

WATERSHEDS: RUNOFF FROM THE TAX CODE

Janet E. Milne

Water pollution has three principal sources: municipal, industrial and agricultural wastes. All three must eventually be controlled if we are to restore the purity of our lakes and rivers. Of these three, the most troublesome to control are those from agricultural sources: animal wastes, eroded soils, fertilizers and pesticides.
—President Richard Nixon, 1970¹

Federal and state tax codes send price signals that can affect behavior. This essay examines selected tax measures from a watershed perspective, exploring ways in which they may—or may not—enhance the quality of water within a watershed. To provide a concrete setting for the inquiry, it looks in particular at ways in which tax systems may influence levels of nonpoint source water pollution in Lake Champlain from Vermont’s agricultural activities. Although President Nixon recognized the national problem of nonpoint source pollution from agricultural activities in 1970, the problem has not yet been solved and the role of taxation is often underappreciated. After briefly describing the environmental challenge, the following discussion focuses primarily on three federal tax provisions and one Vermont tax provision that can offer insights into the role of tax policy in protecting the environmental integrity of water bodies. While not engaging in an empirical analysis, it offers observations relevant to their effectiveness in reducing nonpoint source pollution.

I. THE WATERSHED’S ENVIRONMENTAL CHALLENGE

Lake Champlain lies at the heart of a multi-jurisdictional watershed. Ninety-five percent of its water flows into the lake from an 8,000 square mile basin in Vermont, New York and Quebec.² Some of that water brings with it nutrients that over-fertilize the lake, causing algal blooms that deplete the oxygen in the water. This eutrophication impairs habitat, water supplies, and aesthetic and recreational values of the lake.³ The most significant nutrient is phosphorus, 90% of which comes from nonpoint sources and over one-third from agricultural land.⁴

* Professor of Law, Vermont Law School.

1. President Richard M. Nixon, Special Address to Congress on Environmental Quality, Feb. 10, 1970.

2. Lake Champlain Basin Program, Opportunities for Action 3, 7 (2003).

3. *Id.* at 11.

4. LAKE CHAMPLAIN BASIN PROGRAM, STATE OF THE LAKE AND ECOSYSTEMS INDICATORS

As participants in the Lake Champlain Basin Program,⁵ Vermont and New York in the 1990s committed to reducing phosphorus loads from point and nonpoint sources over 20 years, striving for 25% reductions during each five-year period, and Quebec joined in cooperation.⁶ With improvements in pollution from point sources, nonpoint source pollution from agricultural activities became a key focus after the turn of the century.⁷ Vermont and New York together promulgated a rule that set total maximum daily loads of phosphorus in the lake and prescribed loads that could come from agricultural land in each of the sub-watersheds, and Quebec agreed to levels for its share.⁸

Nonpoint source phosphorus loading from agricultural activities results from runoff from manure storage and spreading, milkhouse management practices, cropland erosion that carries soil-bound phosphorous into water bodies, excessive use of fertilizers, and the destruction of buffers and wetlands that can capture and cleanse runoff containing phosphorus.⁹ Vermont requires farmers to follow Accepted Agricultural Practices that can reduce phosphorus loading, such as limits on spreading manure during the winter when the ground is frozen, the establishment of buffers, the application of fertilizer based on soil tests, and prohibitions on the placement of structures in flood-prone areas.¹⁰ It also provides for Best Management Practices,¹¹ applied on a case-by-case basis with governmental financial assistance.¹² These practices cover a broader range of activities and, unlike Accepted Agricultural Practices, can include the construction of structures.¹³ Nevertheless, the Lake Champlain Basin Program's 2008

REPORT—2008, at 8 (2008). The amount of phosphorus runoff varies substantially in different sub-watersheds. *Id.*

5. Established pursuant to the Lake Champlain Management Conference, Public Law 101-596 § 302, the program is a partnership among New York, Vermont, Quebec, the federal Environmental Protection Agency, and other governmental and private bodies. LAKE CHAMPLAIN BASIN PROGRAM, OPPORTUNITIES FOR ACTION 5 (2003). The federal Clean Water Act is also relevant to the states' legal responsibilities.

6. Lake Champlain Basin Program, Opportunities for Action 13 (2003).

7. *Id.* at 14-15.

8. Vermont Agency of Natural Resources & New York State Department of Environmental Conservation, Lake Champlain Phosphorus TMDL 18-19, 35 (2002). In 2008 the Vermont Legislature directed the Agency of Natural Resources to improve its implementation of the TMDL. VERMONT AGENCY OF NATURAL RESOURCES & VERMONT AGENCY OF AGRICULTURE, FOOD AND MARKETS, VERMONT CLEAN AND CLEAR ACTION PLAN: 2008 REPORT 82 (2009) (citing Act 130 of the 2008 Legislative Session).

9. See Vermont Accepted Agricultural Practices Regulations, Introduction (2006).

10. *Id.* § 4.

11. Vermont Best Management Practices Regulations (1996) (implementing 6 V.S.A. § 4810(a)(2)).

12. 6 V.S.A. § 4810(a)(2).

13. Vermont Best Management Practices Regulations § 4.1. Medium and large livestock farms

report found that phosphorus loads for the lake as a whole from nonpoint sources significantly exceeded the targets.¹⁴

II. TAXATION'S ROLE IN THE WATERSHED

A. Federal Tax Benefits for Agricultural Management Practices: Explicit Recognition of the Environmental Problem

Two federal tax provisions provide benefits for activities that can reduce phosphorus loading by encouraging farmers to engage in activities that will reduce runoff from agricultural activities. Section 126 of the Internal Revenue Code (the Code) excludes certain federal cost-sharing payments from income for federal income tax purposes.¹⁵ This benefit applies to cost-sharing payments from a variety of federal programs that help Vermont farmers.¹⁶ For example, the Environmental Quality Incentives Program provides payments for farmers' development of nutrient management plans, construction of manure storage facilities, installation of fences to contain grazing, use of buffers, and other activities.¹⁷ The Conservation Reserve Program provides payments for conservation practices, such as the establishment of vegetation to reduce erosion,¹⁸ and the Wetlands Reserve Program assists with the restoration of wetland functions.¹⁹ Vermont has designated areas within the Lake Champlain

must obtain a permit, operate under a nutrient management plan and meet other conditions. 6 V.S.A. §§ 4851, 4858.

14. LAKE CHAMPLAIN BASIN PROGRAM, STATE OF THE LAKE AND ECOSYSTEM INDICATORS REPORT 5 (2008). The report did not disaggregate pollution from agricultural lands.

15. I.R.C. § 126(a). The taxpayer can exclude the portion of the payment attributable to soil and water conservation and other designated purposes, but only to the extent that it does not substantially increase the taxpayer's income derived from the land. *Id.* § 126(b)(1)(B). See generally Treas. Reg. § 16A.126-1. A taxpayer may elect not to have Section 126 apply. I.R.C. § 126(c).

16. The programs must be enumerated in Section 126 or be substantially similar to those enumerated. See Rev. Rul. 2006-46, 2006-39 I.R.B. 511 (recognizing Conservation Security Program as substantially similar); Rev. Rul. 2003-59, 2003-1 C.B. 1014 (recognizing Conservation Reserve Program as substantially similar); Rev. Rul. 2003-15, 2003-1 C.B. 302 (recognizing Agricultural Management Program as substantially similar); Rev. Rul. 2003-14, 2003-1 C.B. 302 (recognizing Soil and Water Conservation Assistance program as substantially similar); Rev. Rul. 97-55, 1997-2 C.B. 20 (recognizing Wetland Reserve Program and Environmental Quality Incentives Program as substantially similar).

17. Natural Resources Conservation Service, 2009 Environmental Quality Incentive Program Funding Pools.

18. Natural Resources Conservation Service, Conservation Reserve Program/Vermont, www.vt.nrcs.usda.gov/prgrams/CRP.

19. Natural Resources Conservation Service, At a Glance: Wetlands Reserve Program (2008).

Basin as priorities for funding under some of these programs.²⁰

Section 175 of the Code instead offers an income tax deduction for farmers' soil and water conservation expenditures, such as terracing, the construction of drainage ditches and planting of vegetation that will serve as windbreaks.²¹ The activities must be consistent with a soil conservation plan that has been approved by the federal Department of Agriculture or a comparable state agency.²² As measures that address erosion, they can reduce runoff carrying phosphorus.

Thus, both of these tax provisions target nonpoint source pollution from agricultural activities, and they may buttress implementation of Vermont's Accepted Agricultural Practices and Best Management Practices. They use other, non-tax agencies' programs and expertise to set the priorities and guidelines for subsidized activities—through the parameters of funding programs under Section 126 and the governmentally approved conservation plans under Section 175—which deftly prevents tax authorities from having to make environmental judgments.

B. The Federal Tax Benefit for Conserving Agricultural Land: Ambiguous Results

Over the last several decades, land trusts and governmental agencies nationwide have sought to protect agricultural land from development. Vermont Land Trust, for example, has been involved in the protection of hundreds of working farms through the use of conservation easements that permanently restrict future development and uses of the land.²³ Under Section 170(h) of the Code, landowners who donate perpetual conservation easements to land trusts or governmental agencies that will enforce the easements may be eligible for a charitable deduction for the value of the extinguished rights. To qualify for the income tax deduction, the conservation easements must serve a "conservation purpose," which includes the preservation of farmland pursuant to a "clearly delineated

20. See VT NRCS, Application Evaluation & Ranking Tool (AERT) Guidance: EQIP 2009 Structural Pool.

21. I.R.C. § 175(a)(1), (c). The deduction is capped at 25% of farming income. *Id.* § 175(b). See generally Lonnie R. Beard, Survey of the Law and Selected Issues Relating to the Deductibility of Soil and Water Conservation Expenditures Under Section 175 of the Internal Revenue Code, 73 KY. L.J. 723 (1985).

22. I.R.C. § 175(c)(3)(A). The taxpayer should have on file a copy of a plan for the individual property prepared by the Natural Resources Conservation Service (NRCS) within the Department of Agriculture, an NRCS county plan, or a comparable state agency plan. INTERNAL REVENUE SERVICE, FARMER'S TAX GUIDE 28 (2008) (Publication 225).

23. Vermont Land Trust, Deepening Relationships Through Land Conservation, <http://www.vlt.org/CaseStatement2006.pdf> (describing protection of over 650 farms).

Federal, State, or local governmental conservation policy.”²⁴

The question for purposes of this discussion is whether Section 170(h)'s criteria require farmers to engage in agricultural management activities that would reduce nonpoint source pollution after the land is protected.²⁵ A taxpayer might use a governmental policy calling for the reduction of agriculture nonpoint source pollution as a clearly delineated governmental policy that could satisfy Section 170(h). In that case, the conservation easement should require management activities that are consistent with the pollution-reduction policy.²⁶ For example, the Lake Champlain Basin Program's plan establishes the reduction of phosphorus loading as a priority and encourages management practices that go beyond the “acceptable agricultural practices” required by Vermont law.²⁷ A conservation easement pursuant to this plan presumably should require practices that exceed the regulatory minimum.

Taxpayers, however, might rely on other governmental policies to justify the deduction, such as the Vermont Housing and Conservation Board's conservation easement program for working farms²⁸ or municipal plans approving the preservation of farmland for reasons not related to pollution reduction. If so, the issue becomes whether Section 170(h)'s independent requirement that the property be used “exclusively for conservation purposes”²⁹ would mandate pollution-reduction practices.

24. 26 USC § 170(h)(4)(A)(iii). The easement must also provide a “significant public benefit.” *Id.*; Treas. Reg. § 1.170A-14(d)(vi) (citing factors such as scenic character and preservation of a landscape or resource that “attracts tourism or commerce to the area” as considerations in determining public benefit). Note that farmland could also qualify under other prongs of the “conservation purpose” definition, such as scenic or habitat protection, and a more extended analysis would address these prongs as well.

25. Note that an easement that limits the amount and location of residential and commercial building on a property may reduce nonpoint source pollution by limiting or strategically locating impervious surfaces on the land. This paper, however, focuses on agricultural management practices.

26. In an early private letter ruling, the Internal Revenue Service allowed a deduction for donation of a conservation easement on farmland pursuant to a state policy that encourages open space and farmland protection to reduce nonpoint source pollution of a watershed, but its ruling did not indicate whether the easement required agricultural management practices that would reduce nonpoint source pollution. Private Letter Ruling 8233025 (May 18, 1982). In a recent ruling, the Service allowed a deduction for an easement for forestland in a watershed on the grounds that it would protect a natural ecosystem and preserve open space pursuant, in part, to government water-quality, flood-prevention and erosion-control programs, as well as private programs. It noted the role of the forest in filtering runoff. Private Letter Ruling 200836014 (June 3, 2008).

27. LAKE CHAMPLAIN BASIN PROGRAM, OPPORTUNITIES FOR ACTION 19 (2003). Vermont's Best Management Practices regulations give first priority to the funding of Best Management Practices in the Champlain Basin. Best Management Practices Reg. § 3.3

28. See 10 V.S.A. § 302; Vermont Housing and Conservation Board, Conservation Programs, <http://www.vhcb.org/conservation.html#Anchor-Farmland-65515>.

29. 26 U.S.C. § 170(h)(1)(C).

Treasury regulations interpreting the “exclusively for conservation purposes” requirement provide that a taxpayer cannot claim a charitable deduction if the easement permits uses that destroy other “significant conservation interests.”³⁰ The regulations indicate in an example that the conservation of farmland pursuant to a state’s flood control program would not be eligible under Section 170(h) if the easement allows the use of pesticides that would damage a “significant naturally occurring ecosystem.”³¹ This language implies that easements pursuant to a governmental policy protecting working farms should incorporate a high standard for agricultural management practices if the pollution otherwise would have significant ecosystem consequences, such as phosphorus loading in Lake Champlain.³² On the other hand, the regulations allow inconsistent uses “if the use is necessary for the protection of the conservation interests that are the subject of the contribution.”³³ Thus, if the conservation interest is defined in terms maintaining a working landscape, an easement might not need to contain the highest management standards for nonpoint source pollution.³⁴ A farmer might argue that some continuing, polluting activities are necessary to the farm’s viability. As a result, the choice of conservation justification may influence the determination of whether an easement should hold farmers to a high standard for reducing nonpoint source pollution.

Even if Section 170(h) does not uniformly demand a higher standard, the parties to an easement can agree to set one. The Vermont Land Trust’s description of conservation easements for farms indicates that it generally requires landowners to develop a conservation plan for highly erodible

30. Treas. Reg. § 1.170A-14(e)(2).

31. *Id.* See Private Letter Ruling 8247024 (Aug. 18, 1982) (allowing charitable deduction for an easement on ranchland in river valley that allows the use of pesticides; ranchland not described as containing any significant habitats or ecosystems).

32. Presumably Lake Champlain is a “significant naturally occurring ecosystem” unless perhaps one argues that it is no longer in its natural state. The Internal Revenue Service’s private letter rulings do not provide much insight on the question of when agricultural practices might impair an ecosystem or another conservation value and render the donation nondeductible. For example, one ruling allowed a deduction for an easement on farmland, granted pursuant to the town’s Conservation and Open Space Policy, that prohibited tillage and plowing on steep slopes, but the ruling did not specifically analyze the significance of that prohibition to its conclusion that the retained rights would not impair other conservation purposes. Private Letter Ruling 8711054 (Dec. 15, 1986). *Cf.* Private Letter Ruling 200836014 (June 3, 2008) (citing forestland easement’s restrictions on impervious surfaces).

33. Treas. Reg. § 1.170A-14(e)(3).

34. See *id.* § 1.170A-14(f), Example (5) (allowing preservation of working farm pursuant to governmental open space policies under conservation easement that allows, *inter alia*, “sound agricultural and management practices”).

lands and to use “generally accepted agricultural practices,”³⁵ suggesting that it may not uniformly insist on highest level of agricultural management practices. Perhaps land trusts are grappling with the potentially competing goals of preserving working farms and maximizing watershed protection.³⁶

In sum, while Section 170(h) encourages the conservation of farmland, it does not explicitly address the issue of nonpoint source pollution. The extent to which it reduces nonpoint source pollution will depend on how the purpose of the easement is framed, the environmental consequences, and the negotiating positions of the landowner and the recipient of the conservation easement.

C. Current Use Assessment: No Leverage

Vermont law provides property tax relief for agricultural land that meets certain requirements, and about 75% of Vermont farms are enrolled in the program.³⁷ If a parcel of land is least 25 acres in size and generates income from farm crops, and if at least half of the farmer’s income derives from farming,³⁸ the farmer can elect to have the land assessed for property tax purposes at its value as farmland rather than its fair market value.³⁹ Although development of the property will trigger a penalty,⁴⁰ the farmer benefits from lower property taxes until that time.⁴¹ The program does not require any specific agriculture practices for qualification. Consequently, agricultural practices are only subject to other state requirements, such as Accepted Agricultural Practices, and the tax benefit does not induce a higher level of behavior. The policy goal of increasing the financial viability of farms seems to have implicitly trumped the goal of reducing pollution. By interesting contrast, forestland that qualifies under the same program is subject to a penalty if the owner engages in activities “contrary

35. VERMONT LAND TRUST, OPERATING FARM EASEMENTS: GUIDE TO THE LEGAL DOCUMENT 2 (2007). *See also* Grant of Development Rights (sample for Vermont Land Trust conservation easement purchased under Federal Farm and Ranch Lands Protection Program, requiring conservation plan for highly erodible land and “sound” agricultural practices), www.farmlandinfo.org/documents/31310/Exhibit_B_Vermont.pdf.

36. Note that a number of land trusts in Vermont hold conservation easements. This discussion cites Vermont Land Trust as one example but does not imply empirical conclusions about the terms of farmland easements actually negotiated by Vermont Land Trust or other land trusts.

37. Use Value Appraisal Task Force, Independent Study of [Vermont] Use Value Appraisal Program 4 (2008).

38. 32 V.S.A. § 3752(1), (7).

39. *Id.* § 3756(a).

40. *Id.* § 3757.

41. *Id.* § 3760.

to the minimum acceptable standards for forest management.”⁴²

The fact that the current use program does not mandate specific agricultural practices also has effects that ripple through Section 170(h). A state’s current use program can serve as a clearly delineated governmental policy that can help justify the deductibility of the donation of an agricultural easement.⁴³ As a result, the program lowers the bar for charitable donations of conservation easements, potentially allowing them to qualify without stringent management practices.

D. A Side Note on Fertilizer Costs: A Negative Factor

Finally, it is important to note that tax systems can also provide negative incentives. Section 180 of the Code allows farmers to deduct the cost of fertilizer, otherwise capitalized. By reducing cost, it can encourage increased use of fertilizers that contribute to phosphorus loading.

III. THE RESULT FROM A WATERSHED PERSPECTIVE

In the end, the question is: how, and how much, do these tax measures improve the quality in the watershed? Each of these programs provides tax benefits to farmers, and when evaluated in terms of its relationship to activities that will reduce nonpoint source pollution, such as phosphorus loading, each takes a different approach. Section 126 and Section 175 explicitly target the problem of nonpoint source pollution from agricultural activities. By contrast, Section 170(h) recognizes the preservation of farmland but does not expressly encourage management activities that will reduce nonpoint source pollution. Whether those activities occur will depend on the justification for the conservation easement and the negotiations over the easements’ terms. In yet further contrast, Vermont’s current use program for farmland provides no opportunities for leveraging improved management practices. It represents a missed opportunity, while the tax deduction for fertilizer is environmentally negative.

Determining the actual positive environmental impact of these tax provisions would require empirical and legal analysis beyond the scope of this paper.⁴⁴ Nevertheless several observations emerge from the discussion

42. *Id.* § 3752(5).

43. Treas. Reg. § 1.170A-14(d)(4)(iii)(A); Private Letter Ruling 8713016 (Dec. 23, 1986); Private Letter Ruling 8422064 (Feb. 28, 1984). Neither of these private letter rulings appear to involve watersheds.

44. This essay also does not address the longstanding controversy over the merits of using tax expenditures rather than direct spending programs to subsidized favored activities. See, e.g., STANLEY S. SURREY, *PATHWAYS TO TAX REFORM* 126-154 (1973).

above. First, the environmental impact of the provisions depends in part on their relationship to the regulatory regimes. To the extent that Sections 126 and 175 assist activities that only meet the regulatory requirements of Vermont's Accepted Agricultural Practices, they do not provide incentives for enhanced behavior (although they may accelerate compliance or compensate for weak enforcement).⁴⁵ When Section 126 encourages the installation of non-mandated structures, it can achieve a higher degree of environmental improvement. By requiring the preparation of soil conservation plans, Section 175 also may induce behavior beyond the Accepted Agricultural Practices, depending on the details of the plans. The pollution benefit of conservation easements similarly will depend the practices they require. Thus, one would need to determine the degree to which the tax benefits actually accrue to activities above the regulatory baseline. The relationship to the regulatory baseline is important not only for determining the degree of environmental benefit potentially attributable to the tax incentive, but also for examining whether it is appropriate for society to partially underwrite the costs of regulatory compliance.⁴⁶

Second, the degree of environmental benefit will depend on the level of participation in these programs. Because landowners make voluntary decisions to engage in these tax-favored activities, the result inevitably will be porous, not uniform across the watershed. While each increment of improvement can make a difference, the effect on the watershed or sub-watershed will depend on the cumulative level of voluntary response. The failure of Vermont's current use assessment program to link the tax benefit to enhanced management practices presents a significant missed opportunity, given the widespread participation in the program.

Third, the environmental impact is a function of whether the voluntary actions are directed toward the areas of greatest environmental sensitivity. Section 126 and Section 170(h) each offer opportunities to target specific geographic areas within the watershed to maximize the environmental benefit. Some of the cost-sharing programs place higher priorities on specific geographic areas within the Lake Champlain watershed, and land trusts and agencies accepting easements could choose to seek higher management standards in critical areas of the watershed. The language of the tax provisions may be geographically generic, but its implementation

45. See Vermont Agency of Natural Resources & Vermont Agency of Agriculture, Food and Markets, Vermont Clean and Clear Action Program: 2008 Annual Report 14-15 (2009) (discussing increased enforcement of Accepted Agricultural Practices requirement).

46. This question is most pertinent to Sections 126 and 175 where the government may be helping to finance mandated practices. For Section 170(h), the issue more is whether government has foregone an opportunity to leverage the tax deduction to maximize environmental protection.

need not be.

Finally, this brief analysis illustrates the challenge of intermodal watershed management, where multiple policies operate in multiple jurisdictions and all affect a common resource. Vermont, New York and Quebec collectively have chosen a regulatory vehicle, committing themselves to total maximum daily loads of phosphorus; Vermont, New York and Quebec each have their implementing measures; the federal government finances agricultural improvements; nongovernmental organizations set their programs and priorities; and as illustrated above, tax policies are clearly in the mix as well. Although tax policies often assume lower profile, they can be significant in positive and negative ways. Viewing jurisdictions separately and collectively, it is important to determine the relative role of tax policies and how that role might change in the future.

CONCLUSION

Tax provisions cannot induce comprehensive watershed management, but they can contribute. The provisions discussed above run the gamut. When linked to watershed-specific priorities in federal spending programs, Section 126 provides the most surgically targeted tax approach to reducing nonpoint source pollution in Lake Champlain, drawing on the expertise of non-tax agencies. Yet both Section 126 and Section 175 raise the question about the extent to which they are subsidizing regulatory compliance or providing an incentive for enhanced behavior.

While Sections 126 and 175 specifically focus on nonpoint source pollution, the deduction for donations of conservation easements and the current use assessment program are largely the product of other longstanding governmental goals, including the preservation of working farms. The success of Section 170(h)'s deduction for conservation easements will lie largely in the hands of the implementing organizations and taxpayers, who will decide whether to maximize opportunities to attach water quality conditions to the development restrictions that usually drive the donation. A more aggressive, pollution-reduction role for current use assessment rests in the hands of the legislature. There may be a gritty political and economic tension between the goals of sustaining Vermont's economically fragile working farms and protecting the Lake Champlain's water quality. Nevertheless, a strong argument can be made that when tax codes provide benefits to working farms, they should support environmentally sound farms that will be sustainable residents in the watershed. As the goals of society shift, so should tax codes or their implementation.