen suit could not be maintained against a mining company for its nonpoint pollution (*see* note 5 *supra*). The court noted that under the 1972 enactment, nonpoint programs could only identify and study the problem.

69. Comment, *A Procedural Framework for Implementing Nonpoint Source Control in Iowa*, *supra* note 16, at 187.

70. Tripp, *supra* note 16, at 246; Goldfarb, *supra* note 16, at 116 (OMB resisted full funding of § 208).

71. *To Amend and Extend Authorizations for the Federal Water Pollution Control Act: Hearings before the Subcommittee on Water Resources of the Committee on Public Works and Transportation on H.R. 3199*, 95th Cong., 1st Sess. 348 (1977) (statement of John Quarles, acting EPA Administrator) [hereinafter cited as *Hearings*].

72. Overview, EPA Water Strategy Paper, [1975] 5 ENVIR. REP. (BNA) (Curr. Dev.) 1893, 1896 (Mar. 28).

73. Goldfarb, *supra* note 16, at 116.

Clearly, the major reason for delay was the EPA's failure to publish adequate guidelines promptly. Regulations concerning the section 208 grants program were not available until May 1974, and did not become effective until September 1974. By then areawide planning agencies could no longer apply for any of the funds authorized for fiscal year 1973.[74] Implementation regulations due in January 1973, were not published until September 1973.[75] Moreover, these regulations were later found to be invalid.[76] Acceptable guidelines to assist the states and localities in identifying areas with water problems and designating agencies to develop areawide plans were not published until November 1975.[77] Since the section 208 timetable was contingent upon publication of these guidelines,[78] this produced a chain-reaction of delays in the entire planning process.[79] These delays have had adverse financial consequences as well. The section 208 funding provisions were coordinated with the original timetable of planning provisions with no allowance for delays in designating planning agencies.[80] Therefore, only about 13.5 million of 150 million dollars authorized for appropriation in fiscal years 1973 and 1974 were actually granted to state, regional, and local planning agencies.[81] The EPA has steadfastly contended that it has no power to apportion the unspent money in later fiscal years.[82]

Implementation problems also strike at the very core of section 208 by delaying the comprehensive planning which is necessary to integrate various water pollution control efforts under FWPCA. Section 208 was designed to integrate local decisions on construction of waste treatment facilities with the section 208 nonpoint program. Unfortunately these two parts of the scheme have now fallen out of "synchronization."[83] Con-

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74. 38 Fed. Reg. 25,681 (1973).

75. 39 Fed. Reg. 17,201 (1974). *See* H.R. REP. No. 139, 95th Cong., 1st Sess. 10 (1977).

76. NRDC v. Train, 396 F. Supp. 1386, 1391 (D.D.C. 1975) *aff'd sub nom.* NRDC v. Costle, 564 F.2d 573 (D.C. Cir. 1977).

77. 40 Fed. Reg. 55,321, 55,343 (1975).

78. 33 U.S.C. § 1288(a)(2).

79. H.R. REP. No. 139, *supra* note 75, at 10.

Furthermore, the new guidelines led to identification of even more areas with substantial water quality problems thereby increasing the number of agencies affected by the delays. *Id.* The new guidelines provide that a state acting as the planning agency for non-designated areas must develop plans of the same scope as those devised for designated areas. In all 149 designations were approved by EPA between July 1974 and July 1975, most occurring in the last two months. *Id.*

80. 33 U.S.C. § 1288(f)(2)-(3) (Supp. V 1975).

81. No money was obligated to be paid in 1973 and only eleven grants totalling $13,575,000 were made in 1974. Due to the number of new planning agencies designated in 1975, the entire $150 million authorized for that fiscal year was appropriated. In fact, 17 agencies did not receive any funds. H.R. REP. No. 95-139, *supra* note 75, at 10. The following awards were made in fiscal year 1976: $41,019,661 to forty-nine state planning agencies, $9,445,412 to 27 areawide planning agencies, and $2,553,396 for four grant increases. OFFICE OF WATER AND HAZARDOUS MATERIALS, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, WATER QUALITY MANAGEMENT DIRECTORY 153-54 (2d ed. Sept. 1977).

82. *See* note 103 *infra*.

83. Phillips, *supra* note 16, at 75.

tinued construction of massive waste treatment facilities without adequate section 208 guidance may lead to irreversible adverse effects on overall water quality.[84]

C. Ramifications

Although the massive dimensions of nonpoint source pollution are becoming better understood, section 208,[85] if it functions as it has in the past, holds little promise of providing needed nonpoint control.

Many environmental authorities fear that inherent weaknesses in the section 208 program, combined with delays in implementing nonpoint source controls, will prevent attainment of the 1983 goal of fishable, swimmable waters.[86] Recently the General Accounting Office issued a report criticizing the EPA's role in implementing nonpoint source control programs and concluded that without improvements in nonprint programs national water quality goals will not be met.[87] The National Commission on Water Quality has gone even further, speculating that nonpoint sources "may even overwhelm the improvements resulting from the control of point sources."[88]

IV. CURRENT DEVELOPMENTS

The most important development in 1977 was the passage of the new amendments to the FWPCA. These amendments, a recent court decision, and several EPA initiatives provide a revised context in which to evaluate the potential for controlling nonpoint sources under the FWPCA.

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84. Tripp, *supra* note 16, at 251-253.

The problems raised in the case, EDF v. Costle, 439 F. Supp. 980, (E.D.N.Y. Sept. 16, 1977), are indicative of what can happen when the § 208 program falls out of synchronization with the construction grants program. (*See* note 42 *supra*.) One participant in last year's House Hearings commented; "It is the divorcing of planning from the construction program that has served to retard achievement of the tangible results envisioned by Congress." Hearings, *supra* note 68, at 112 (statement of the Water Pollution Control Federation).

85. *See* notes 8 to 12 *supra* and accompanying text.

86. [1978] 8 ENVIR. REP. (BNA) (Curr. Dev.) 1337 (Jan. 7) (GAO Report says that without nonpoint control improvement, national water quality goals will not be met); STEWART AND KRIER, ENVIRONMENTAL LAW AND POLICY V/180 (draft 1978) (the authors felt that nonpoint sources of pollution would be a "serious obstacle" to attainment of FWPCA water quality goals); Whipple, *supra* note 86, at 15, quoting the Council on Environmental Quality in its 1974 annual report: "Until the stormwater situation is analyzed and efficient corrective measures taken, there is little or no sense in seeking higher levels of treatment efficiency in secondary plants."

87. [1977] 7 ENVIR. REP. (BNA) (Curr. Dev.) 1337 (Jan. 7). Entitled "National Water Quality Goals Can't Be Attained without More Attention to Pollution from Diffused or Nonpoint Sources," the GAO report's main criticisms focused on the EPA's failure to define adequately, and to provide data on, impacts of different means of nonpoint control. Without this information, short-term actions taken by § 208 agencies might actually lead to long-term increases in nonpoint-source-caused water quality degradation.

88. *Focusing on nonpoint sources*, 48 J. WATER POLLUTION CONT. FED'N 3 (January 1976).

A. Judiciary

In *NRDC v. Costle*[89] the D.C. Circuit Court held that plans which a state prepares for non-designated areas must be of the same scope as those prepared for designated areas and that section 208 funds should be made available to state agencies preparing the plans. The court of appeals affirmed the district court's holding, quoting at length from that opinion.[90]

Basically, both courts reasoned that uniformly comprehensive plans were necessary to attain FWPCA's goal of clean waterways by 1983. Since only five percent of the nation's waters were "designated" at the time,[91] to hold either that a planning agency need not develop a section 208 plan for non-designated areas[92] or that "a state could fulfill its 208 planning requirements for undesignated areas by planning under section 303(e) of the Act"[93] would have rendered the nonpoint provisions of section 208 practically meaningless.[94] The court of appeals agreed with the district court that the section 208 nonpoint provisions were an important feature of FWPCA and were not meant "to be the exception rather than the rule."[95] However, the court also apparently agreed with the district court that in some instances the plans for non-designated areas need not be as intensive as those for designated areas.[96] "Intensive" and "comprehensive" are distinct terms, in that the former is concerned with depth of planning in any one specific facet of the plan, whereas the latter is concerned with the entire scope of the plan.

B. Legislative

The Clean Water Act of 1977[97] which substantially amends the FWPCA contains numerous provisions bearing upon nonpoint source control.[98] (See table on page 191.) Congress, choosing between switching

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89. 564 F.2d 573 (D.C. Cir. Sept. 6, 1977). After the district court decision, the EPA, the defendent, voluntarily dismissed its appeal (which defendant-intervenor National Forest Products Association (NFPA) took over) and intervened in favor of the lower court ruling. *See* discussion note 77 *supra* on the EPA's subsequent revised guidelines.

90. NRDC v. Train, 396 F. Supp. 1386 (D.D.C. 1975).

91. NRDC v. Costle, 564 F.2d at 576.

92. *Id. See* 40 C.F.R. Pt. 126, 38 Fed. Reg. 25,681 (Sept. 14, 1973).

93. 564 F.2d at 576. *See* 40 C.F.R. Pt. 130 & 131, 39 Fed. Reg. 19, No. 634 (June 3, 1974).

94. 564 F.2d at 576-578.

95. *Id.* at 577.

96. *Id.*

97. Pub. L. No. 95-217, 91 Stat. 1566 (December 27, 1977). *See* [1978] 8 ENVIR. REP. (BNA) (Curr. Dev.) 1347 (Jan. 6).

98. The House passed H.R. 3199 on April 5, 1977. The Senate amended H.R. 3199 to conform to its own S.R. 1952, passed it by a large majority on a voice vote, and appointed its conferees on August 14, 1977. On September 29, 1977, the House rejected the Senate bill and appointed its own conferees. Conference agreements were reached in mid-November (Pelham, *Water Pollution Conference Agreement Reached*, 34 CONG. QUART. WEEKLY REP. 2438 (1977)), and the bill was reported in the House on December 6 (CONF. REP. ON H.R. 3199, WATER POLLUTION CONTROL ACT AMENDMENTS OF 1977, H.R. REP. No. 830, 95th Cong., 1st Sess. (1977) *as reprinted in* 123 CONG. REC. H-12690 (daily ed. Dec. 6, 1977) [hereinafter

to a completely regulatory system or continuing the existing program, reaffirmed section 208's approach to nonpoint sources.[99] However, significant procedural and substantive changes were made. The Senate Committee, whose bill supplied all of the substantive changes concerning nonpoint control, made clear its determination that nonpoint source control will no longer be a low priority item.[100]

The amendments address many of the major procedural ills that have plagued the section 208 program since its inception. First, they provide renewed funding for section 208 with authorizations of 150 million dollars for each of the fiscal years 1977-1980.[101] In addition, the funding is now under a "continuing" budget authorization,[102] rather than "one-shot" funding of the type that led to the problems in a recent case, *NARC v. Costle*.[103] Finally, the new provisions relax the compliance schedule by giving state agencies three years from the time of their initial grants to complete the inital plans.[104]

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cited as CONFERENCE REPORT]. It passed both chambers on December 15. *Congress Votes Clean Water Rule*, N.Y. Times, December 16, 1977, § A, at 10.

99. S. REP. No. 370, 95th Cong., 1st Sess. 9 (1977).

100. S. REP. No. 370, *supra* note 99, at 8-9. In deciding that nonpoint source control was still best "left to the level of government closest to the sources of the problem," (*id.* at 9) the Committee made it clear that "that should not be interpreted as a lack of concern . . . . (T)he committee clearly intends 208 to produce specific nonpoint source abatement programs . . ." *Id.*

101. Pub. L. No. 95-217, § 4(e), 91 Stat. 1566 (amending 33 U.S.C. § 1288(f)(3) (Supp V 1975)).

102. Pub. L. No. 95-217, § 31(c), 91 Stat. 1566 (amending 33 U.S.C. § 1288(f)(3) (Supp. V 1975)).

103. National Association of Regional Councils v. Costle, 564 F.2d 583 (D.C. Cir. 1977) was a suit brought by the NARC to force the EPA's release of 137 million dollars in unobligated authorized funds for the 1973 and 1974 fiscal years, and to provide 100% funding to agencies receiving the grants. The District Court ruled in favor of NARC, finding that the impounded funds should be financed with 100% federal funding rather than 75% until the unspent funds were completely obligated. NARC v. Train, 8 ENVIR. REP. (BNA) (ERC) 2025 (D.D.C. 1976).

In a unanimous opinion, the court of appeals first ruled that, because Congress had not explicitly given the EPA "continuing" contract authority under FWPCA, and since the suit was filed after EPA's "budget authority" for fiscal years 1973 and 1974 had lapsed, funds not obligated by the EPA during those years could not be made available by the court. NARC v. Costle, 564 F.2d at 588-590.

The court did conclude, however, that because the EPA's delays prevented the states from setting up planning agencies while 100% funding was available under the statute, such agencies would be entitled to 100% funding to the extent of the unobligated funds for 1973 and 1974 if Congress made further appropriations to the program. *Id.* at 591-92. The court felt that it was Congress' intent that "startup" financing for 208 planning agencies be at the 100% level. *Id.* Historically, this was a case whose outcome seemed likely to determine the future of the section 208 program. However, passage of new Clean Water Act amendments independently provided increased 100% section 208 funding. Apparently to avoid confusion in how the EPA was to allocate these funds in light of the *NARC* decision, the Conference Report for the 1977 amendments specifically provided that its authorizations for more § 208 funds were not related to the decision in *NARC*, and were not to be used in any way to meet any order resulting from that decision (CONFERENCE REPORT, *supra* note 98 at H-12710).

104. Pub. L. No. 95-217, § 31(a), 91 Stat. 1566 (amending 33 U.S.C. § 1288(b)(1) (Supp. V 1975)).

Although the basic structure of section 208 remains intact, significant steps toward establishment of a regulatory nonpoint control program were taken. It is especially noteworthy that in several sections of the amendments Congress adopts the EPA's "best management practices" terminology, a hybrid policy which seeks to abate pollution through both technology and procedure-forcing, aimed at prevention rather than treatment of wastes.[105] As one example of this, a new program administered by the Secretary of Agriculture provides owners and operators of rural land with technical advice and financial assistance in developing best management practices to reduce nonpoint source pollution.[106]

Rural land owners and operators will be eligible for assistance covering up to 50% of the expenses incurred in reducing nonpoint source pollution. Two hundred million, and four hundred million dollars respectively are authorized for appropriation in fiscal years 1979 and 1980.[108]

This new program marks a clear departure from the original decentralized approach of section 208. Although there must be an approved section 208 plan in the area before an agricultural cost-sharing plan may be used, the plan is implemented by a federal agency, the Department of Agriculture, rather than through state and local agencies. Since contracts are made with the landowner, federal monetary subsidies are being used directly for nonpoint source control.

Aside from its significance in showing Congress' willingness to use a more centralized authority to implement a nonpoint source control program at the local level, the cost-sharing plan is a pragmatic approach to the problem of agricultural nonpoint sources. Subsidies are designed to make farmers more willing to adopt best management practices in order to comply with section 208 requirements. Moreover, after these measures are developed and implemented it will be much easier to promulgate regulations requiring the use of such practices. The need for a regulatory program for control of nonpoint sources has become even more pressing in light of the new amendments explicitly excluding "irrigation return flows" from point source regulation and including them in nonpoint source programs.[109] Of course, the success of any nonpoint source con-

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105. *See* text accompanying notes 54 to 55 for definition of the EPA's requirement of best management practices.

106. Pub. L. 95-217, § 35, 91 Stat. 1566 (amending 33 U.S.C. § 1288 (Supp. V 1975)).

107. S. REP. No. 370, *supra* note 99; H.R. REP. No. 139, *supra* note 75; CONFERENCE REPORT, *supra* note 98, at H-12690-12722.

108. Pub. L. No. 95-217, § 35, 91 Stat. 1566 (amending 33 U.S.C. § 1288 (Supp. V 1975)).

109. Pub. L. No. 95-217, § 33, 91 Stat. 1566 (amending 33 U.S.C. §§ 1288(b)(2)(F), 1342(1), 1362(14) (Supp. V 1975)). The Senate in its report defined irrigation return flows as "[c]onveyances carrying surface irrigation return as a result of the controlled application of water by any person to land used primarily for crops." (S. REP. No. 95-370, *supra* note 99, at 35).

Congress' decision to drop irrigation return flows was a result of intense political pressure from farmers who voiced great opposition to meeting the burden of NPDES compliance (*See Will the Family Farm Survive in America, Joint Hearings before the Senate Select Committee on Small Business and the Senate Committee on Public Works and the Committee on Agriculture and Forestry*, 94th Cong., 1st Sess., Pt. 2 (Oct. 21-22, 1975)) and of

MAJOR AMENDMENTS AFFECTING NONPOINT SOURCE CONTROL[107]

Section	Senate Version	House Version	Final Bill
208(b)(1)	states given three years after initial grant to prepare final plan	no provision	senate version adopted
208(b)(4)(B)	adds a program for development of best management practices to reduce destruction of wetlands from point and nonpoint sources and placement of dredge and fill	no provision	senate version essentially adopted but limited to dredge-and-fill placement
208(f)(2)	all designated agencies and state planning agencies designated before October 1, 1978, to receive up to 100 per cent federal funding for first two years	all designated agencies to receive 100 percent federal funds for two years, if grant approved before October 1977	each initial 208 grant to be at 100 percent for a 2-year period if approved before October 1, 1977
208(i)	program administered by Secretary of Agriculture to assist landowners and operators of rural areas in reduction of nonpoint source pollution	no provision	senate version essentially adopted but clarified to give Secretary more flexibility
208(f)(3)	150 million dollars authorized to be appropriated for fiscal years 1978-1980	150 million dollars authorized to be appropriated for fiscal years 1977-1978	150 million dollars authorized to be appropriated for fiscal years 1977-1980
304(e)	"housekeeping" activities of point source dischargers of toxic and hazardous pollutants now subject to EPA control under § 402 permit process	no provision	senate version essentially adopted
504(12)	irrigation return flows specifically excluded from definition of point sources	no provision	senate version adopted

trol program will depend on the degree of local cooperation. Farmers, ranchers, and other rural landowners are extremely sensitive to increases in cost and, if they did not receive financial incentives, would be serious obstacles to progress.

Two major amendments concern a governor's ability to initiate a state-wide nonpoint source control program under section 208(b)(4) when he determines that such a plan is necessary for an adequate state-wide regulatory program under section 303. One amendment authorizes the EPA to make grants available to states to assist them in the administration of a state-wide nonpoint program.[110] Under this amendment, however, these grants must be in addition to funds that the state is already receiving from the EPA for the administration of a state-wide construction grants program.[111] Therefore, to be eligible for EPA financial assistance for the administration of a nonpoint program, the state must administer a construction grants program. A second amendment extends the scope of section 208(b)(4) to include consideration of section 404 issues of wetland destruction.[112] Dredge-and-fill activities involve both point and nonpoint sources of water pollution. Congress felt that these activities could often best be dealt with by state-wide planning.[113] The program's goal is the development and application of best management practices.[114]

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testimony in field hearings that indicated that point source regulation was not suitable for irrigation return flows (S. REP. No. 370, *supra* note 99, at 35).

This decision to drop irrigation return flows from point source control reduces the impact of the recent decision in NRDC v. Costle, No. 75-2056, 75-2066, 75-2067, 75-2235 (D.C. Cir. Nov. 16, 1977) (court held that the EPA could not exempt certain point sources from the NPDES program). *See* note 4 *supra*.

110. Pub. L. No. 95-217, § 26(a), 91 Stat. 1566 (amending 33 U.S.C. § 1285 (Supp. V 1975)). The amendments also change the previous provisions by requiring that governors henceforward must obtain approval from the EPA Administrator before using their authority under § 208(b)(4) to establish a statewide nonpoint program. Pub. L. No. 95-217, § 34,91 Stat. 1566 (amending 33 U.S.C. § 1288(b)(4) (Supp. V 1975)). Under the old provision, EPA's role was unclear. The statute merely provided that governors must submit their proposals to the Administrator. There was no reference to EPA approval. For discussion of FWPCA § 208(b)(4) *see* note 34 *supra*, and accompanying text.

111. Pub. L. No. 95-217, § 26(a), 91 Stat. 1566 (amending 33 U.S.C. § 1288(b)(4) (Supp. V 1975)). This amendment authorizes for each fiscal year up to "2 percentum of the allotment made to each state under this section on or after October 1, 1977, or $400,000 whichever amount is the greater." *Id.*

112. Pub. L. No. 95-217, § 34, 91 Stat. 1566, (amending 33 U.S.C. § 1288(b)(4) (Supp. V 1975)). (*See* article by Edward Thompson on dredge and fill in this volume of HELR.)

113. S. REP. No. 270, *supra* note 99, at 10-11. Under the original Senate version, this new program applied not only to dredge and fill activities, but also to other point and *nonpoint* sources threatening wetlands. *Id.* Moreover, it provided that unless a governor obtained the Administrator's approval for a plan applying best management practices to *all* these sources, § 402 or § 404 permits would continue to be required. *Id.* at 136. This could have been a potent weapon in the hands of an Administrator trying to coerce implementation of best management practices for nonpoint sources. However, in the conference agreements the reference to other point and nonpoint sources was not included. CONFERENCE REPORT, *supra* note 98, at H-12694 (§ 34).

114. S. REP. No. 370, *supra* note 99, at 136 (FWPCA § 208(b)(4)(C)). If EPA approves a state program under section 208 and section 303 regulating placement of dredge and fill, no

Curiously, the amendment with the most far-reaching substantive and precedential implications for nonpoint control does not appear under section 208. It is entitled "Best Management Practices for Industry" and it amends section 304 to give the Administrator discretionary power to publish regulations on the control of nonpoint sources of toxic and hazardous pollutants[115]—runoff, spillage, leaks, sludge, or waste disposal—"associated with or ancillary to the industrial manufacturing or treatment process" at all industrial sites.[116] The implementation of these controls by industry can be required as a condition for issuance of a section 402 permit,[117] which is currently needed before an indust ry's point sources may lawfully discharge wastes. Under the old law, before receiving a section 402 permit, the industry only needed to clean up its point source discharge. Under the new law, the industry would have to apply best management practices to reduce other toxic or hazardous pollution including that emanating from any nonpoint sources which significantly affect water quality. The interpretation which the EPA and the courts decide to use in construing the terms "associated with or ancillary to" and "significantly affect" will decide the ultimate impact of this provision. In any case, FWPCA's incorporation of nonpoint source control into a federally enforced regulatory permit program has important precedential effect.

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person in that state needs to seek a section 404 permit. Pub. L. No. 95-217, § 34, 91 Stat. 1566 (amending 33 U.S.C. § 1288(b)(4) (Supp. V 1975)). However, in order to assure proper consideration of wetlands destruction, Congress gave the Administrator power to withdraw such approval i the wetlands are not being properly protected. *Id.*

115. Lists of toxic and hazardous pollutants are published by the Administrator pursuant to FWPCA § 307(a)(1) (33 U.S.C. § 1317 (Supp. V 1975)) and FWPCA § 311(b)(2)(a), (*id.* § 1321) respectively. In the new amendments, Congress included a list of certain chemicals that must be so classified by the Administrator. (CONFERENCE REPORT, *supra* note 98, at H-12697). In late December 1977, EPA announced that it would soon be publishing a list of toxic and hazardous pollutants. [1977] 7 ENVIR. REP. (BNA) (Curr. Dev.) 1315 (Dec. 23).

116. Pub. L. No. 95-217, § 50, 91 Stat. 1566 (amending 33 U.S.C. § 1314 (Supp. V 1975)). This new subsection provides in pertinent part:

> The Administrator. . . may publish regulations. . . for a class or category of point sources, for any specific pollutant which the Administrator is charge with a duty to regulate as a toxic or hazardous pollutant under section 307(a)(1) or 311 of this Act to control plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage which the Administrator determines are associated with or ancillary to the industrial manufacturing or treatment process within such class or category of point sources and may contribute significant amounts of such pollutants to navigable waters. Any applicable controls established under this subsection shall be included as a requirement for the purposes of section 301, 302, 306, 307, or 403, as the case may be, in any permit issued to a point source pursuant to section 402 of this Act.

Id. "Industrial user" is defined in 33 U.S.C. § 1362 (18) to (Supp. V 1975) include industries identified in the Standard Industrial Classification Manual, Bureau of the Budget, and other classes that the Administrator determines are significant waste producers. *See generally* Part I of this narrative.

117. 33 U.S.C. § 1342 (Supp. V 1975) (as amended by Pub. L. No. 95-217, §§ 33(c), 54(c)(1), 65, 66, 91 Stat. 1566).

The amendment was designed to close a gap in regulation of toxic pollutants and the conferees intended it to be vigorously enforced. 123 CONG. REC. S19647 (daily ed. Dec. 15, 1977) (statement of Senator Muskie).

Finally, the Clean Water Act deletes federal funding for separate storm sewers for the next five years.[118] Congress felt that more time was needed to assess the benefits of separate storm sewers and to evaluate the cost-effectiveness of nonstructural measures (e.g. land-use management, drainage ditches, improved septic tanks) to control urban stormwater runoff.[119]

Since the specific nonpoint measures necessary in a particular urban area will need to be coordinated with other pollution abatement efforts and often be site-specific, the section 208 planning process is well-suited to the task of implementing them. This amendment essentially requires development and application of best management practices to control urban stormwater runoff, and places the burden of implementing these control measures on 208 planning agencies.

In sum, the amendments definitely succeed in rejuvenating the nonpoint program but no clear and coherent congressional plan emerges from the legislation. Rather Congress' heightened concern has produced a hodge-podge of new nonpoint provisions which rely heavily for their effectiveness on discretionary exercise of authority. Compared with the pre-1977 program, however, the new amendments provide renewed funding and place significantly more authority in the hands of state and federal officials.

C. Administrative

With passage of the new amendments and forthcoming submission of the great majority of areawide waste management plans,[120] the EPA will be playing a pivotal role in implementation of nonpoint source control.[121] The degree to which the EPA strictly scrutinizes the states' and localities'

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118. Pub. L. No. 95-217, § 36, 91 Stat. 1566 (amending 33 U.S.C. § 1291 (Supp. V 1975)). For further discussion of the effects of this amendment see notes 134 to 138 *infra*, and accompanying text; *see also* Part II this narrative notes 19 to 20 *supra*.

119. S. REP. No. 370, *supra* note 96, at 39. The Senate felt that the cost was "beyond the reach of the limitations of the Federal Budget." *Id.* According to the EPA it would cost about $200 billion to treat the problem while using best management practices to prevent runoff pollution will have a national capital expenditure of about six billion dollars. [1978] 8 ENVIR. REP. (BNA) (CURR. DEV.) 1354 (Jan. 6). *Id.* S. REP. No. 370, *supra* note 99, at 39.

120. Final Plans Due

before 6/30/77	7/1-12/31/77	1/78-6/30/78	7/1-12/31/78
15	63	71	68

OFFICE OF WATER AND HAZARDOUS MATERIALS, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, WATER QUALITY MANAGEMENT DIRECTORY 154 (2d ed. Sept. 1977).

121. Over the last year the EPA has been concerned primarily with providing guidance and assistance to the states and regional planning agencies. The EPA held three National Conferences on § 208, one each in Reston, Virginia, Denver, and St. Louis, in order to bring planning agencies together to discuss implementation of an effective § 208 program (Environmental Research Information Center, United States Environmental Protection Agency, *National Conferences on 208 Planning and Implementation*, Technology Transfer (June 1977)).

The EPA also hired a consulting group to survey the progress of § 208 and to study the potential for successful implementation (*see* text accompanying footnotes 57 to 60 *supra*). It has a two-part report. The second part focused on several problems, including nonpoint sources. It demonstrates a trend toward voluntary compliance, which seems at odds with the

section 208 plans and utilizes its new discretionary authority under section 304(e) will determine to a great extent the level of nonpoint source abatement that will be achieved.

An EPA internal memorandum of September 1977 prescribes the criteria for evaluating nonpoint programs submitted to the agency[122] and reinforces the trend toward regulatory control of nonpoint sources which appears so prominently in the 1977 Clean Water Act. For areas with substantial nonpoint source pollution problems, the type of control to be utilized, such as permits, licenses, contracts, and various management techniques, will depend upon the intensity, scope, and type of nonpoint source to be controlled. Land ownership patterns, and such physical factors as rainfall, soil characteristics, geologic conditions, and topography will also be considered.[123] Non-regulatory programs will be allowed only when they can achieve water quality standards. If, during implementation, there is any indication that such a program will be ineffective, the presumption will be that a regulatory approach is warranted.[124]

A nonpoint regulatory control plan must include a designated management agency responsible for implementing the plan, with authority to require best management practices, monitoring and inspection, and implementation of chosen control tools.[125] However, these general criteria still give the states broad discretion in developing a procedural framework for reducing nonpoint source pollution.[126]

It is clear that the EPA hopes to become more directly involved in actual implementation of nonpoint controls by working closely with states to establish state-wide nonpoint programs. In December 1977, the Agency announced that it is in the process of developing a four- to six-year plan that will emphasize state-wide control of nonpoint sources.[127] The EPA will provide management support to the states to help carry out the plan,[128] which ultimately will probably involve the governor of each state exercising his or her authority under 208(b)(4) to adopt state-wide nonpoint programs.[129]

In January 1978, the EPA announced the formation of a joint program with the Department of Agriculture for controlling nonpoint sources.[130]

EPA's growing emphasis on regulatory controls. *See* notes 122 to 126 *supra* and accompanying text.

122. Internal EPA Program Guidance Memorandum: SAM-31. Subject: Regulatory Programs for Nonpoint Source Control. From: Albert J. Erickson, Acting Deputy Asst. Administrator for Water Planning and Standards (September 1977).

123. *Id.*

124. *Id.*

125. *Id.*

126. *See generally* Comment, *A Procedural Framework for Implementing Nonpoint Source Water Pollution Control in Iowa*, *supra* note 16. This comment contains a thorough discussion of possible means of implementing control in the state of Iowa.

127. [1977] 7 ENVIR. REP. (BNA) (Curr. Dev.) 1186 (Dec. 9).

128. *Id.*

129. *See* notes 37 and 110 to 114 *supra* and accompanying text.

130. EPA Selects Seven Model Projects for Nonpoint Water Pollution Controls, [1978] 8 ENVIR. REP. (BNA) (Curr. Dev.) 1409 (Jan. 20).

The project involves seven model states and is designed to demonstrate the effectiveness of coordinated best management practices in alleviating nonpoint source pollution.[131] At the end of January 1978, the EPA published new construction grant requirements which state that proposed waste treatment facilities must commit themselves to utilizing best management practices in controlling nonpoint source pollution as a condition for approval of their section 201 federal grants.[132] Specifically, federally funded sewage treatment plants will have to include measures to control erosion and subsequent sediment runoff.[133]

Finally, there are some indications that the EPA plans eventually to use its authority under the National Pollution Discharge Elimination System to require the application of best management practices to a whole array of nonpoint sources. Presently, EPA is required to regulate many sources of runoff under NPDES which are classified as point sources because of their magnitude even though they are hydrologically nonpoint.[134] To regulate these sources, the EPA plans to intiate a general permit program that will require the application of best management practices.[135] Since at the present time EPA does not possess sufficient information concerning the controllability of runoff pollution, it will not immediately implement this permit program. Instead, the EPA will initially require the application of best management practices only in the identification and monitoring of the runoff.[136] Simultaneously, section 208 programs will be used to develop best management practices control measures.[137] Therefore, under this scheme, section 208 will continue to play a central role in the planning and development of localized runoff control and the EPA NPDES authority to establish general permit programs will provide the needed enforcement mechanisms. Once this program has been satisfactorily implemented, it would seem logical to expand it to include other traditional nonpoint sources. The EPA has hinted that mining operations may

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131. *Id.* The states chosen are Indiana, Nebraska, New York, Oklahoma, South Carolina, South Dakota, and Washington. A full array of best management practices will be demonstrated including, for example, land management, septic tank improvement, sprinkler irrigation systems, and water conservation.

132. [1978] 8 ENVIR. REP. (BNA) (Curr. Dev.) 1462 (Jan. 27). The requirements apply to plans or construction activities anticipated or under way after December 29, 1977.

133. *Id.*

134. In NRDC v. Costle, Nos.95-2056, 75-2066, 75-2067, 75-2235 (D.C. Cir. Nov. 16, 1977), [1978] 8 ENVIR. REP. (BNA) (Curr. Dev.) 1354 (Jan. 6), the court held that EPA could not exempt these sources from the NPDES program once they had been classified as point sources. *See* note 4 *supra*.

135. Telephone conversation with Dennis Athayde, Nonpoint Source Branch, EPA (Feb. 28, 1978). The need for the development of best management practices to control urban stormwater runoff is especially acute now that separate storm sewer funding has been deleted. *See* notes 118 to 119 *supra*, and accompanying text. The EPA has stated that it has the power to establish such general permit programs according to the decision of NRDC v. Costle, Nos. 75-2056, 75-2066, 75-2067, 75-2235 (D.C. Cir. Nov. 16, 1977). [1978] 8 ENVIR. REP. (BNA) (Curr. Dev.) 1354 (Jan. 6).

136. *Id.*

137. *Id.*

be one source already susceptible to such a program.[138] Others feel that agricultural activities also might be better controlled by a regulatory permit approach.[139] Since in essence, the real justification for treating point and nonpoint sources differently is the latter's uncontrollability, as nonpoint sources are better understood, it is appropriate to treat the two sources more similarly.

V. Conclusion

The nonpoint source water pollution control program has undergone a significant evolution since the passage of the Federal Water Pollution Control Act Amendments of 1972. When the Act was first implemented, it provided only for study and identification of the nonpoint problem, and even this was given low priority. Planning responsibilities were designated to local and regional officials without providing enforcement mechanisms to ensure that the officials carried out their duties. In this setting EPA had little incentive to push section 208 strongly and instead diverted its attention to other seemingly more pressing areas of responsibility. However, as the vast dimensions of the nonpoint water pollution problem were better understood, the 1972 program appeared wholly inadequate, both in theory and in practice. To make progress toward national water quality goals, increased resources and more centralized control were needed.

Two clear trends have emerged in the movement to establish a nonpoint program capable of achieving substantial pollution abatement. First, there has been a growing emphasis on the use of regulatory controls. However, a transition period will be needed to prepare for establishment of such programs. The regulations must have a justifiable basis and standards of performance that can be reasonably applied. The development and demonstration of a set of best management practices—measures which effectively reduce nonpoint source pollution—will be crucial. The new federal programs providing funds to individual farmers and to state governments and assisting both groups in the development of model programs will, it is hoped, provide such a basis.

The second trend, the growing role of state governments, may not be as visible as the first but is equally significant. State agencies are begin-

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138. The EPA's brief in the case NRDC v. Costle, Nos. 75-2056, 75-2066, 75-2067, 75-2235 (D.C. Cir. Nov. 16, 1977) stated:

> EPA has found that in the area of runoff from mining operations, there is a sufficient predictability because of a longer history of regulation and the relatively confined nature of the operation that numerical limitations can be established. Thus, consistent with EPA's position stated earlier that it will expand the permit program where its capability of establishing effluent limitations allows, appropriate limitations have been created and the permit program expanded.

Id. at 21, *quoting Federal Appellants' Memorandum on "Impossibility"*.

139. Montgomery, *supra* note 16, at 555.

ning to assume the planning responsibilities for non-designated areas and in some instances have decided to confront the task of developing a single section 208 plan for the entire state. Further state involvement, in the form of state-wide nonpoint and dredge-and-fill control programs and state enforcement of non-degradation policies, is likely in the future.

Nonpoint sources are most susceptible to control through preventive rather than remedial measures. Therefore land-use planning and management will ultimately be necessary. However, planning for nonpoint source controls is just one factor among many which must be considered in developing a comprehensive land-use plan, the need for which is an all-too-familiar theme in environmental law.[140] Local and regional officials have not proven themselves capable of developing such plans. It will take strong state leadership, buttressed by federal prompting, to ensure that land-use planning legislation is passed.

After over four years of relative inaction and obscurity, events in 1977 represent a major advance for nonpoint source control. As with the implementation of any major federal environmental program, substantial economic, political, sociological, and technological barriers remain. The significance of recent developments is that a program to control nonpoint sources of water pollution is finally emerging as a national priority.

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140. Jungman, *supra* note 16, at 1078 (author warns against the "illogical, piecemeal approach" to land use planning under section 208). This does not mean, however, that state and regional officials can afford to wait until comprehensive planning is complete before they take any action to prevent present nonpoint source pollution. Rather, stop-gap measures should be employed. The need for such government action was recognized in the recently decided case, Bridgeport Hydraulic Co. v. Council on Water Co. Lands of Conn., Civ. No. B-75-212 (D. Conn., decided Dec. 29, 1977) (three-judge panel). The district court noted the importance of protecting critical watershed areas from nonpoint source pollution and rejected an attack on the constitutionality of Connecticut's moratorium on the sale or development of certain parcels of land critical to the purity of the state's water supply.