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An Agricultural Law Research Article

Controlling Agricultural Nonpoint Source Pollution: The New York Experience

by

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CONTROLLING AGRICULTURAL NONPOINT SOURCE POLLUTION: THE NEW YORK EXPERIENCE

*Ruth A. Moore**

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I. INTRODUCTION

Federal legislation, such as the Clean Water Act,¹ Safe Drinking Water Act,² the Coastal Zone Management Act,³ Federal Insecticide, Fungicide and Rodenticide Act,⁴ and the Food Security Act,⁵ have created a maze of

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1. 33 U.S.C. §§ 1251-1387 (1994).

2. 42 U.S.C §§ 300f-300j-26 (1994).

3. 16 U.S.C §§ 1451-1464 (1994).

4. 7 U.S.C §§ 136-136y, 1451 (1994).

5. Food Security Act of 1985, Pub. L. No. 99-198, 99 Stat. 1354 (1985) (codified as amended at 7 U.S.C. §§ 1736o-1736u (1994), and 16 U.S.C. §§ 3831-3862 (1994)).

government programs to protect water quality, public health, wetlands, and other natural resources from the impacts of potential pollution producing activities, including agricultural activities. In recent years, court cases and regulatory enforcement actions in New York have exposed some farm operators to significant costs and confusion regarding how to address legitimate environmental concerns while maintaining economically viable agricultural businesses.

In response to concerns raised by both the farming and environmental communities, the New York State Department of Agriculture and Markets, in cooperation with state and federal environmental agencies, local governments, educational institutions, farmers, environmentalists, and agri-businesses, proposed the development of a new and innovative program to address agricultural nonpoint source pollution.⁶ The proposed program creates a system of "one stop shopping" for farmers. Participating in the program enables farmers to comply with the plethora of environmental laws and regulations governing farm operations, while maintaining an economically viable farm business.

The proposed program combines a flexible farm-by-farm approach to water quality improvement; priority watershed planning; cooperative arrangements between federal, state, and local government agencies to deliver education and technical assistance to farmers; and financial and other incentives for participation in the program.⁷ The effort is a "work in progress" and builds on the public, private, and intergovernmental partnerships forged under the existing educational and regulatory framework for controlling and abating pollution from agricultural sources.⁸

This Article will examine the nature and diversity of New York agricultural resources and farm operations; the nature of the agricultural nonpoint source pollution problem in New York; the current federal, state, and local regulatory framework for addressing agricultural nonpoint source pollution; and the current intergovernmental efforts to improve the quality of New York's waters while maintaining a vital agricultural industry in the state.

II. THE NEW YORK AGRICULTURAL LANDSCAPE

Agriculture is a major contributor to New York's economy, producing approximately three billion dollars in gross farm receipts annually.⁹ In 1994,

6. Agricultural nonpoint source pollution is generally considered to be the diffuse runoff of agricultural wastes and other agricultural inputs from farm fields. Controversy over what constitutes agricultural nonpoint source pollution, however, has complicated control and abatement efforts by government officials. For discussion of the issue, see *Concerned Area Residents for the Env't v. Southview Farm*, 34 F.3d 114 (2d Cir. 1994), *cert. denied*, 115 S. Ct. 1793 (1995).

7. NUTRIENT MGMT. WORKING GROUP, N.Y. ST. AGRIC. ENVTL. PLAN. PROGRAM, A RESOURCE MANAGEMENT AND MAINTENANCE APPROACH FOR MORE PROFITABLE FARMING (Dec. 1994) (Draft available from the New York State Department of Agriculture and Markets).

8. *Id.*

9. NEW YORK AGRIC. STATISTICS SERV., NEW YORK AGRICULTURAL STATISTICS 1994-95, at 9, tbl. 5 (1995).

there were approximately 36,000 farms in the state, averaging 219 acres in size.¹⁰ Livestock agriculture—a potentially significant source of agricultural nonpoint source pollution—forms a substantial segment of New York's farm economy. In 1993, cash receipts from the sale of animals and the products they produce represented 67% of total farm cash receipts, with dairy products alone accounting for 51.9%.¹¹ Cash receipts for milk during 1994 totaled \$1.5 billion.¹² Nationally, New York ranks third in the production of milk.¹³ In addition, New York also ranks first in the nation in the production of cabbage and cottage cheese; second in the production of tart cherries and corn for silage; third for apples, grapes, fresh sweet corn, and Italian cheese; and fourth for snap and green beans for processing, pears, and cauliflower.¹⁴

New York farms cover 7.9 million acres, representing more than 26% of the state's total land area.¹⁵ This number represents a decline during the last decade from 9.1 million acres in 1985, and an overall decline in the number of farms, from 44,000 in 1985 to the current 36,000.¹⁶ Unlike other states, New York agriculture is comprised for the most part of family farms which are relatively small in size, both physically and financially. In 1994, 16,600, or 46%, of all farms in the state had gross sales under \$10,000.¹⁷ Another 11,200, or 31%, had gross sales between \$10,000 and \$100,000.¹⁸ Total net farm income in 1993 was \$493.8 million, down from \$649.4 million in 1992.¹⁹

The New York physical landscape is richly diverse. It ranges from flat, open spaces, and prime soils in the western part of the state, to the crop and pastureland in the Susquehanna River Valley; from the Great Lakes basin with its temperate climate, to the rolling central hills; and from the fine orchardlands in the Hudson Valley, to the unique, highly productive soils of Long Island. New York is a coastal state and also possesses an abundance of lakes that dot the landscape, as well as a multitude of rivers and streams which often traverse farms.²⁰

All of these financial and geographical factors have influenced the ongoing development of a practical, economical, and effective approach to controlling agricultural nonpoint source pollution in New York, an approach which recognizes the unique nature of each farm operation.

10. *Id.* at 6, tbl. 3. Farms are defined to include places selling \$1000 or more of agricultural products in a year. *Id.*

11. *Id.* at 11, tbl. 6.

12. *Id.* at 49.

13. *Id.* at 12, tbl. 7.

14. *Id.*

15. *Id.* at 6, tbl. 3.

16. *Id.*

17. *Id.* at 5, tbl. 2.

18. *Id.*

19. *Id.* at 8, tbl. 5.

20. New York has more than 52,000 miles of rivers and streams; nearly 7,900 lakes and ponds; 577 miles of Great Lakes coastlines; and 120 linear miles of Atlantic coastline. N.Y. ST. DEP'T OF ENVTL. CONSERV., 1993 PRIORITY WATER PROBLEM LIST 7, tbl. 4 (1993) [hereinafter PRIORITY WATER PROBLEM LIST] (available from the Department of Environmental Conservation).

III. THE AGRICULTURAL NONPOINT SOURCE POLLUTION PROBLEM IN NEW YORK

The New York State Department of Environmental Conservation (DEC) has identified nonpoint source pollution²¹ as the largest threat to water quality in the state, constituting the primary source of contamination for more than 90% of the impaired waterbodies in New York.²² The Priority Water Problem List for New York, last updated in 1993, reveals nonpoint sources of pollution as the primary cause of use impairments on 91% of impaired river segments, 67% of impaired bay or estuary segments, and 85% of impaired Great Lakes segments.²³

New York's 1993 Priority Water Problem List listed agriculture as a primary source of nonpoint pollution, causing impairments in 147 river segments, 43 lake reservoirs, and one of the Great Lakes.²⁴ This represents 13% of the overall nonpoint source problem sites in New York. Agriculture is considered the primary source of pollution for 1394 miles (31%) of rivers and more than 250,000 acres (23%) of lakes and reservoirs affected in the state.²⁵ Agricultural nonpoint source pollutants include soil erosion, nutrients, and pathogens.²⁶ Overgrazed areas can cause these nutrients and pathogens, as

21. The New York Environmental Conservation Law defines nonpoint source as any source of water pollution or pollutants which is not a discrete conveyance or point source permitted pursuant to the section of New York law governing point sources. N.Y. ENVTL. CONSERV. LAW § 17-1403(7) (McKinney Supp. 1995). A point source is defined in the regulations 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." N.Y. COMP. CODES R. & REGS. tit. 6, § 750.2(21) (1985). The above definition closely follows the definition of a point source in the Clean Water Act, 33 U.S.C. § 1362(14) (1994), except that the New York definition does not adopt the exclusions for return flows from irrigated agriculture and agricultural stormwater discharges, which were added to the federal definition in 1977 at Pub. L. No. 95-217, 91 Stat. 1366, 1377 (codified as amended at 33 U.S.C. § 1362 (1994)) and in 1987 at Pub. L. No. 100-4, 101 Stat. 7, 75 (codified as amended at 33 U.S.C. § 1362 (1994)).

22. PRIORITY WATER PROBLEM LIST, *supra* note 20, at 7, tbl. 4.

23. *Id.* Chapter 436 of the New York State Laws of 1989 established a nonpoint source water pollution control program. The legislation required the Commissioner of Environmental Conservation, in cooperation with the State Soil and Water Conservation Committee (an advisory body within the Department of Agriculture and Markets), to prepare a report by January 1991 which "a) identifies those waterbodies within the State which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain and maintain applicable water quality standards; and b) identifies categories or subcategories of nonpoint sources or particular nonpoint sources which add significant amounts of pollution to each waterbody identified above." 1989 N.Y. Laws 436 (codified at N.Y. ENVTL. CONSERV. LAW § 17-1405-1 (McKinney Supp. 1995)). The Priority Water Problem List, which is updated biennially, was originally developed in response to the 1989 legislation and amendments to the Clean Water Act. *See* 33 U.S.C. § 1329 (1994).

24. PRIORITY WATER PROBLEM LIST, *supra* note 20, at 7, tbl. 4.

25. *Id.* at 8, tbl. 5.

26. N.Y. ST. DEP'T OF ENVTL. CONSERV., NONPOINT SOURCE MANAGEMENT PROGRAM 26 (1990). [hereinafter NONPOINT SOURCE MANAGEMENT PROGRAM].

well as organic matter and ammonia, to pollute the land.²⁷ Removal of riparian vegetation and unrestricted livestock access to streams may increase streambank erosion and heighten streamwater temperature, which could adversely affect fish survival and propagation.²⁸

Agricultural nonpoint source pollution, however, derives primarily from rainfall or snowmelts which cause dissolved substances and detached soil particles to transport off site.²⁹ Pollutants are carried by overland runoff to surface waters and by infiltration through the soil profile to ground waters. Major pollutants attributed to agricultural operations include "sediment, nutrients, organic matter, pathogens, and pesticides."³⁰ The impact on water quality from a particular farm operation depends on the nature, timing, and intensity of farm practices employed, climatic and topographic conditions, proximity to watercourses, and specific farm management choices.³¹ Employing effective management practices can reduce or eliminate pollutant yield to a receiving water, thus mitigating adverse impacts to water quality.³² DEC recommends that on-farm practices which affect the availability, detachment, and transport of pollutants should be selected based on the specific pollution problem, site variables, management and operation of the farm, and affordability to the farmer.³³ Ideally, the farmer will independently select practices which benefit the farm business and adequately protect the environment. Between the ideal and the reality, however, lies a regulatory scheme which currently uses a complex mix of incentives, statutory requirements, and penalties to help assure the compatibility of farm practices with environmental protection.

IV. CURRENT REGULATORY FRAMEWORK

A. Federal Legislation

1. *The Clean Water Act*

The Federal Water Pollution Control Act Amendments of 1972, popularly referred to as the Clean Water Act (CWA), relegate management and control of nonpoint source pollution to the states.³⁴ Section 1288 of the Act provides for a system of state management of nonpoint sources of pollution subject to oversight and approval by the federal Environmental Protection Agency (EPA).³⁵ The Federal Water Quality Improvement Act of 1987 amended the CWA to include section 319, authorizing federal assistance for

27. *Id.*

28. *Id.*

29. N.Y. ST. DEP'T OF ENVTL. CONSERV., CONTROLLING AGRICULTURAL NONPOINT SOURCE WATER POLLUTION IN NEW YORK STATE 2 (1991).

30. *Id.*

31. *Id.* at 2, tbl. 2.

32. *Id.* at 3-4.

33. *Id.* at 4.

34. 33 U.S.C. § 1329 (1994)

35. *Id.* § 1288.

nonpoint source programs.³⁶ The 1987 legislation requires states to produce two documents—a nonpoint source assessment³⁷ and a nonpoint source management program.³⁸ The CWA point and nonpoint source provisions are administered in New York by the Department of Environmental Conservation.³⁹

2. Coastal Zone Management Act

The Coastal Zone Management Act, as amended by the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA)⁴⁰ requires states and territories with approved coastal management programs, such as New York and 28 other states and territories, to develop and implement enforceable programs to control pollution from a wide range of nonpoint sources to “restore and protect coastal waters.”⁴¹ The programs must contain “enforceable policies and mechanisms” to implement the state’s nonpoint program required by section 1455b of CZARA.⁴² Enforceable policy is defined as state policies “which are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances or judicial or administrative decisions, by which a state exerts control over private and public land and water uses and natural resources in the coastal zone.”⁴³ Coastal waters, as defined by the CZARA, encompass nearly 70% of New York, because it includes areas that drain directly into the Great Lakes and the Atlantic Ocean.⁴⁴ New York and other states with approved programs are eligible for federal financial assistance in administering their coastal programs.⁴⁵

CZARA also requires states with approved coastal management programs to develop coastal nonpoint pollution control programs to “develop and implement management measures for nonpoint source pollution to

36. *Id.* § 1329.

37. The Clean Water Act requires states to identify, inter alia, those navigable waters which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain applicable water quality standards. *Id.* § 1329(a)(1)(A).

38. States are required to prepare a management program for controlling pollution from nonpoint sources which includes, inter alia, identification of best management practices (BMPs) and measures to reduce pollutant loading; and programs, regulatory and otherwise, to achieve implementation of the BMPs. *Id.* § 1329(b).

39. The state water quality program is set forth in Article 17 of the Environmental Conservation Law. N.Y. ENVTL. CONSERV. LAW § 17-0801 to -1907 (McKinney 1984 & Supp 1995). The state Soil and Water Conservation Committee also administers a grant program to address agricultural nonpoint source pollution. *See infra* note 88 and accompanying text. The EPA adopted, with certain exceptions, New York’s national pollution discharge elimination system (NPDES) program in 1975. 1978 Op. N.Y. Att’y Gen. 54 (1978). Title 8 of Article 17 and accompanying regulations govern the New York point source permitting program. N.Y. ENVTL. CONSERV. LAW § 17-0801; N.Y. COMP. CODES R. & REGS. tit. 6, § 750 (1987).

40. 16 U.S.C. §§ 1451-1464 (1994).

41. *Id.*

42. *Id.* § 1455(d)(16).

43. *Id.* § 1453(6a).

44. N.Y. ST. DEP’T OF ENVTL. CONSERV., NEW YORK STATE’S NONPOINT SOURCE PROGRAM, A STATUS REPORT 2 (Jan. 1995)

45. 33 U.S.C. § 1455(a).

restore and protect coastal waters."⁴⁶ The Act directs states to coordinate the program closely with state and local water quality programs⁴⁷ and requires that the program serve as an update and expansion of the state nonpoint source management program developed under section 319 of the Clean Water Act Amendments.⁴⁸

The Coastal Zone Program is administered in New York by the Department of State in coordination with the Department of Environmental Conservation.⁴⁹ The New York Secretary of State and the Commissioner of Environmental Conservation submitted New York's Coastal Nonpoint Pollution Control Program to the Secretary of Commerce and the Administrator of the EPA on July 21, 1995.⁵⁰ The description of the Program includes detailed documentation of New York's coordinated approach to controlling agricultural nonpoint source pollution as it affects coastal waters. It also addresses the effectiveness of the approach in achieving the intent of CZARA's required management measures.⁵¹ The Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration anticipate completing their review of New York's Program submission by mid-November, 1995.

3. *Safe Drinking Water Act*

The Safe Drinking Water Act (SDWA)⁵² authorizes the EPA to promulgate National Primary Drinking Water regulations for public water systems drawn from surface and groundwater sources.⁵³ The federal regulations specify contaminants which may have an adverse effect on human health, and maximum contaminant levels or treatment techniques to reduce contaminant levels where it is not economically or technically feasible to ascertain the level of a particular contaminant in the public water system.⁵⁴ The SDWA is administered in New York by the Department of Health (DOH).⁵⁵ New York

46. *Id.* § 1455b(a)(1).

47. *Id.* § 1455b(a)(2).

48. *Id.*; see also discussion of the Clean Water Act, *supra* Part IV.A.1.

49. N.Y. EXEC. LAW ART. 42, § 910-920 (McKinney 1982 & Supp. 1994); Memorandum of Understanding between N.Y. State Dep't of State and N.Y. State Dep't of Environmental Conservation for the Development, Approval and Implementation of a State Coastal Nonpoint Pollution Control Program (July 22, 1993) (on file with author) (explaining the cooperation of the New York State Department of State with the New York State Department of Environmental Conservation and the allocation of duties and responsibilities).

50. New York State Coastal Nonpoint Pollution Control Prog. (1995) at 8-14 (on file with the New York State Department of State).

51. *Id.*

52. 42 U.S.C. §§ 300f-300j-26 (1994).

53. *Id.* § 300g-1. A public drinking water system is defined as a system for the provision of piped water for human consumption, if the system has a minimum of fifteen service connections or regularly serves a minimum of 25 people. *Id.* § 300f(4).

54. *Id.* § 300f(1); 40 C.F.R. pt. 141 (1996).

55. The Administrator of the EPA delegated general responsibility for implementation of the SDWA in New York to the Commissioner of Health in 1975. Since that date, the

municipalities propose surface water protection regulations which are approved and adopted by the Department of Health.⁵⁶ These regulations often impose setbacks from water courses for agricultural activities such as manure spreading and animal disposal.⁵⁷ The City of New York has independent rulemaking and enforcement authority to protect its vast surface water supplies in the Catskill region of the state.⁵⁸ The DOH and New York City regulations are drafted, in part, to comply with federal standards. Municipalities have also adopted their own local ordinances curtailing or prohibiting certain agricultural activities which may contribute to nonpoint source pollution of local waterbodies.⁵⁹

4. FIFRA

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) prohibits the distribution or sale of pesticides that are not registered with the EPA.⁶⁰ The EPA administrator approves a pesticide for registration when it is determined that the pesticide, "when used in accordance with widespread and commonly recognized practice, will not generally cause unreasonable adverse effects on the environment."⁶¹ The EPA may restrict the time, place, and manner of a registered pesticide's use. In addition, the DEC separately registers pesticides for use in New York.⁶²

According to the EPA, FIFRA authorizes the agency to condition the registration and availability of certain pesticides on the development of state management plans (SMPs) which address the environmental risks of these pesticides.⁶³ The EPA has not required states to develop SMPs to date, but it has encouraged states to develop generic SMPs (GSMPs) as a basis for potentially mandatory pesticide-specific SMPs in the future.⁶⁴ The DEC published a draft GSMP in September of 1993, emphasizing whole farm planning as an important mechanism for addressing groundwater contamination and nonpoint source pollution which stems from agricultural pesticide use.⁶⁵

Administrator has delegated responsibility for promulgating specific drinking water regulations to the DOH following the promulgation of federal regulations.

56. See, e.g., N.Y. COMP. CODES R. & REGS. tit. 10, §§ 100-157 (1992).

57. See, e.g., *id.* §§ 100.4(2), 100.5(e)(2), 100.5(f), 103.1(e), 105.3(e)(5), 111.20(e)(2), 127.2(e)-(f).

58. N.Y. PUB. HEALTH LAW §§ 1100-1103 (McKinney 1990). See *infra* Part VI.A. for a discussion of the New York City Watershed.

59. See, e.g., Town of Verona Local Law #5 (1994).

60. 7 U.S.C. § 136j (1996).

61. *Id.* § 136a(c)(5)(D).

62. N.Y. ENVTL. CONSERV. LAW §§ 33-0101 to -1503 (McKinney 1984 & Supp. 1995).

63. N.Y. ST. DEP'T OF ENVTL. CONSERV., N.Y. STATE PESTICIDES AND GROUNDWATER STRATEGY, DRAFT GENERIC STATE MANAGEMENT PLAN 1-6 (1993).

64. *Id.* at 1-1.

65. *Id.*

5. Food Security Act

The Food Security Act,⁶⁶ otherwise known as the 1985 Farm Bill, tied certain federal farm program benefits to compliance with prescribed conservation practices. It required persons wishing to participate in federal farm programs involving such assistance as price supports, crop insurance, disaster payments, and certain loans to comply with soil and water conservation measures.⁶⁷

The Act also established the Conservation Reserve Program, which allows farmers to remove highly erodible land from production and devote it to a conserving use in exchange for federal payments.⁶⁸ The Act's Water Quality Incentive Program makes incentive payments to producers who implement a water quality protection plan.⁶⁹ The plan should include practices which assist the farmer in complying with state and federal environmental laws.⁷⁰ Preliminary discussion of proposed provisions in the 1995 Farm Bill includes further linkages between federal subsidies and environmental stewardship programs.⁷¹

B. State Programs

1. Soil and Water Conservation Planning

County soil and water conservation districts provide technical assistance to individual farm operators.⁷² In addition to administering a variety of cost sharing programs, in many instances county legislatures have designated soil and water conservation districts as lead agencies for addressing problems involving nonpoint source pollution. District activities also typically include assistance in on-farm planning and best management practice implementation. Best management practices are methods, measures, or practices determined to be the most practical and effective in preventing or reducing the amount of pollutants generated by nonpoint sources to a level compatible with applicable water quality standards.⁷³ They include structural and nonstructural controls and operation and maintenance procedures.⁷⁴

The Soil and Water Conservation Districts Law requires that owners or occupiers of more than twenty-five acres of agricultural land—or less if the

66. Food Security Act of 1985, Pub. L. No. 99-198, 99 Stat. 1354 (1985) (codified as amended at 7 U.S.C. §§ 1736o-1736u (1994), and 16 U.S.C. §§ 3831-3862 (1994)).

67. 16 U.S.C. §§ 3811, 3821 (1994). These sections are popularly called the "sodbuster" and "swampbuster" provisions. See, e.g., Galen Fountain, *Land Use Related Restrictions and the Conservation Provisions of the Food Security Act of 1985: Sodbuster and Swampbuster*, 11 U. ARK. LITTLE ROCK L.J. 553 (1988-89).

68. 16 U.S.C. § 3831.

69. *Id.* § 3838.

70. *Id.* § 3838b(b)(4).

71. *Two Bills Will Be Starting Point for Farm Bill Research, Conservation Titles*, DAILY ENV'T REP., Apr. 24, 1995.

72. N.Y. SOIL & WATER CONSERV. DIST. LAW § 9(2) (McKinney Supp. 1995).

73. *Id.* § 3(16).

74. *Id.*

agriculture is intensive—apply to the local soil and water conservation district for a soil and water conservation plan.⁷⁵ The plan should contain “proposals for the conservation of soil and water resources” and provide “an orderly method for landowners and occupiers to follow in limiting soil erosion and reducing the amount of pollutants entering into the waters or on the lands of the state.”⁷⁶

The DEC estimates that ninety percent of farms in New York have conservation plans,⁷⁷ although not all types of pollutants are considered in every plan, and many have not been updated since their creation. It is unknown what percentage of these plans have been fully implemented. Plans are required, but there is no penalty for failure to develop or implement a plan. The Soil and Water Conservation Districts Law, however, provides that “[a]s a condition to the extending of any benefits under this chapter or to the performance of work upon any lands [other than state lands] the directors [of the soil and water conservation district] . . . may require land occupiers to enter into and perform such agreements or covenants as to the long term use of such lands as will tend to prevent or control erosion.”⁷⁸

2. *Nonpoint Source Grant Programs*

The DEC is charged with protecting the water quality of New York. It has the authority to impose fines and penalties for violations of water quality standards set by regulation.⁷⁹ In 1989, New York enacted a nonpoint source pollution control law which authorized two matching grant programs for the planning and implementation of nonpoint source pollution control projects.⁸⁰ One grant program administered by the DEC assists municipalities in addressing nonagricultural sources of pollution such as urban run-off, land disposal of wastes, and erosion and sediment from construction activities and mining.⁸¹

The other program administered by the New York State Soil and Water Conservation Committee provides financial assistance to farmers through local soil and water conservation districts for installing agricultural best management practices.⁸²

In the 1994-95 fiscal year, the New York State Legislature appropriated \$1 million for the grant programs from the State Environmental Protection Fund (EPF).⁸³ \$800,000 was allocated to agricultural projects. The 1995-96

75. *Id.* § 9(7-a).

76. *Id.* § 3(10).

77. NONPOINT SOURCE MANAGEMENT PROGRAM, *supra* note 26, at 28.

78. *Id.* § 9(10).

79. N.Y. ENVTL. CONSERV. LAW §§ 17-0101 to -1907, 71-0101 to -4412 (McKinney 1984 & Supp. 1995).

80. *Id.* § 17-1401 (McKinney Supp. 1995); N.Y. SOIL & WATER CONSERV. DIST. LAW § 11-b (McKinney Supp. 1995).

81. N.Y. ENVTL. CONSERV. LAW §17-1401 to 1411 (McKinney Supp. 1995).

82. N.Y. SOIL & WATER CONSERV. DIST. LAW § 11-b (McKinney Supp. 1995).

83. Chapter 610 of the Laws of 1993 established an Environmental Protection Fund which receives certain state fees and penalties to finance solid waste projects such as landfill closings, historic preservation and coastal revitalization projects, open space land

state budget earmarked \$1.37 million in EPF funds for nonpoint source grant funding.⁸⁴ Decisions regarding the allocation between agricultural and nonagricultural projects will be made at a later date.

In response to the Clean Water Act amendments, the DEC has also developed sets of management practices to prevent or reduce the availability, detachment, or transport of substances that adversely affect surface or ground water.⁸⁵ The Management Practices catalogue for agriculture is used as a guide by the Soil and Water Conservation Committee in awarding grants under the state program.⁸⁶

3. *Nonpoint Source Coordinating Committees*

In 1990, New York formed a nonpoint source coordinating committee composed of representatives of seventeen federal, state, and local agencies with authority and expertise in nonpoint source issues.⁸⁷ The committee meets quarterly to exchange information, coordinate nonpoint source activities, and identify funding sources to address nonpoint source issues.⁸⁸ Local water quality coordinating committees have also been formed in all sixty-two counties in New York to address nonpoint source issues at the local level.⁸⁹ These committees receive funding through the federal Clean Water Act to prepare county water quality strategies. The committees work closely with their local soil and water conservation districts, county cooperative extensions, and state and local officials to establish priorities for addressing local water quality problems.⁹⁰

This wide and complex array of laws and regulations, mandatory requirements, and voluntary incentives for controlling agricultural nonpoint source pollution poses significant challenges to farmers. They must understand the interplay among regulatory requirements which affect day-to-day farm management decisions and also strive to meet those requirements in the most sensible, cost-effective way.

V. REGULATORY PARADIGMS

A. *Voluntary Versus Mandatory Controls*

The existing federal, state, and local regulatory framework for agricultural nonpoint source pollution contains fragmented, noncohesive

conservation, agricultural protection planning, and nonpoint source abatement and control projects. N.Y. STATE FIN. LAW § 92-s (McKinney Supp. 1995).

84. 1995 N.Y. Laws 54.

85. *See, e.g.*, N.Y. ST. DEP'T OF ENVTL. CONSERV., AGRICULTURAL BEST MANAGEMENT PRACTICES CATALOGUE (1992).

86. Letter from the N.Y. St. Soil & Water Conserv. Committee to the Soil & Water Conservation Districts 2 (Aug. 5, 1994) (on file with author).

87. N.Y. ST. DEP'T OF ENVTL. CONSERV., *supra* note 44, at 5.

88. *Id.*

89. *Id.* at 5-6.

90. *Id.*

requirements and programs, causing farmers frustration and leading New York to revisit, revise, and reinvigorate its role in this area.⁹¹ The current regulatory scheme employs voluntary incentives for adopting environmentally compatible agricultural practices,⁹² prohibitions by public water supply regulations,⁹³ and water quality standards with stringent penalty provisions for violations.⁹⁴ The DEC has taken some action against farmers for violations of water quality standards stemming from agricultural runoff and resulting in significant fish kills. In response to neighbors complaining of off-farm water quality degradation, the DEC has also issued citations to farmers violating water quality standards. Citations, however, have spawned complaints from farmers who assert that excessively burdensome environmental regulations cripple New York's agricultural industry. In contrast, some environmentalists assert that New York has not been aggressive enough in curbing agricultural nonpoint source pollution.

Recent congressional action, however, appears to signal a shift from the traditional "command and control" water quality protection approach to a less regulatory, more incentive-based approach. The Clean Water Act Amendments, H.R. 961,⁹⁵ emphasizes incentives rather than penalties and state flexibility rather than a one-size-fits-all prescription.⁹⁶ The Bill recognizes the value of voluntary and incentive-based programs, extends the time for achieving water quality standards to fifteen years, and ties that deadline to the adequacy of federal funding.⁹⁷ In addition, it stipulates that voluntary development and implementation of an approved whole farm or ranch natural resource management plan is acceptable for purposes of complying with the requirements of a state management program.⁹⁸

The Bill also softens the mandate for enforceable state coastal programs set forth in CZARA by allowing states to opt out of CZARA when an approved CWA program is in place.⁹⁹ Even before the Reauthorization Bill was amended to address CZARA, the National Oceanic and Atmospheric Administration clarified in a letter to the chair of the Coastal States Organization its previous position on enforceability and suggested that current state environmental laws might serve to satisfy CZARA's call for state enforceable programs to be established by July 15, 1995.¹⁰⁰ The letter

91. NUTRIENT MGMT. WORKING GROUP, *supra* note 7.

92. *See, e.g.*, N.Y. SOIL & WATER CONSERV. DIST. LAW § 11-b (McKinney Supp. 1995).

93. N.Y. COMP. CODES R. & REGS. tit. 10, §§ 100-157 (1992).

94. N.Y. ENVTL. CONSERV. LAW § 17-0101 to -1907, 71-0101 to -4412 (McKinney 1994 & Supp. 1995).

95. H.R. 961, 104 Cong., 1st Sess. (1995).

96. For example, H.R. 961 amends 33 U.S.C. § 1329 (1988) by adding a subsection recognizing that "state nonpoint source programs need to be built upon the foundation that voluntary initiatives represent the approach most likely to succeed in achieving the objectives of [the] Act." *Id.* § 319(p).

97. *Id.* § 319(c) (amending 33 U.S.C. § 1329(c)(2) (1994)).

98. *Id.* § 319(b) (amending 33 U.S.C. § 1329(b) (1994)).

99. *Id.* § 308(m) (amending 16 U.S.C. § 1455(b) (1994)).

100. Letter from the National Oceanic and Atmospheric Administration and the Environmental Protection Agency to the Coastal States Organization (Jan. 6, 1995) (on file with New York Department of State Coastal Programs).

further relaxed the mandate by declaring that states would need only show reasonable progress toward an enforceable program by the July deadline.¹⁰¹ Other indications of the shift toward a more flexible, voluntary approach include endorsements of these types of amendments to the CWA by the National Association of Departments of Agriculture¹⁰² and a commitment by the new administration in New York to reduce unnecessary, duplicative, and excessive burdens on business, including family farms.¹⁰³

Regardless of the outcome of the polemic over mandatory versus voluntary controls, there is growing recognition in the agricultural community that farmers have an obligation to be good stewards of the land and alter the way they practice the art and science of agriculture. At the same time, many farmers believe that the cost of this transition to environmentally compatible practices should be shared in some measure with the community at large.¹⁰⁴

B. *Point Versus Nonpoint Source Pollution:* CARE v. Southview Farm

Agricultural run-off from fields in New York was historically treated as a nonpoint source issue.¹⁰⁵ In 1991, however, neighbors of a large dairy farm in western New York sued under the citizen suit provision of the Clean Water Act¹⁰⁶ alleging the farm had discharged pollutants into the navigable waters of the United States without a national pollution discharge elimination system (NPDES) permit.¹⁰⁷

Concerned Area Residents for the Environment (CARE) brought suit in the United States District Court for the Western District of New York against Southview Farm—a 1300 cow dairy in Wyoming County—and one of the farm's two partners, for alleged violations of the CWA and associated state claims of nuisance, negligence, and trespass.¹⁰⁸ CARE members complained that the farm's manure handling practices, specifically the landspreading of

101. *Id.*

102. *Whole Farm Plan Concept Included in Committee-Passed CWA Rewrite*, NASDA NEWS RELEASE, Apr. 11, 1995.

103. Governor George E. Pataki, Message to the New York Legislature (January 4, 1995); see also Exec. Order No. 2: Ordering a Moratorium on Proposed Rules and Regulations, Vol. XVII, Issue 4, Book 1, N.Y. St. Reg. 87 (January 25, 1995) (imposing a ninety day moratorium on the adoption of rules and regulations, and directing each agency and department to review its existing rules to see if they unduly burden the economy of the State of New York).

104. Tom Parry, *State Wants to Be Farmer Friendly*, CANANDAIGUA MESSENGER, May 3, 1995, at 1A.

105. N.Y. ST. DEP'T OF ENVTL. CONSERV., CONTROLLING AGRICULTURAL NONPOINT SOURCE WATER POLLUTION IN NEW YORK STATE 2 (1991).

106. The Clean Water Act authorizes any citizen to commence a civil action against any person "who is alleged to be in violation of . . . an effluent standard or limitation under [the Act] or . . . an order issued by the Administrator [of the EPA] or a State with respect to such a standard or limitation." 33 U.S.C. § 1365(a)(1) (1994).

107. See *Concerned Area Residents for the Env't v. Southview Farm*, 834 F. Supp. 1422 (W.D.N.Y. 1993), *rev'd*, 34 F.3d 114 (2d Cir. 1994), *cert. denied*, 115 S.Ct. 1793 (1995).

108. *Concerned Area Residents for the Env't v. Southview Farm*, 34 F.3d 114, 115-16 (2d Cir. 1994), *cert. denied*, 115 S. Ct. 1793 (1995).

liquid manure, had polluted the Genesee River, contaminated their wells, created obnoxious odors, and otherwise interfered with the use and enjoyment of their properties.¹⁰⁹ CARE requested over four million dollars in damages. The jury returned guilty verdicts on five of the eleven claims under the Clean Water Act, found no cause of action on the nuisance and negligence claims, and awarded six plaintiffs a total of \$4,001.00 on the trespass claims.¹¹⁰ The trespass claims alleged that Southview Farm's manure application practices caused nitrates to enter the groundwater and then migrate to the CARE members' properties.¹¹¹ Southview Farm moved for judgment as a matter of law pursuant to Federal Rule of Civil Procedure 50(b) requesting the court set aside the jury verdicts on the Clean Water Act and trespass claims.¹¹² The district court granted Southview Farm's motion as to the Clean Water Act verdicts but upheld the verdict and damage award for the trespass claims.¹¹³

CARE appealed the trial court's ruling on the motion to the United States Court of Appeals for the Second Circuit.¹¹⁴ The Second Circuit reversed the judgment of the district court and remanded the case for further proceedings in accordance with its opinion.¹¹⁵ The court ruled that Southview Farm was a concentrated animal feeding operation (CAFO)¹¹⁶ because it met certain numeric thresholds for numbers of animals, and the cows were confined apart from the crop fields on which their manure was applied.¹¹⁷ The Court also rejected Southview's argument that discharges from farm fields were stormwater run-off, and thus exempt from regulation, stating that the liquid manure merely was spread on days when it happened to be raining.¹¹⁸ Finally, the Court ruled that manure spreading equipment and a

109. *Id.* at 117.

110. *Concerned Area Residents for the Env't v. Southview Farm*, 834 F. Supp. at 1437.

111. *Id.* at 1435.

112. *Id.* at 1437.

113. *Id.*

114. *Concerned Area Residents for the Env't v. Southview Farm*, 34 F.3d 114 (2d Cir. 1994).

115. *Id.* at 123.

116. The CWA definition of point source includes CAFOs. 33 U.S.C. § 1362(14) (1994). The EPA has defined CAFO as an animal feeding operation meeting certain criteria or which the Director designates as a CAFO. 40 C.F.R. § 122.23(b)(3) (1996). An animal feeding operation is defined as a lot or facility (other than an aquatic animal producing facility) where the following conditions are met:

i. Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and

ii. Crops, vegetation forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

40 C.F.R. § 122.23(b)(1) (1996). The regulation sets forth minimum numbers of animals to qualify as a concentrated animal feeding operation, including "(1) 1000 slaughter and feeder cattle [and] (2) 700 mature dairy cattle (whether milked or dry cows)." 40 C.F.R. § 122 app. B (1996).

117. *Concerned Area Residents for the Env't v. Southview Farm*, 34 F.3d at 122-23.

118. *Id.* at 121.

swale—a natural depression in the field—were point sources of pollution for purposes of the Act.¹¹⁹

Southview petitioned the United States Supreme Court to hear the case. Nine amicus briefs were filed in support of Southview's petition for certiorari, including one from the New York State Attorney General.¹²⁰ The Attorney General argued that the NPDES permitting program—designed to regulate municipal and industrial “end-of-pipe” discharges—would impose extensive, burdensome recordkeeping, testing, and other requirements on farm operations that are inappropriate for most dairy farms in New York and were not intended by Congress to be imposed on most agricultural operations.¹²¹ He also argued that Congress, through various amendments to the CWA, has consistently expressed an intent not only to exempt production agriculture from the reach of the point source permitting program, but has specifically left regulation of nonpoint sources of pollution to the states.¹²² The Supreme Court denied Southview's petition on April 24, 1995.¹²³

The Southview decision has created a quandary for the DEC, which had not previously interpreted the NPDES program to cover livestock and dairy operations that spread manure on adjacent fields. The DEC recently completed the process of crafting a SPDES permit application—the State equivalent of an NPDES permit application—for large dairy and livestock operations in response to a request from Southview Farm, but it remains unclear from the Second Circuit decision just how many of New York's 10,700 dairy farms¹²⁴ and other livestock operations would be advised to apply for a permit in light of the Second Circuit's statement that manure spreaders and swales are point sources.¹²⁵ The EPA has published a position paper on the case that criticizes the Court's finding on manure spreaders and essentially advises states to ignore that portion of the opinion as “dicta.”¹²⁶ The Second Circuit, however, characterized its determination on this point as

119. *Id.* at 118-19.

120. *Amici* included: State of New York; New York Joint Legislative Commission on the Dairy Industry; Dairylea Cooperative Inc. and National Milk Producers Federation; Equipment Manufacturers Institute; National Pork Producers Council; National Council of Farmers Cooperatives and National Cattlemen's Association; Northeast Dairy Producers Association; Farm Credit of Western New York, ACA, First Pioneer Farm Credit, ACA, Empire Farm Credit, ACA, Yankee Farm Credit, ACA, Farm Credit of Maine, ACCA, and Cobank, ACB; The American Farm Bureau Federation and The New York Farm Bureau, Inc.

121. Brief for St. of N.Y. at 2, *Concerned Area Residents for the Env't v. Southview Farm*, 115 S. Ct. 1793 (1995) (No. 94-1316).

122. *Id.* at 8-9 (citing S. Rep. No. 92-414, 92d Cong., 1st Sess. (1971), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3705).

123. *See Southview Farm v. Concerned Area Residents for the Env't*, 115 S. Ct. 1793 (1995).

124. NEW YORK AGRIC. STATISTICS SERV., *supra* note 9, at 56, tbl. 59.

125. *See Concerned Area Residents for the Env't v. Southview Farm*, 34 F.3d 114, 118-19 (2d Cir. 1994).

126. OFFICE OF WATER, U.S. EPA, PERCEPTIONS AND FACTS ABOUT THE SOUTHVIEW FARM DECISION (1994).

an alternative holding.¹²⁷ The Supreme Court has determined that alternative holdings stand as *stare decisis*.¹²⁸

In response to the *Southview* decision, the Clean Water Act Reauthorization Bill, which passed the House of Representatives on May 16, 1995, was amended to specifically exclude landspreading as a point source subject to the permitting provisions of the Act.¹²⁹ The New York Attorney General has endorsed the amendment and has suggested even further changes to "reverse a severe and unintended blow to America's family farmers." The Attorney General stated that further changes are needed to ensure that New York dairy and livestock operations, which spread manure for crop fertilization and soil nutrient recycling, "not be forced to endure the same stringent and severe regulation as is reserved for major industrial, chemical, and municipal polluters."¹³⁰

House Bill 961 will likely undergo further revision as it works its way through the Senate. President Clinton has vowed to veto the bill if it passes the Senate in its present form.¹³¹

VI. RECENT EFFORTS TO ADDRESS AGRICULTURAL NONPOINT SOURCE POLLUTION

A. Watershed Protection: The New York City Model

The current programmatic effort underway in New York has its roots in the New York City Watershed Agricultural Program.¹³² The New York City water supply system is the largest surface storage and supply complex in the world, covering over 1900 square miles or 1,216,000 acres.¹³³ In addition to its residents, New York City supplies drinking water to one million residents in upstate counties, as well as millions of daily commuters, tourists, and visitors to the city.¹³⁴ Water from the Catskill and Delaware watersheds account for approximately 90% of New York City's water supply.¹³⁵

127. *Concerned Area Residents for the Env't v. Southview Farm*, 34 F.3d 114, 119 (2d Cir. 1994).

128. *Woods v. Interstate Realty Co.*, 337 U.S. 535, 537 (1949) (holding that "where a decision rests on two or more grounds, none can be relegated to the category of *obiter dictum*").

129. H.R. 961 amends Section 319, Nonpoint Source Management Programs, by adding a new subsection (g) which provides: "For the purposes of this Act, any land application of agricultural inputs, including livestock manure, shall not be considered a point source and shall be subject to enforcement only under this section." H.R. 961, 104 Cong., 1st Sess. (1995).

130. Dennis C. Vacco, New York Attorney General, Memorandum in Support of H.R. 961 with Amendments (May 12, 1995).

131. John H. Cushman, *House Votes Sweeping Changes in Clean Water Act*, N.Y. TIMES, May 17, 1995, at A17.

132. AD HOC TASK FORCE ON AGRIC. & N.Y.C. WATERSHED REG. POLICY GROUP RECOMMENDATIONS 1 (Dec. 1991) [hereinafter AD HOC TASK FORCE].

133. *Id.*

134. *Id.*

135. *Id.*

In September 1990, the New York City Department of Environmental Protection (DEP) issued a Discussion Draft¹³⁶ of revisions to its watershed regulations, pursuant to the New York Public Health Law¹³⁷ and New York City Administrative Code.¹³⁸ The regulations have not been amended since 1953.

The Discussion Draft was developed to solicit input on approaches meeting New York City's overall objective: to prevent degradation of the sources of its water supply.¹³⁹ It was also intended to meet state and federal drinking water standards as set forth in the 1986 amendments to the SDWA.¹⁴⁰ Under the federal Surface Water Treatment Rule—promulgated by the EPA pursuant to the Act—communities which rely on surface water sources may avoid the requirement to filter those sources if they show that their source water meets federal and state raw water standards, adequate disinfection is in place, and an adequate watershed protection program can be implemented to reduce the risk of waterborne disease.¹⁴¹ Construction of a filtration system is estimated to cost \$4-5 billion, plus annual operating costs of approximately \$200-400 million.¹⁴²

Members of the farm community, local, state, and federal agencies, and Cornell University¹⁴³ faculty and staff, voiced strong concern that the Discussion Draft sections on agriculture threatened the continued viability of farms in the New York City Watershed, especially dairy and livestock farms, due to large and arbitrary setbacks from watercourses for many farm activities, such as manure landspreading.¹⁴⁴ The setbacks would render much of the farmland in the watershed unusable for farming. At the same time, New York City has repeatedly expressed that farms are a preferred land use in the Watershed for water quality purposes, compared to other forms of development.¹⁴⁵

In an effort to explore solutions to the agricultural concerns raised by the Discussion Draft, the New York State Department of Agriculture and Markets convened an Ad Hoc Task Force to recommend regulations and programs that would protect New York City's water supply, while also sustaining the long-term viability of agriculture within the Watershed.¹⁴⁶ The Task Force was comprised of a Policy Group and Technical Support Group.¹⁴⁷ The Policy Group represented agencies directly involved in issuing

136. N.Y. CITY DEP'T OF ENVTL. PROTECTION, DISCUSSION DRAFT OF PROPOSED REGULATION FOR THE PROTECTION FROM CONTAMINATION, DEGRADATION AND POLLUTION OF THE NEW YORK CITY WATER SUPPLY AND ITS SOURCES (Sept. 1990).

137. N.Y. PUB. HEALTH LAW § 1100.1 (McKinney 1990).

138. N.Y.C. ADMIN. CODE § 24-302 (1992).

139. AD HOC TASK FORCE, *supra* note 132, at 1.

140. *Id.*

141. 40 C.F.R. §§ 141.71 (1996).

142. AD HOC TASK FORCE, *supra* note 132, at 1.

143. Cornell University is the land grant college for the State of New York. N.Y. EDUC. LAW §§ 5701-5716 (McKinney 1985).

144. AD HOC TASK FORCE, *supra* note 132, at 1.

145. *Id.*

146. *Id.*

147. *Id.* at 2.

and administering the proposed watershed regulations, groups that would be affected by the regulations, and organizations that could facilitate implementation of the regulations. The Technical Group was comprised of representatives of academia and federal, state, and local government, who possessed the special expertise necessary to assist the Policy Group in its deliberations.¹⁴⁸

The Task Force was charged with (1) improving mutual understanding of the laws and public policies that shape the New York City's watershed program, (2) improving mutual understanding of the characteristics of farm operations and of the technology and art of farm management available to address the influences of farm practices on drinking water quality, and (3) exploring ways in which New York City could work in partnership with farmers and the network of agricultural support institutions to encourage a sustainable farm economy in the watersheds, yet achieve water quality objectives.¹⁴⁹

After approximately one year of deliberations, the Policy Group issued its recommendation that New York City adopt a voluntary, Whole Farm Planning/Best Management Practices (BMP) Program.¹⁵⁰ Under the Program, Whole Farm Plans identifying BMPs tailored to the needs of each farm would be prepared by local project teams to control pathogens, nutrients, sediments, pesticides, and other potential agricultural pollutants. Incentives for participation, including cost-sharing, would be made available by New York City to participating farmers, supplemented by other funding sources, if available. The Group also recommended withdrawal of the proposals for regulation of agricultural practices in the Discussion Draft and substitution with a simple prohibition against willful point and nonpoint source pollution by individual farm operators.¹⁵¹ The Group recommended establishment of a permanent Watershed Agricultural Council and adoption of the program in phases, with a target for completing the "Phase I" start-up in 2 1/2 years.¹⁵²

In response to the Policy Group Recommendations, the New York City DEP withdrew the proposed regulations governing agriculture and embarked on a partnership with farmers and local government to bring whole farm planning to the Watershed.¹⁵³ New York City committed over \$3 million to Phase I, which involved the development and implementation of whole farm plans on ten demonstration farms in the Watershed.¹⁵⁴ It also signed a \$35 million contract with the Watershed Agricultural Council, Inc., a New York not-for-profit corporation comprised of farmers and local and state government officials to coordinate and administer Phase II of the Program, including disbursement of funds to develop and implement whole farm plans for the

148. *Id.* at 2-3

149. *Id.* at 2.

150. *Id.* at 4.

151. *Id.* at 5.

152. *Id.* at 15-16.

153. *Id.* at D-1.

154. Agricultural Program Memorandum of Understanding Between the N.Y.C. Dept. of Env'tl. Protection and the N.Y. St. Soil & Water Conserv. Committee 11 (July 20, 1992) (on file with author).

remaining farms in the Watershed.¹⁵⁵ Phase II is intended to span five years and ultimately result in a minimum 85% farmer program participation rate in the Watershed.¹⁵⁶ The EPA has directed that one condition for maintaining New York City's current status of "filtration avoidance" is the commencement of a total of 415 new whole farm plans by October 1996, with all plans to be implemented by October 1997.¹⁵⁷

Filtration avoidance for New York City rests not only on the success of the Whole Farm Planning Program, but also on the ability to successfully address nonagricultural sources of contamination in the Watershed. These nonagricultural issues have spawned litigation involving the Coalition of Watershed Towns, New York City, and the Department of Health,¹⁵⁸ and have also led to the formation of a special task force to resolve several divisive and long-standing issues before September 15, 1995, the latest deadline imposed by the EPA.¹⁵⁹

B. Creating a Statewide Program: The REAP Proposal

The New York City Program was developed to address a unique situation involving an extremely large unfiltered surface water supply.¹⁶⁰ It is largely funded by New York City with no direct cost to participating farmers.¹⁶¹ State officials have now begun to explore ways to bring the whole farm planning concept to farmers statewide in a way which addresses the State's water quality concerns, yet is economical for farmers to implement in light of limited state resource funding.

In 1993, the Commissioner of Agriculture and Markets and the Dean of the College of Agricultural and Life Sciences at Cornell University convened a working group of farmers, college faculty, agribusiness representatives, and state and federal officials in response to a request from farmers for assistance in dealing with dairy manure management issues.¹⁶² The group quickly broadened its focus to discuss programmatic ways to resolve a number of environmental issues facing farmers.¹⁶³ It then developed a framework for a program to provide "one-stop shopping" for farmers to enable them, through their voluntary participation, to comply with the myriad envi-

155. WATERSHED AGRIC. COUNCIL, FIRST PROGRESS REPORT OF THE NEW YORK CITY WATERSHED AGRICULTURE PROGRAM 53 (Apr. 4, 1994) [hereinafter INTERIM REPORT].

156. *Id.* at 4.

157. *Id.*

158. *See, e.g.*, *City of New York v. New York State Dep't of Health*, 623 N.Y.S.2d 491 (App. Div. 1995).

159. *State Given Until September by EPA to Resolve Watershed Rulemaking Issues*, ENVTL. REP., April 21, 1995, at 2498. On August 16, 1995, the "Ad Hoc Watershed Committee," which consists of representatives from New York State, New York City, the EPA, the Coalition of Watershed Towns, and Westchester and Putnam counties, announced conceptual agreement on many major issues. Executive Chamber, State of New York, Press Release (August 16, 1995).

160. AD HOC TASK FORCE, *supra* note 132.

161. INTERIM REPORT, *supra* note 155, at 1.

162. NUTRIENT MGMT. WORKING GROUP, *supra* note 7.

163. *Id.* at 1.

ronmental laws and regulations governing their farm operations, while maintaining economically viable farm businesses.¹⁶⁴ During the course of its deliberations, the Working Group studied the New York City experience and incorporated many of the components of that program in its proposed statewide program.¹⁶⁵

The proposed program is called REAP—Responsible Environmental and Agricultural Planning.¹⁶⁶ REAP calls for a cooperative effort between state and local agencies to evaluate farm practices, develop or approve farm plans through certified planners drawn from both public agencies and the private sector.¹⁶⁷ REAP also seeks to provide technical and financial assistance to farmers to help them satisfy current regulatory requirements—either by documenting and monitoring existing conforming operations, or by instituting timely planning and implementation of best management practices.¹⁶⁸ REAP encourages adaptation and use of existing farm plans where possible.¹⁶⁹ It relies on incentives such as regulatory relief, protection from private nuisance suits, and exemption from the requirements of restrictive local ordinances to maximize farmer participation.¹⁷⁰ It also stresses good stewardship of the land and farmer responsibility, as well as promotes cost effective ways to protect New York's water resources for farms which might be permitted as a point source.¹⁷¹ The proposed program is intended to fulfill the permit conditions for those farms.¹⁷² In order to receive the benefits of program participation, farmers would be required to maintain a copy of their farm plans on file with the local soil and water conservation district and keep records showing appropriate implementation of the plan.¹⁷³

The Working Group stressed that success would depend, in part, on development and implementation of an educational component to the program which includes the following:¹⁷⁴

1. General awareness education provided to the agricultural community and policymakers regarding environmental laws and regulations, environmental issues impacting farm businesses, environmental standards, and environmental risks created by current agricultural activities;

164. *Id.*

165. *Id.* at 4.

166. See Eleanor Jacobs, *Know Where You Stand—A REAP Environmental Assessment Can Help Farmers Identify and Solve Environmental Problems*, AMERICAN AGRICULTURALIST, Aug. 1995, at 9.

167. NUTRIENT MGMT. WORKING GROUP, *supra* note 7, at 6.

168. *Id.*

169. Examples of existing plans include those prepared to meet the requirements of the Food Security Act, *see supra* note 5 and accompanying text, and related state soil and water conservation plans. N.Y. SOIL & WATER CONSERV. DIST. LAW § 9 (McKinney Supp. 1995).

170. NUTRIENT MGMT. WORKING GROUP, *supra* note 7, at 7.

171. *Id.*

172. *Id.* at 3.

173. *Id.* at 1.

174. *Id.* at 3-4.

2. Farm-level education employing agricultural environmental management curricula covering on-farm environmental risk and priority-ranking; manure and nutrient management principles and methods; and applications of practices and technologies. . . . and
3. Whole Farm Plans using planning guides and manuals to teach applicability of Best Management Practices to specific farm conditions; [and] conference and training sessions to train new and existing certified consultants to develop, implement, and evaluate environmental farm plans.

The Working Group also developed the outline for a "tiered approach" to water quality protection from agricultural pollution sources.¹⁷⁵ The tiered approach aims to tailor the appropriate level of farm assessment and planning to the individual farm to maximize farmer participation and minimize cost while achieving water quality goals. For example, Tier I would involve an initial survey of farmers to determine the parameters of their farm operations and to assess the potential risks, if any, to water quality from each farm operation. If certain risks are revealed in the Tier I survey, planning would proceed to Tier II.

Tier II would consist of a series of assessments completed by the farmer with the assistance of a project team of local water quality and farm experts.¹⁷⁶ The project team would be composed of local soil and water districts and cooperative extension personnel, as well as federal Natural Resource Conservation Service assistance as available or needed. If the assessments reveal the need for corrective action through development and implementation of a formal farm plan, planning would proceed to Tier III.

Depending on the complexity of the farm operation and the water quality issues involved, Tier III would involve either limited planning and implementation needed to protect water quality or it would involve development and implementation of a whole farm plan consisting of a complete environmental and economic analysis of the farm operation, resulting in an integrated, comprehensive, blueprint for managing the farm in a manner compatible with water quality goals.¹⁷⁷ This form of agricultural or environmental triage is currently being tested in the Skaneateles Lake Watershed in Central New York.¹⁷⁸ The lake is a major drinking water source for the City of Syracuse.

The Working Group is continuing to meet and refine its recommendations, including identifying legislative amendments that are necessary or advisable to implement the program it envisions. It is also inviting the farm and environmental communities to provide further input into the shaping of any legislative initiatives. Some farm advocates have expressed the view that establishment of a formal, comprehensive program to address agri-environ-

175. *Id.* at 3.

176. *Id.*

177. *Id.*

178. Memorandum of Understanding of the Skaneateles Watershed Program between the N.Y. St. Soil and Water Conserv. Committee and the Onondaga County Soil and Water District (May 3, 1994) (on file with author).

mental issues will lead to more invasive government regulation of farmers.¹⁷⁹ Environmental advocates, on the other hand, have decried the initiative as a license for farmers to pollute.¹⁸⁰ The Working Group continues to grapple with these divergent perspectives and to search for the appropriate mix of incentives and controls to help farmers produce food and fiber in harmony with the environment. Furthermore, the Group is also discussing the need for greater outreach to both the farm and nonfarm community, regarding the nature of agricultural nonpoint source pollution, the various laws and regulations which affect farm operations in this area, and the options for moving forward to address farm business and environmental concerns.

VII. CONCLUSION

Controlling agricultural nonpoint source pollution in New York will continue to require a cooperative effort between farmers, federal officials, state and local officials, academia, agribusiness, and the nonfarm community. Federal legislative reform, statewide legislative and programmatic initiatives, and ongoing planning and implementation of projects at the local level are all converging to offer opportunity for developing a comprehensive strategy for protecting New York's water resources while preserving New York farm operations. New York is well poised to grasp this opportunity.

179. Tom Parry, *State Wants to Be Farmer Friendly*, CANANDAIGUA MESSENGER, May 3, 1995, at 1A.

180. *Bitter Harvest. Should the State Give Farmers a License to Pollute?*, METROLAND, May 18, 1995.