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OPTIONS FOR CONTROLLING NON-POINT SOURCE WATER POLLUTION: A LEGAL PERSPECTIVE*

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INTRODUCTION

Section 208 of the Federal Water Pollution Control Act Amendments of 1972[1] requires the States and certain designated areas to develop plans for the control of water pollution emanating from non-point sources. One such non-point source results from introduction of soil and plant nutrients into ground or surface waters from irrigation of and precipitation on agricultural land. In order to mitigate this pollution source, planning agencies will be evaluating alternate approaches to encourage or require farm operators to adopt improved soil conservation practices and to limit the level of plant nutrient loss.[2]

The following pages will analyze from a basic legal perspective various alternate approaches for controlling agricultural non-point sources of pollution. Various voluntary programs that involve general inducements such as increased education, cost sharing, and tax incentives will be explored, in addition to mandatory programs such as those in which implementation of a soil conservation plan would be compulsory for each farm operator. Programs for the control of most plant nutrients can be analyzed in the same context as erosion and sedimentation control programs, because most plant nutrients are

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1. 33 U.S.C. §1288 (1976).

2. For example, the State of Illinois constituted a seventy member task force to analyze the non-point sources of water pollution from agriculture. The task force included representatives of farm organizations, environmental groups, state agencies, universities and others. Committees of the task force were constituted to study the soil erosion, plant nutrient, pesticide, animal waste and silvaculture problems and to recommend policies and procedures for control. The committee recommendations were reviewed by the task force, a technical and a policy advisory committee and submitted to the State Environmental Protection Agency for integration with plans generated by the three designated area planning efforts. The submissions to the Federal EPA were to occur by November of 1978.

affixed to soil particles and enter streams and waterways with the particles. Nitrogen is an exception to this general rule because it is more readily leached from the soil and enters waters without being transported by soil particles. Thus, the control of most plant nutrients will be implicitly discussed in the context of erosion and sedimentation control programs, and nitrogen control programs will be discussed separately.

CONTROL ALTERNATIVES: AN OVERVIEW

The control policies discussed in this paper represent a reasonable range of alternatives, including programs that rely on general education, programs in which participation is voluntary and those which mandate specific actions. While the alternatives considered do not represent an exhaustive list, they do provide a means of examining the range of legal barriers that might be faced if such programs were to be implemented. The alternative policies selected also have the advantage of being under consideration at present by individuals involved in policy development.[3]

Voluntary Programs

The policy that would likely be met with the least resistance would be an expansion of current educational programs carried out by the Soil Conservation Service, the Agricultural Extension Service, local Soil and Water Conservation Districts, and other organizations. These programs, which presently rely largely on public meetings and demonstration projects, could be expanded to include the use of communication methods such as print and broadcast media, mail campaigns, and farm-to-farm canvassing. Cost sharing and tax incentives, such as those currently operated through the Agricultural Stabilization and Conservation Service, are also examples of compliance incentives which could be used in voluntary programs. The major emphasis of current programs is on soil conservation for the purpose of maintaining productivity, but not water quality. Under such programs the farm operator is reimbursed for a portion of actual expenditures on approved projects. In a tax incentive program the farm operator would be given a credit against his income tax liability for all or some part of certain types of expenditures. Examples of expenditures that might qualify are construction of terraces, or the purchase of erosion reducing tillage equipment. A

3. *See,* Seitz *et al., Alternative Policies for Control of Non-point Sources of Water Pollution from Agriculture,* EPA-600/5-78005 at 23-35, April 1978 (available through National Technical Information Service, Springfield, Virginia, 22161. Hereinafter cited as Seitz.).

major difference between the cost sharing and tax incentive approaches is that the cost sharing funds are limited to the amount approved by Congress, whereas the tax incentive approach likely would be less rigidly constrained.

Mandatory Programs

Of the many possible mandatory approaches to soil erosion control, the one most likely to be considered for adoption is the requirement of farm operators to implement an approved soil conservation plan. At present, the Soil and Water Conservation Districts and the Soil Conservation Service provide technical assistance to farmers requesting aid in developing a soil conservation plan for their farms.[4] As noted, these agencies conduct programs to encourage farmers to secure and adopt such plans. Under present policies the development and implementation of the plans are completely voluntary, but this situation is beginning to change. New York recently enacted legislation requiring the development (but not the implementation) of soil conservation plans.[5] Under Iowa's soil conservancy law,[6] farm operators can under certain conditions be forced to adopt soil conservation measures with the assistance of the appropriate agencies. This process would almost certainly involve development of a soil conservation plan.

The major reason for requiring the development of plans at the farm level is that such plans allow the flexibility to use a full range of physical control techniques. Depending on factors such as the soil, weather patterns, slope of the land and farmer preferences, the plan may involve modification of the crops produced, the tillage practices implemented, or the conservation practices employed. In some cases several such modifications will be required to achieve the desired reduction in soil loss. In other cases, improving soil conservation practices, perhaps by constructing terraces and changing tillage methods (e.g., adopting "conservation tillage"), may allow more intensive crop rotation, increasing the profitability of the farm operation. More often the plan will be developed so as to minimize loss of farm income while achieving the soil loss tolerance limit.[7]

The most severe of the mandatory soil conservation programs

4. 16 U.S.C., §590a(1), (3) (1976); 5 Ill. Rev. Stat. §127.5 (1977).

5. Soil Conservation Districts Law, §9 (7-a), McKinney's Consolidated Laws of N.Y. Annot., Book 52B.

6. Iowa Stat. Annot. §§467 D.1-D.24 (West Supp. 1977).

7. An analysis of the economic impact of mandatory soil erosion control on all cornbelt farms indicates that the aggregate impact on farm income may be positive. The impacts at the regional and at the farm level would not, however, be uniformly distributed. *See,* Seitz, *supra* note 3, at 65-70.

would be one that limits row-crop agriculture by requiring conversion of land to pasture or forest production. Such a restriction may be necessary in a number of cases if the desired soil loss limits are to be met. Such limitations are likely to be criticized as being tantamount to prohibiting the farm operator from carrying out the farming program which produces the highest income from the property. Hence, this limitation has been selected for more detailed scrutiny in the analysis.

Another potential mandatory policy would require that greenbelts be developed along streams to filter out sediment and other substances from agricultural runoff. Greenbelt policies are more strictly oriented toward improving water quality than are soil erosion control measures, which have impacts on productivity and water quality. The greenbelt requirement is similar to a restriction on row-crop agriculture in that it would force some land out of production. The legal issues are somewhat different, however, in that the green belt may filter runoff from the property of several owners, not just from the land of the owner who installs the greenbelt.

Other requirements that could be imposed include the prohibition of fall plowing in order to reduce soil loss or the mandatory implementation of conservation tillage practices such as chizel plowing. Universal restrictions of this type are not likely to be adopted, however, because they are not appropriate production techniques in all farming areas. For example, there are areas in the cornbelt where fall plowing is necessary to achieve acceptable soil tilth for spring planting. Thus while such requirements may be legally acceptable, they would not be practical.

Nitrogen Control

The extent to which nitrogen leaching is a water quality problem is not clear.[8] Since nitrogen standards for drinking water do exist,[9] however, nitrogen control policies will be considered by policy

8. *See, e.g.,* PORTER, NITROGEN AND PHOSPHOROUS, FOOD PRODUCTION, WASTE AND THE ENVIRONMENT, A REPORT OF AN INTERDISCIPLINARY RESEARCH PROJECT (1975). Porter discussed the contribution of nitrogen to the eutrophication problem. He also describes a multiplicity of natural and manmade sources that contribute nitrogen to water, the various transport processes that are involved, and the complex ecological processes which make a determination of the role of any single activity such as crop fertilization quite difficult.

9. A limit of 10 mg/l for nitrate-nitrogen concentration in public water supplies is given in the National Academy of Sciences Water Quality Criteria. The standard is established to avoid, "serious and occasionally fatal poisoning in infants. . . ." *See,* ENVIRONMENTAL STUDIES BOARD, NATIONAL ACADEMY OF SCIENCES, NATIONAL ACADEMY OF ENGINEERING (1972). WATER QUALITY CRITERIA 1972, A REPORT OF THE COMMITTEE ON WATER QUALITY CRITERIA.

makers and, therefore, are addressed in this analysis. One control possibility is the establishment of maximum levels of nitrogen to be applied according to the crops produced. Such a limit could be set on a uniform basis or could be set according to the rate of crop utilization (a function of yield). In either case any attempt at rigorous enforcement would be extremely expensive and difficult to achieve. Enforcement would be analogous, perhaps, to limiting the amount of water that a person could drink each day. It would be necessary to rely on voluntary cooperation, perhaps with spot checks to encourage compliance.

An alternative to setting application limits would be to impose a tax on nitrogen fertilizer to encourage farmers to reduce application rates. This approach would be much easier to implement, especially if the tax were assessed at the manufacturers' level. The rate of the tax would determine the amount of the reduction in nitrogen application.

The following discussion will examine the legal implications of both voluntary and mandatory sedimentation control programs and of programs for the control of nitrogen.

VOLUNTARY SEDIMENTATION CONTROL PROGRAMS

Educational Policies

There are few legal constraints on educational policies for the control of agricultural non-point source (NPS) pollution. There is a long tradition of state and federal support of educational activities as evidenced by the combined state and federal support of the Cooperative Extension Service.[10] Clearly, an intensification of such educational activity would be a legitimate function of either level of government. The more difficult question, however, is whether educational policies would be effective in altering human conduct. It is unlikely that education alone would stimulate a farmer to expend large sums for pollution control or to forego substantial income because of less intensive farming. Some form of cost sharing or income support would probably be needed, or alternatively, some kind of policing policy employing sanctions.

10. The Cooperative Extension Service was established by the Smith-Lever Act, 1914, now codified as 7 U.S.C. § 341. States then enacted statutes setting up avenues for accepting federal funds for extension work, establishing local services and providing the requisite state funds. *See, e.g.*, Ariz. Rev. Stat. Ann. § 3-121ff (enacted in 1915); 17 Mo. Ann. Stat. § 262.550ff (enacted in 1919). 7 U.S.C. § 342 outlines the work of the extension Service as "giving of instruction and practical demonstrations in agriculture, uses of solar energy with respect to agriculture, and home economics and subjects relating thereto to persons not attending or resident in said [land grant] colleges in the several communities and imparting information on said subjects through demonstrations, publications, and otherwise. . . ."

Cost Sharing Policies

The federal government is authorized to participate in subsidy programs to encourage soil conservation.[11] Typically, these subsidy programs also include federal regulations that are a prerequisite to receiving aid. As long as the regulations are reasonable, the federal government has the power to regulate in connection with its aid programs.[12]

State authority to provide a subsidy or cost sharing program for soil conservation improvements such as terracing would arise from its inherent sovereign powers.[13] Although earlier court decisions often opposed recognition of farmers as a separate class on the grounds that this classification violated the principle of equal protection under the laws, modern policy reflects a multitude of farm aid laws that have received judicial sanction.[14]

The constitutionality of a state cost sharing program could also be challenged because of the granting of public money for individual use. For example, several states have offered bounties for persons planting certain trees and hedges. At least two states, Colorado and Missouri, found these statutes to be unconstitutional.[15] It seems unlikely, however, that such a result would be reached with soil conservation subsidies. Although the farmer would benefit from the improved conservation over a period of time, the immediate benefit would be to the general public who would enjoy cleaner water. The Iowa Soil Conservation District law, which includes a state cost sharing program, has not yet been challenged.[16]

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11. 16 U.S.C. §590h (1976).

12. Wickard v. Filburn, 317 U.S. 111 (1942).

13. *See,* People v. Francis, 40 Ill.2d 204, 207, 239 N.E.2d 129, 131 (1968) wherein the court states, "The basic authority of the legislature is unrestricted save only if a power is denied by the State or Federal constitution."; Perry v. Lawrence County Election Commission, 219 Tenn. 548, 551, 411 S.W.2d 538, 539 (1967), *cert. denied,* 389 U.S. 821, 88 S.Ct. 44, 19 L.Ed.2d 73 (1967), wherein the court said, "The Legislature of Tennessee, like the legislature of all other sovereign states, can do all things not prohibited by the Constitution of this State or of the United States."; Sears v. State, 232 Ga. 547, 554, 208 S.E.2d 93, 99 (1974), wherein the court stated, "The legislature is absolutely unrestricted in its power to legislate, so long as it does not undertake to enact measures prohibited by the State or Federal Constitution."

14. Wickard v. Filburn, 317 U.S. 111 (1942), wherein the constitutionality of the Agricultural Adjustment Act was upheld; Hiatt Grain and Feed, Inc. v. Bergland, 446 F. Supp. 457 (D.C. Kan. 1978), wherein court sustains actions to suspend price supports for farmers; State, Department of Citrus v. Griffin, 239 So.2d 577 (Fla. 1970), wherein court upholds legislation to stabilize orange prices.

15. Institute for Educat'n of the Mute and Blind v. Henderson, 18 Colo. 98, 31 P. 714 (1892); Deal v. Mississippi County, 107 Mo. 464, 18 S.W. 24 (1891).

16. Iowa Stat. Annot. §§467 D.1-D.24 (West Supp. 1977).

Tax Incentive Policies

The federal government faces few constitutional constraints in effecting a tax incentive policy. In fact, current tax law already provides some incentive for soil conservation expenditures.[17] Farmers may elect to deduct certain soil and water conservation costs, even though such expenditures would normally be non-deductible capital outlays. Thus expenditures incurred for activities such as terracing, contour furrowing, construction of water courses, and planting of windbreaks can be deducted if a farmer so elects.

A new federal income tax incentive policy would need to provide additional incentives beyond a mere deduction. Such a policy could involve tax credits; for example, a tax credit equal to 50 percent of the conservation practice or equipment costs could be allowed. Such a tax credit policy would be, in effect, a federal cost sharing policy implemented through the income tax system.[18] Thus, the earlier discussion of a cost sharing policy probably would be applicable. The amount of the tax credit could be determined in several ways. For example, if the tax credit is a percent of actual expenditures on conservation practices, the calculation of the credit would deal with easily ascertainable facts. On the other hand, if the credit were based upon lost income resulting from a less intensive cropping pattern, the calculation of the credit would be based upon rather amorphous determinations.[19]

At the state and local level there are few constraints upon a tax policy, but there are also fewer opportunities to implement such a policy. For example, state sales taxes and local property taxes are major tax systems for state and local governments and many states offer tax incentives in the form of sales and use tax exemptions for pollution control facilities.[20] Such exemptions do provide some incentive for investments in pollution control equipment which would be subject to the tax in the first place. The technology for the control of NPS pollution, however, generally does not require equipment. Rather it involves conservation practices and the use of devices

17. *See, e.g.*, I.R.C. §175.

18. Precedent exists for such a policy. A preferential investment credit provision for urban pollution control facilities was enacted by the Tax Reform Act of 1976. *See*, I.R.C. §46(c)(5) (added by §2112(a)(2) of the Tax Reform Act of 1976).

19. There are also practical constraints upon a federal income tax credit policy. The Internal Revenue Service might actively resist the introduction of excessively complex sections into the code. The service would have a number of political allies among legislators supporting a streamlining of the tax system. The tax credit policy would therefore need to be as simple and straightforward as possible.

20. *See, e.g.*, Ill. Rev. Stat. §439.1 *et seq.*, 432.2a, 440 *et seq.*, 440a (1977).

such as terraces, grass waterways and concrete structures. Because such technology is generally not subject to sales and use taxes, any exemption could be inconsequential.

Special provisions in property tax laws could also provide incentive for the desired actions. For example, certain desirable improvements to land can be exempt from property tax—that is, the assessed valuation of the property could be held constant even though the fair market value of the property may increase because of the improvement. Such an approach is not readily adaptable to encouraging NPS pollution control because the types of improvements needed such as terraces, waterways and structures do not increase net farm income in the short run. Thus they do not significantly increase land value and hence there is no basis for an exemption.

If the state employs an income tax, there would be some opportunity to offer tax incentives for pollution control expenditures. For example, the state could employ an income tax credit similar to the federal tax credit. Such a policy generally would not face significant constitutional problems. However, since the amount of state income tax paid by a farmer is generally very small compared with the federal tax, such a policy at the state level would probably not be very effective.[21]

MANDATORY SEDIMENTATION CONTROL PROGRAMS

The requirement of *implementation* of a soil conservation plan would be subject to some constitutional constraints. This discussion assumes that mandatory implementation of a soil conservation plan would involve some limitation upon row-crop agriculture. The assumption is made because such limitations would be the most severe of the possible requirements. Other means of achieving the conservation goals of the plan, such as minimum tillage or contour farming, would be less restrictive on the farmer in that he could continue to produce his choice of crops. If a mandatory conservation plan prohibiting row-crop agriculture on certain land can survive constitutional attack, then less restrictive conservation plans could also be expected to survive the challenge.

A critical constitutional issue that would arise with any mandatory implementation policy would involve the Fifth Amendment prohibition against the taking of property for public use without just compensation: ". . . nor shall private property be taken for public

21. Given the financial crises in many states, it is questionable whether such a policy would be politically acceptable.

use without just compensation."[22] The issue would also be raised by any similar state requirement because of the incorporation of the Fifth Amendment into the Due Process clause of the Fourteenth Amendment. Assuming row-crop agriculture to be one of the most productive techniques of agriculture, it might be maintained that legislation prohibiting the use of the technique amounts to a "taking" of the property in violation of the Fifth Amendment, since the most profitable use of the land would no longer be possible. This argument would raise a variety of distinct legal issues.

Although the Fifth Amendment contemplates proper compensation in situations involving the taking of property under the state power of eminent domain, the constitutional provision imposes no barrier to the proper exercise of the state police power.[23] To determine whether row-crop restrictions would violate the Fifth Amendment, it therefore becomes essential first to ascertain the distinctions between the power of eminent domain and the police power, and second to determine under which power the government would be acting if it were to impose restrictions on the use of row-crop agriculture.

Eminent domain has been defined as ". . . the right or power to take private property for public use; the right of the sovereign, or of those to whom the power has been delegated, to condemn private property for public use, and to appropriate the ownership and possession thereof for such use upon paying the owner a due compensation."[24] The power of eminent domain is an inherent and necessary attribute of sovereignty,[25] existing independently of constitutional provisions[26] and superior to all property rights.[27] In the United States, the power of eminent domain may be exercised by the federal government in furtherance of the powers conferred on it by the United States Constitution,[28] by the individual states within their

22. U.S. Constitution Amendment V.

23. Chicago, B. & Q. R. Co. v. Illinois, 200 U.S. 561 (1905). "[T]he clause prohibiting the taking of private property without compensation 'is not intended as a limitation of the exercise of those police powers which are necessary to the tranquility of every well-ordered community, nor of that general power over private property which is necessary for the orderly existence of all governments.' " *Id.* at 594.

24. 29A C.J.S. *Eminent Domain* 1 (1965); *See,* Hinrichs v. Iowa State Highway Commission, 260 Iowa 1115, 152 N.W.2d 248 (1967); Johnson v. Preston, 1 Ohio App.2d 62, 203 N.E.2d 505 (1963); City of Pryor Creek v. Public Service Co. of Oklahoma, 536 P.2d 343 (Okl. 1975).

25. Green Street Assoc. v. Daley, 373 F.2d 1, 6 (7th Cir.), *cert. denied,* 387 U.S. 932 (1967).

26. County Highway Comm'n of Rutherford Co. v. Smith, 61 Tenn. App. 292, 454 S.W.2d 124 (1969).

27. Green St. Assn. v. Daley, 373 F.2d 1, 6 (1967), *cert. denied,* 387 U.S. 932 (1967).

28. Goodpasture v. Tennessee Valley Authority, 434 F.2d 760, 763 (6th Cir. 1970).

territorial boundaries[29] or by various political bodies within the states to which the power has been properly delegated by the state legislature.[30]

The police power is the sovereign right of a government to promote order, safety, health, morals and the general welfare of society within constitutional limits.[31] Though the police power, like the power of eminent domain, is a power inherent in all governments, in the United States it is a power reserved to the states by the Constitution.[32] It should be noted, however, that a comparable federal power is to be found in the General Welfare clause of the Constitution.[33] But police power is not unlimited. As a rule, it extends only to the governmental function of regulation for the welfare of society.[34]

Obviously it is often very difficult to ascertain whether a government is acting under the power of eminent domain or under its police power, as no magic formula exists. The more severe the loss to an individual property owner, the more severely the use of private property is restricted, the more likely it is that a court will find that the regulating body has acted under the power of eminent domain and not under the police power. With a very severe restriction on property use it is more likely that a court will find an improper exercise of police power, a violation of the Fifth Amendment, and therefore require compensation to the owner for the "taking." In analyzing restrictions placed upon row-crop agriculture, three particular issues arise. First, is there a taking? Are the restrictions reasonable? Is there a public purpose for the regulations?

Regarding the issue of taking it is necessary to review how the judiciary has dealt with other situations in which regulations have been imposed. The most readily apparent parallel to the restriction of land cultivation is that of land zoning. Since 1926 the United States Supreme Court has recognized the need for municipalities and states to regulate by zoning certain activities within their boundaries to protect the health, safety, welfare and morals of their citizens.[35]

29. State v. Union County Park Comm'n, 89 N.J. Super. 202, 214 A.2d 446 (1965), *appeal dismissed* 40 N.J. 246, 225 A.2d 122 (1966).

30. Boswell v. Prince Georgia County, 273 Md. 522, 330 A.2d 663 (1975); Housing Authority of the Cherokee Nation of Oklahoma v. Langley, 555 P.2d 1025 (Okl. 1976).

31. Eubank v. Richmond, 226 U.S. 137 (1912).

32. Lincoln Federal Labor Union v. Northwestern I & M Co., 149 Neb. 507, 31 N.W.2d 477 (1948) *affirmed* 335 U.S. 525 (1949).

33. Oklahoma City v. Sanders, 94 F.2d 323 (10th Cir. 1938).

34. Bruner v. City of Danville, 394 S.W.2d 939 (Ct. App. Ky. 1965); Phillips Petroleum Co. v. Corporation Commission, 312 P.2d 916, 921 (Okl. 1957); Houston Compressed Steel Corp. v. State, 456, S.W.2d 768 (Tex. Ct. Civ. App. 1970).

35. Euclid v. Ambler Co., 272 U.S. 365 (1926).

It has since been stated frequently that there is a strong presumption of validity with zoning regulations,[36] and there is little doubt today that most limitations placed upon the use of property under properly adopted zoning regulations, even if quite severe in their application, do not constitute takings. It is equally clear that an ordinance that would deprive an owner of the entire use of his property would be a taking.[37] Thus most judicial analysis of zoning has by necessity been done on a case-by-case basis. However, certain examples may be cited which give an indication of how courts view the taking issue in zoning.

In *Goldblatt v. Town of Hampstead,*[38] the U.S. Supreme Court upheld a city ordinance which in effect prevented the owner of land that had been used as a quarry for years from continuing excavation despite the fact that the ordinance prevented use of the land in the most financially awarding way. The ordinance forbade future excavation to a depth below that of the water table, a practice which the plaintiff had been undertaking for years and which, as a result, had created a twenty-five acre lake. In *Kopetzke v. County of San Mateo,*[39] a county board's moratorium on the issuance of building permits to owners of land in certain areas of apparent soil instability was upheld and no taking was found, once again despite the fact that the value of the property was reduced considerably as a result.

The court in *Petterson v. City of Naperville*[40] found city ordinances requiring the placement of curbs and sewers in roads built by private contractors within new subdivisions not to be takings. However in *Nashville, C. and St. Louis Ry. v. Walters,*[41] a taking was deemed to have occurred when a town ordinance was passed requiring railroads to pay one half the cost of eliminating grade crossings (i.e., building overpasses and underpasses). Finally, in *Kirby v. Rockford,*[42] a drastic financial loss resulting from zoning was found to be

36. *See,* Van Alstyne, "The Search for Inverse Condemnation Criteria," 44 So. California L.R. 1 (1970).

37. *See,* R. ANDERSON, 1 AMERICAN LAW OF ZONING §3.26 (1976), and cases cited therein.

38. 369 U.S. 590 (1961).

39. 396 F. Supp. 1004 (N.D. Cal. 1975).

40. 9 Ill.2d 233, 137 N.E.2d 371 (1956). *See also,* Krughoff v. City of Naperville, 68 Ill.2d 352, 369 N.E.2d 892 (1977), which upholds city ordinance requiring developer to set aside school and park land or give money in lieu of land.

41. 294 U.S. 405 (1939). *See also,* Roark v. City of Caldwell, 87 Idaho 557, 394 P.2d 641 (1964), wherein an ordinance allowing no building or only one story dwellings in areas surrounding an airport is unconstitutional as a taking of air space above owner's land. *But see,* Southern Railway Co. v. City of Morristown, 448 F.2d 288 (6th Cir. 1971).

42. 363 Ill. 531, 2 N.E.2d 842 (1936); *see,* Chicago Title and Trust Co. v. City of Harvey, 30 Ill.2d 237, 195 N.E.2d 727 (1964).

too extreme a restriction on private property and thus a taking was held to have occurred.

There is ample reason to use the long standing validity of zoning regulations to serve as precedent for the implementation of row-crop restrictions. Both are sets of rules which presumably are meant to benefit the public health, safety and welfare. Nonetheless, the zoning analogy is not a perfect parallel. Most zoning contemplates the granting of variances and exceptions for nonconforming uses existing at the time the ordinance is implemented.[43] Row-crop restrictions would not be effective if nonconforming uses were allowed because those exceptions would literally "swallow up" the regulation. It must, therefore, be assumed that little if any provision would be made for individuals presently using their property in a manner which the proposed restrictions would prohibit, other than perhaps the creation of a timetable for compliance. Under this assumption, the row-crop limitation would be more difficult to justify under the police power.

Important parallels to the issue of taking as it applies to row-crop restrictions may be seen in other pollution control areas. Numerous federal and state courts have upheld legislative restrictions placed on point source pollutors. One pertinent example is *Illinois Coal Operators Association v. Pollution Control Board.*[44] In that case, the appellant was unsuccessful in efforts to have the noise pollution restrictions placed upon the operation of its facility declared unconstitutional as takings without just compensation.

Reviewing the issue of taking, it appears that the courts would not find an unconstitutional taking by the mere application of a row-crop restriction law. Admittedly, there may be circumstances where the implementation of row-crop restrictions might be so onerous that a court would find these to be takings as applied to a particular set of circumstances. It seems, however, that in light of the numerous zoning cases and pollution cases, most courts would be unlikely to hold particular row-crop restrictions to be invalid as takings, preferring instead to uphold such restrictions as a valid exercise of police power.

Ancillary to the issue of taking is the issue of reasonableness. For any restriction or regulation to be justified under the police power or

43. Anderson, *supra* note 37, at § § 6.02, 6.05. *See also,* Vendley v. Village of Berkeley, 21 Ill.2d 563, 173 N.E.2d 506 (1961), upholding zoning provision permitting existing uses to continue. *See also* Gino's of Maryland, Inc. v. City of Baltimore, 250 Md. 621, 244 A.2d 218 (1968).

44. 59 Ill.2d 305, 319 N.E.2d 782 (1974).

the power of eminent domain, it must be reasonable. As stated by the U.S. Supreme Court:

> To justify the State in . . . interposing its authority on behalf of the public, it must appear, first, that the means are reasonably necessary for accomplishment of the purpose, and not unduly oppressive upon individuals.[45]

The Illinois Supreme Court has adopted a similar view:

> To be a valid exercise of the police power, the enactment of the legislature must bear a reasonable relation to the public interest sought to be protected, and the means adopted must be a reasonable method to accomplish such objective.[46]

The Illinois Supreme Court commented that it is firmly established that doubts as to reasonableness will be resolved in favor of the body imposing the regulation in question. Thus if row-crop restrictions are demonstrated to be even "arguably" reasonable, then in theory they would be upheld against attacks based upon a reasonableness argument.

Reviewing the application of the standard set by the courts, it seems likely that row-crop restrictions would not be found to be unreasonable. There seems to be clear congressional and legislative history establishing the need for control of non-point source pollution from agricultural runoff.[47] Limiting the use of row-crop agriculture in areas of high runoff potential would significantly reduce soil loss from runoff. Consequently, controls placed upon row-crop agriculture should be deemed reasonable as a matter of course.

A final legal issue to be dealt with in this area is whether a public purpose would be found behind the imposition of row-crop restrictions. This issue would appear to be the most easily resolved of all of those arising under the Fifth Amendment. As discussed, both the power of eminent domain and the police power require that legislation under these powers be promulgated for a public purpose. Property may not be taken under eminent domain for the sole satisfaction of a private party. Likewise, a regulation may not be imposed

45. Lawton v. Steele, 152 U.S. 133, 137 (1894).

46. Sherman-Reynolds, Inc. v. Mahin, 47 Ill.2d 323, 327, 265 N.E.2d 640, 642 (1970).

47. The Federal Water Pollution Control Act Amendments of 1972, §208(b)(2)(F), 33 U.S.C. §1288(b)(2)(F) (1976) provides for states and localities to develop "a process to (i) identify, if appropriate, agriculturally and silviculturally related non-point sources of pollution, including runoff from manure disposal areas, and from land used for livestock and crop production, and (ii) set forth procedures and methods (including land use requirements) to control to the extent feasible such sources." *See also,* Natural Resources Defense Council, Inc. v. Castle, 564 F.2d 573 (1977).

under the police power for a nonpublic purpose. With row-crop restrictions, there is little doubt that the purpose is solely one of a public nature. The whole theory behind any such restrictions is not to benefit any individual but rather to help the population as a whole by limiting the amount of pollution entering the public waters via soil runoff and by preserving soil resources for future generations. In summary, it does not appear likely that the Fifth Amendment prohibition on the taking of property without just compensation would severely restrain the imposition of row-crop restrictions. Such legislation would fall within the police power of the state and would not be considered a taking. In addition, it does not appear that the issues of reasonableness or public purpose would severely limit the applicability of row-crop limitations so long as the restrictions were kept within a rational framework.

A final constitutional contention that might be advanced against such a limitation is that row-crop restrictions amount to a denial of equal protection. It is an argument which may arise when a particular landowner is affected more severely by the restrictions than are other landowners. Placed in this framework, the basis of the argument would be that row-crop restrictions violate the Fourteenth Amendment because they do not treat all landowners equally, and in effect tend to be discriminatory.

As with due process considerations, the Equal Protection Clause is not meant to limit ordinances, rules, regulations, or restrictions properly enacted under the police power.[48] Of course, "any attempted exercise of police power which results in a denial of equal protection of the laws is invalid."[49] Thus the key question concerning equal protection becomes, how uniformly must a law be applied? In the area of regulation by government the answer to this question seems clear. As long as the ordinance in question can be shown to have a reasonable relation to the people affected by the scope of its classification and as long as the restrictions imposed are not arbitrary or irrational, the statute will not be found to violate the equal protection clause.[50] Since row-crop limitations are probably the most severe restrictions that would arise under a policy requiring mandatory implementation of a soil conservation plan and since the row-crop limitation generally appears to be able to survive constitutional attack, one may conclude that mandatory soil conservation

48. Minneapolis and St. L. R. Co. v. Beckwith, 129 U.S. 26, 33-34 (1889).

49. Smith v. Cahoon, 283 U.S. 553 (1931); *see* Public Service Co. v. Caddo Electric Cooperative, 479 P.2d 572 (Okl. 1971).

50. *See, e.g.*, Crescent Cotton Oil Co. v. State of Mississippi, 257 U.S. 129 (1921).

plans would be constitutionally valid approaches to reducing non-point source pollution.

Another approach to controlling soil runoff is to require maintenance of greenbelts between cultivated fields and bodies of water. The identity of issues which would arise with implementation of the approach is rather apparent, but resolution of the issues is not clear. The first legal argument which would be advanced if greenbelts were required is that the police power had been exceeded and that land had been taken without just compensation in violation of the Fifth Amendment. A greenbelt policy would place a definite restriction on the use of particular land. Equal protection issues also are raised by the greenbelt alternative. If used as the sole method of runoff control, greenbelts would obviously most seriously affect the person with the most acreage adjacent to water. Though legislation need not affect all people totally equally, the peculiar hardships which legislation such as this would impose on some would arguably make greenbelt legislation a denial of equal protection.

It must not be assumed, however, that greenbelts are a poor alternative for pollution control. If a significant relationship could be shown between the need for a "buffer zone" and the prevention of sedimentation, legal objections based on the denial of equal protection would fail. It is interesting to note that equating greenbelts with pollution control devices might well be one way of overcoming constitutional objections to the implementation of greenbelt controls. Still, it appears that the greatest strength of the greenbelts concept lies in either encouraging voluntary implementation or in including it as part of a total control concept. Greenbelts might be a very good alternative for controlling NPS pollution and if offered as part of a package including implementation of gross soil loss restrictions or mandatory conservation plans, they should prove to be feasible.

PROGRAMS FOR THE CONTROL OF NITROGEN

Per Acre Nitrogen Restrictions

One of the first decisions that should be made when considering NPS pollution restrictions, whether at the state or federal level, is whether the restrictions should be in the form of statutes or EPA regulations. Courts have traditionally granted more deference to legislative determination than to administrative regulations.[51] This distinction may be especially important in the area of restricting or

51. *See, e.g.,* Reserve Mining Co. v. United States, 498 F.2d 1073 (8th Cir. 1974). *See also,* discussion in text at note 59, *infra.*

taxing nitrogen fertilizer, since at this time there is only limited evidence that high levels of nitrogen in rural waters results primarily from nitrogen fertilizers, or that those high levels present a health or pollution hazard.[52]

With the recent surge of environmental regulations, courts have been examining agency actions more and more closely.[53] This examination requires an analysis of environmental consequences of both the action itself and any failure to act. The eighth circuit used a good faith balancing of competing interests test in *Environmental Defense Fund, Inc. v. Corps of Engineers,*[54] and held that the action could be enjoined if the agency balancing was arbitrary.[55] Other courts have refused to review good faith judgments and agency substantive decisions.[56] The balancing test, which is always subjective at best, is particularly subjective in this area since environmental costs are usually more qualitative than quantitative.

Even if a court has determined that the regulations are within the zone of reasonableness, it may still refuse to enforce them if there has been insufficient consideration of nonenvironmental factors.[57] This aspect of judicial review could be significant if an attempt were made to impose harsh nitrogen restrictions which would substantially reduce grain yields. In *International Harvester Co. v. Ruckelshaus,*[58] the court reviewed global consequences for the economy if the United States EPA enforced what the court viewed as an overly onerous auto emission standard. While all courts might not be willing to go as far as the D.C. Circuit in *International Harvester Co.*, it would appear that the agency would have difficulties supporting nitrogen restrictions under any of the tests used unless it becomes possible to obtain more substantial data indicating that high levels of nitrogen in water supplies are dangerous.

The Court of Appeals for the Eighth Circuit granted, pending appeal, a stay of an injunction to stop any asbestos discharge unless the actual existence of, and not just the potential for a health hazard was proven in the case of *Reserve Mining Co. v. U.S.A.*[59] The court

52. *See,* note 8, *supra.*

53. *See, e.g.,* National Helium Corp. v. Morton, 455 F.2d 650 (10th Cir. 1971), court considered termination of contract a reviewable agency action under NEPA.

54. 470 F.2d 289 (8th Cir. 1974).

55. *Id.*

56. Ely v. Velde, 451 F.2d 1130 (4th Cir. 1971); *See* National Helium Corp. v. Morton, 455 F.2d 650 (10th Cir. 1971).

57. *See, e.g.,* International Harvester Co. v. Ruckelshaus, 478 F.2d 615 (D.C. Cir. 1973).

58. *Id.*

59. 498 F.2d 1073 (8th Cir. 1974). Reserve was granted stay by the 8th Cir., 498 F.2d 1073 and the U.S. Supreme Court refused to vacate the stay. 419 U.S. 802 (1974). Meanwhile, the district court entered final judgment against Reserve holding that Reserve's dis-

felt that it was improper to take judicial notice of the unknown, and suggested that it might be proper for the legislature to protect society from those unknown risks, but that the court itself could not do so without the necessary proof. In other words, what the legislature could simply *say* was a health hazard the administrative agency would be forced to *prove*. While the Eighth Circuit probably represents the more traditional view, in response to recent public concern about the pollution problem some courts have cited legislative action such as the Federal Environmental Pesticide Control Act of 1972,[60] the Federal Water Pollution Control Act Amendments of 1972[61] and the 1970 Clean Air Amendments[62] as a clear statement of congressional intent to shift emphasis to a more extensive consideration of *potential* health and environmental effects. A risk-benefit approach which allows a margin of safety has been emerging.[63] This margin of safety compensates for any scientific lack of knowledge and allows regulations of products which are potentially harmful but whose harm is not presently provable.

The present trend is away from the nineteenth-century attitude that development should be encouraged at any cost and toward a more cautious approach of weighing the risks of future injury against any benefits of present exploitation of property.[64] One problem of putting this new philosophy into the old judicial framework is the requisite standard of proof. Causal relationships in environmental proofs get so technical and complicated that lay persons, including judges, tend to label them as merely speculative.[65]

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charges violated Federal and Minnesota laws (Order of Oct. 18, 1974). In a lengthy opinion, the 8th Cir. Court of Appeals held, at 514 F.2d 492 (1975) that 1) the presence of asbestos in air and water gives rise to a reasonable medical concern for the public health, 2) the danger justifies judicial preventative action, 3) the District Court abused its discretion by closing Reserve, 4) Reserve must be given reasonable opportunity and time to abate the pollution. *Id.* at 500.

60. Pub. L. No. 92-516; 86 Stat. 973.

61. Pub. L. No. 92-500; 86 Stat. 816.

62. Pub. L. No. 91-604; 84 Stat. 1676.

63. *See, e.g.,* Reserve Mining Co. v. EPA, 514 F.2d 492 (8th Cir. 1975) (en banc) modified 529 F.2d 181 (1976); Environmental Defense Fund, Inc. v. EPA, 510 F.2d 1292 (D.C. Cir. 1975); Society of the Plastics Indus., Inc. v. OSHA, 509 F.2d 1301 (2d Cir. 1975); Industrial Union Dept., AFL-CIO v. Hodgson, 499 F.2d 467 (D.C. Cir. 1974); Environmental Defense Fund, Inc. v. Ruckelshaus, 439 F.2d 584 (D.C. Cir. 1971); Ethyl Corp. v. EPA, 7 E.R.C. 1353 (D.C. Cir. Jan. 28, 1975) (Wright, J. dissenting), *judgment vacated and petition for hearing en banc granted,* 7 E.R.C. 1687 (D.C. Cir. March 17, 1975), *regulations upheld,* 8 E.R.C. 1785 (D.C. Cir. March 19, 1975); Note, *Projected Environmental Harm: Judicial Acceptance of a Concept of Uncertain Risk,* 53 J. Urb. L. 497 (1976).

64. *See* Note, *Imminent Irreparable Injury: A Need for Reform,* 45 S. CAL. L. REV. 1025, 1054 (1972).

65. Gelpe and Tarlock, *The Uses of Scientific Information in Environmental Decision Making,* 48 S. CAL. L. REV. 371 (1974).

In contrast to the close examination to which administrative regulations are subjected, the courts tend to give complete deference to congressional determination of policy. As long as the end is legitimate, as clean water certainly should be, statutory control of fertilizer need only be a reasonable way of achieving pure water if it is to be upheld by the courts. As the United States Supreme Court stated in *Berman v. Parker,*[66] ". . . when the legislature has spoken, the public interest has been declared in terms well-nigh conclusive. In such cases the legislature, not the judiciary, is the main guardian of the public needs to be served by social legislation, whether it be Congress legislating concerning the District of Columbia or the states legislating local affairs."[67]

Restrictions at the State Level

Regulation of nitrogen applications should be within the police powers of the state, as states have the power to impose reasonable regulations to protect the safety, health, morals and general welfare of the public.[68] Once the state legislature uses its police power to regulate nitrogen application, the legislation still must satisfy the requirements of the federal and state constitutions. Challenges to the validity of the statute can be minimized by careful drafting. It should be precisely stated that the purpose of the statute is the protection of the public health and welfare, because legislative purpose is the first thing that courts consider when a statute is challenged.[69]

Assuming, *arguendo,* that nitrogen in water is a health hazard and that the source of the nitrogen is agricultural, due process requirements should not impede state legislation designed to limit nitrogen application. For example, in 1974 an Illinois appellate court stated that the due process guarantee is modified by reasonable exercise of the police power by the legislature to regulate or prohibit anything harmful to the welfare of the people.[70]

Similarly, the Equal Protection Clause of the Constitution should not create problems for the proposed legislation. Courts have generally used the "conceivable basis" standard for reviewing statutes. A person challenging a statute must generally show that the classifica-

66. 348 U.S. 26 (1954).

67. *Id.* at 32.

68. *See* notes 31 and 34 *supra* and accompanying text.

69. *See, e.g.,* Andrews v. Lathrop, 132 Vt. 256, 315 A.2d 860 (1974), determining legislative support of land gains tax.

70. Freeman Coal Min. Corp. v. Illinois Pollution Con. Bd., 21 Ill. App.3d 157, 313 N.E.2d 616 (1974).

tion is arbitrary and that *no* set of facts supports that classification.[71] Courts have held that classification is primarily a legislative function in which there should be no judicial interference except to determine whether the legislative action is clearly unreasonable.[72] The only foreseeable problem with the per-acre nitrogen restriction would arise if animal waste runoff were determined to be the major source of nitrogen in the water (as suggested by Smith in *Agriculture and the Quality of Our Environment,* 173, 180 and 185), while the burden for nitrogen control was placed only upon crop farmers. The crop farmers might then have an equal protection argument, but if the courts follow their own precedent, the statute still should be considered a valid legislative determination.

In conclusion, a properly drafted per-acre nitrogen restriction should be a valid assertion of state police powers and should not violate the due process or equal protection provisions of the Constitution *provided* that it is established that nitrogen in water is a significant health hazard, and that the source of the nitrogen is agricultural.

Although technically the federal government does not have the police powers which were reserved for the states in the Tenth Amendment, in practice the federal government exercises even greater powers in the nature of police powers. The United States government possesses whatever power is appropriate to the exercise of any attribute of sovereignty specifically granted it by the Constitution.[73] Some federal regulatory measures have been sustained as arising under the General Welfare provision of the federal Constitution[74] or under Article IV, § 3 granting Congress the power to make all necessary rules and regulations respecting the territory or other property belonging to the United States.[75] Whatever the authority relied upon, congressional legislation in the area of environmental control generally has been upheld and enforced by the courts. For example, the courts have been very cooperative in enforcing the various regulations imposed as a result of P.L. 92-500,[76] and in fact have read the law more expansively than the Administrator in

71. *See, e.g.,* Vermilion County Conservation District v. Lenover, 43 Ill. 2d 209, 251 N.E.2d 175 (1969).

72. Dubvois v. Gibbons, 2 Ill.2d 392, 118 N.E.2d 295 (1954).

73. McCulloch v. Maryland, 4 Wheat 316, 4 L. Ed. 579 (1819); Kinsella v. Singleton, 361 U.S. 234 (1960).

74. *See* In re U.S., 28 F. Supp. 758 (D.C. N.Y. 1939).

75. *See, e.g.,* Kleppe v. New Mexico, 426 U.S. 529 (1976) (upholding congressional power to regulate and protect burros on federal land).

76. 86 Stat. 816 (codified in scattered sections of 12, 15, 31, 33 U.S.C.).

several instances.[77] It is very unlikely that a per-acre nitrogen restriction would be held invalid at the federal level because Congress lacked the power to regulate such a substance. Congress has imposed a similar type of restriction on farmers under P.L. 86-139[78] as a means of controlling certain insecticides. The limitation of nitrogen should be a relatively small burden on farmers because it only restricts *excessive* nitrogen application—it is not a complete prohibition of use as in the case of insecticides.

There is a presumption that all legislation passed is constitutionally valid.[79] However, a law restricting the amount of nitrogen applied per acre could be challenged as an interference with property rights. The United States Constitution protects property rights, but as mentioned all property is held subject to such reasonable restraints and regulations as the legislature has established to protect the safety, health and general welfare to the public.[80] Invasion of property rights, again, can only be justified by the presence of a public interest.[81] Since there is clearly a public interest in pure water, this law should be a valid regulation of property rights.

Other possible challenges to this regulation would be denial of due process and equal protection, or an uncompensated taking. The due process and equal protection arguments would be handled at the federal level in a manner similar to that at the state level. Such challenges should not be a real threat to the validity of this law as long as it applies to all lands equally. Since the law would be applied to all agricultural lands and not just to an individual state, it would be less of an economic burden if imposed at a federal level than at the state level because the price impacts of the restoration could tend to offset the impacts of reduced production.

Federal Nitrogen Tax

The imposition of excise taxes is generally held to be within the power of the legislature unless specifically restricted by the Constitution. Article I, § 8(1) of the United States Constitution gives Congress the power to lay and collect taxes, duties, imposts, and excises.

77. *See, e.g.,* California v. EPA, 511 F.2d 963 (1975); National Resources Defense Council Inc. v. Train, 396 F. Supp. 1386 (1975).

78. 73 Stat. 286 (amending 7 U.S.C. § 135 (1976)).

79. *See, e.g.,* Goldblatt v. Town of Hempstead, N.Y., 369 U.S. 590 (1962).

80. Schiller Piano Co. v. Illinois Northern Utilities Co., 288 Ill. 580, 123 N.E. 631 (1919). *See generally,* Anderson, *supra* note 37, at § 3.06.

81. Nebbia v. New York, 291 U.S. 502 (1934); Armstrong v. Maple Leaf Apartments, Ltd., 436 F. Supp. 1125 (N.D. Okl. 1977). *See generally,* Anderson, *supra* note 37, at § 3.23.

The federal government has presently imposed several taxes of a regulatory nature, similar to a possible nitrogen tax.[82] The federal excise tax on fuels has essentially a regulatory function. The fuel tax is truly a use tax, since for some uses of fuel, such as for tractors, credit is allowed for taxes paid, while fuel use for other purposes such as car travel does not receive tax credit treatment.[83] A federal tax on nitrogen would be preferable to a state tax for several reasons. First, implementation would be easier because it could be applied at the level of manufacturing on all nitrogen fertilizer produced. Second, if all nitrogen produced were taxed, the problem of smuggling across state lines would be avoided. The state cigarette taxes and alcohol taxes are evidence of the problems which arise when adjacent states tax a product at different rates.[84] Third, equity would be served if all farmers functioned under the same burden. Fourth, the short term effect of a state tax on nitrogen may have only a very minimal effect on the amount of nitrogen applied, with a tendency for the farmers in that state to absorb the increased cost, while a federal tax would have a tendency to reduce the application with the knowledge that the national production would drop and prices would increase. Also, a long-term response to increased nitrogen fertilizer prices may be technological advancement reducing the dependence on this nutrient.[85]

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82. *See, e.g.,* I.R.C. §4041(a)(2) imposes a tax on diesel fuel "used by any persons as a fuel in a diesel-powered highway vehicle. . . ." I.R.C. §4041(b) imposes a tax on "benzol, benezene, naphtha, liquefied petroleum gas, casinghead, and natural gasoline. . . ."

83. I.R.C. §39(a) provides:

> There shall be allowed as a credit against the tax imposed by this subtitle for the taxable year an amount equal to the sum of the amounts payable to the taxpayer–
>
> (1) under section 6420 with respect to gasoline used during the taxable year on a farm for farming purposes . . . .
>
> (2) under section 6421 with respect to gasoline used during the taxable year (A) otherwise than as a fuel in a highway vehicle or (B) in vehicles while engaged in furnishing certain public passenger land transportation service . . . .

84. *See, e.g.,* W. Drayton, Jr., The Tar and Nicotine Tax: Purchasing Public Health Through Tax Incentives, 81 Yale L. Jrn. 1487 (1972).

85. In 1973, low-income persons in California brought suit against the Secretary of Agriculture, Secretary of the Interior, and other officials to require them to take action to control water pollution caused by agricultural users of pesticides and fertilizers. The plaintiffs were concerned with the dangerous after-effects of these substances which caused a high level of nitrate in the well water used for consumption and bathing. The plaintiffs were denied the remedy they sought, which was to prohibit federal agencies from giving subsidies and loans to users of agricultural chemicals (Kings County Economic Community Development Association, *et al.* v. Hardin, 478 F.2d 478 (1973)). This case points out the anomaly involved when the government, on the one hand, encourages the use of fertilizers and, on the other hand, discourages, or even makes illegal, the pollution resulting from that use.

Nitrogen Tax at the State Level

Another alternative would be to impose a state tax on nitrogen. The character of the tax imposed depends on the legislative intent, the practical operation and the actual effect. Since the purpose of the tax is to impose an economic limitation upon the amount of nitrogen used rather than to raise revenue, the tax would technically be an exercise of the state's police power and not its taxing power. The constitutional restrictions applicable to the taxing power are not imposed upon a regulatory tax.[86] The public purpose required for the police power is less than that required for state taxing power.[87] In this sense the same requirement that the means be reasonable would apply to the nitrogen tax as it would to the nitrogen restriction. The expense imposed should be taken into consideration in estimating the reasonableness of a statute enacted under the police power. Presumably the nitrogen tax, however, would be set at a level which would discourage *excessive* use of nitrogen rather than *all* use. The U.S. Supreme Court has held that the cost and inconvenience would have to be very great before these factors would become elements in considering whether such an exercise of police power is proper.[88] If the revenue collected from the nitrogen tax went into the general fund, the police power would be the only authority required. If, however, the money collected were earmarked for removing nitrogen from water or for some other type of effort to correct pollution, then the taxation would constitute a mixture of the state's police power and its taxing power and the regulations would have to conform to the tax-power requirement.[89]

The states have wide discretion in establishing classifications to produce reasonable systems of taxation.[90] The only two constitutional standards which the state must meet are equality and uniformity. The U.S. Supreme Court has held that the equal protection clause does not impose an iron rule of equality which would pro-

86. *See, e.g.,* Besozzi v. Indiana Employment Security Board, 237 Ind. 341, 146 N.E.2d 100 (1957).

87. Village of Litchville v. Hanson, 19 N.D. 672, 124 N.W. 1119 (1910); McGlone v. Womack, 129 Ky. 274, 111 S.W. 688 (1908); Terry v. City of Portland, 204 Or. 478, 269 P.2d 544 (1954); State v. Anderson, 144 Tenn. 564, 234 S.W. 768 (1921); Robinson v. City of Norfolk, 108 Va. 14, 60 S.E. 762 (1908). City of Milwaukee v. Hoffman, 29 Wis.2d 193, 138 N.W.2d 223 (1965).

88. Erie R. Co. v. Williams, 233 U.S. 685 (1913).

89. If the purpose of the tax is mixed, it must conform to the limitation upon the taxing power. *See, e.g.,* San Francisco v. Liverpool, L. & G., Ins. Co., 74 Cal. 113, 15 P. 380 (1887).

90. Lehnhausen v. Lake Shore Auto Parts Co., 410 U.S. 356 (1973); Allied Stores of Ohio v. Bowers, 358 U.S. 522 (1959); Carmichael v. Southern Coal & Coke Co., 301 U.S. 495 (1937).

hibit the flexibility required for state taxation schemes.[91] Rather, a state may vary the rate of excise upon various products and will not be required to maintain a precise scientific uniformity with reference to use or value.[92] In this respect the tax on nitrogen and not other fertilizers should be a reasonable classification. From the standpoint of water pollution, nitrogen is distinguishable from other fertilizers because it readily leaches from the soil.[93]

The requirement of a public purpose under the state taxing power refers to the use made of the revenue, not the motivating purpose of the legislature.[94] Hence if the money collected from the nitrogen tax were earmarked for some special purpose, then that purpose must qualify as a legitimate effort to directly promote the welfare of the community.

CONCLUSION

The preceeding discussion has described in general terms various alternative approaches for controlling pollution from agricultural non-point sources. These approaches have included voluntary programs with subsidies or tax incentives and mandatory programs such as limitation upon row-crop agriculture. Alternative approaches have been examined from a legal perspective, employing a very broad framework of analysis. This broad framework is necessitated by the evolutionary nature of the control policies and the resulting lack of specificity.

If one assumes that each of the various policies considered in the preceeding pages can, in fact, reduce non-point source pollution then it appears that each of the various policies could survive constitutional attack. Thus, the final mix of policies actually implemented to control agricultural non-point sources of pollution will probably be determined by legislative and administrative procedures, rather than by the courts.

91. Allied Stores of Ohio v. Bowers, 358 U.S. at 526-27.
92. Lehnhausen v. Lake Shore Auto Parts Co., 410 U.S. 356 (1973).
93. Seitz, *Agricultural Non-point Pollution–Approaches for Control,* 159 (Proceedings, Economic and Legal Enforcement Mechanisms Workshop Sponsored by Great Lakes Research Advisory Board, International Joint Commission, Report #R-77-1, October 1977).
94. Magnano Co. v. Hamilton, Washington, 292 U.S. 40 (1933).