Groundwater Quality Regulation: Existing Governmental Authority and Recommended Roles*

Douglas A. Yanggen**
Leslie L. Amrhein***

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** Professor, Agricultural Economics Department and Environmental Resources Center, University of Wisconsin-Madison. B.S., M.S., L.L.B., University of Wisconsin-Madison.

*** Environmental Resources Center, University of Wisconsin-Madison. B.S. University of Wisconsin-Madison (1978); J.D. University of Wisconsin-Madison (1984).

I. INTRODUCTION

Groundwater is an essential source of water for drinking and other domestic needs, for farming and industrial and commercial processes. In the United States, approximately fifty percent of the population relies on groundwater for its potable water supply.[1] In some states, this figure is even higher; for example, in Wisconsin, approximately sixty-four percent of the residents of cities and villages[2] and one hundred percent of the rural population[3] rely on groundwater for drinking water. Across the nation, groundwater comprises approximately forty percent of the water used for irrigation and twenty-three percent of the water used by industry.[4] In Wisconsin, groundwater provides approximately ninety-seven percent of the water used for irrigation and twenty-three percent of the water used by industry.[5]

The quality of groundwater[6] is threatened by degradation in many parts of the nation.[7] While efforts have been made nation-

1. Roberts & Butler, *Information for State Groundwater Quality Policymaking*, 24 NAT. RESOURCES J. 1015 (Oct. 1984). *See also* OFFICE OF GROUNDWATER PROTECTION, U.S. ENVIRONMENTAL PROTECTION AGENCY, A GROUNDWATER PROTECTION STRATEGY FOR THE ENVIRONMENTAL PROTECTION AGENCY (August, 1984) [*hereinafter* cited as EPA STRATEGY].

2. F. DI NOVO & M. JAFFE, LOCAL GROUNDWATER PROTECTION: MIDWEST REGION 6 (1984). Sources differ as to the exact percentage of various population types utilizing groundwater for drinking water in Wisconsin and in other states. According to one source, for example, ninety-four percent of cities and villages in Wisconsin rely on groundwater for this purpose. Wisconsin Department of Natural Resources and University of Wisconsin-Extension, *Groundwater, Wisconsin's Buried Treasure* 3 (Supplement to WISCONSIN NATURAL RESOURCES MAGAZINE, Vol. 7, No. 5, Sept.-Oct. 1983).

3. F. DI NOVO & M. JAFFE, *supra* note 2, at 6.

4. THE NATIONAL GROUNDWATER POLICY FORUM, GROUNDWATER: SAVING THE UNSEEN RESOURCE, PROPOSED CONCLUSIONS AND RECOMMENDATIONS 5 (1985).

5. Wisconsin Department of Natural Resources and University of Wisconsin-Extension, *supra* note 2, at 5, citing a U.S. Geologic Survey study, WATER USE IN WISCONSIN (1979); figures do not include power plant water usage.

6. The primary focus of this article is on groundwater quality rather than quantity, although the two are often inextricably linked:

> [t]he management of groundwater quantity can have important practical repercussions for groundwater quality. Excessive pumping from wells can speed the spread of a contamination plume through an aquifer. Or it can draw low-quality water into the aquifer from coastal areas or adjacent salt-water aquifers. Conversely, excessive contamination can reduce the amount of water available for desired uses.

THE NATIONAL GROUNDWATER POLICY FORUM, *supra* note 4, at 22. Wisconsin recently enacted legislation which addresses the issues of water quantity and state water rights. *See* WIS. STAT. § 144.026 (1985).

7. Groundwater contamination incidents have been documented in all 50 states, but perceptions about what constitutes a "problem" and what, if any, action should be taken, varies. *See* U.S. CONGRESS, OFFICE OF TECHNOLOGY ASSESSMENT, OTA-0-233, PROTECTING THE NATION'S GROUNDWATER FROM CONTAMINATION (Oct. 1984) (citing U.S. GEOLOGICAL

wide to improve the quality of surface waters, these efforts have sometimes been at the expense of groundwater quality; some of the wastes that were previously disposed into surface waters or burned have now been diverted onto land or to subsurface disposal, ultimately degrading groundwater quality in many instances.[8] In addition, contamination by hazardous substances and hazardous wastes, underground flammable and combustible liquid storage tanks, pesticide use and storage, animal waste disposal, and other activities[9] threatens public health and the continued use of groundwater as potable and otherwise useful water.

The United States Congress,[10] many state legislatures,[11] the United States Supreme Court,[12] and numerous federal[13] and

SURVEY, USGS WATER SUPPLY PAPER 2250, NATIONAL WATER SUMMARY 1983 - HYDROGEOLOGIC EVENTS AND ISSUES (1984)).

8. Tripp & Jaffe, *Preventing Groundwater Pollution: Towards a Coordinated Strategy to Protect Critical Recharge Zones*, 3 HARV. ENVTL. L. REV. 1 (1979); *See also* Dycus, *Development of a National Groundwater Protection Policy*, 11 ENVTL. AFFAIRS 211 (1978). Dycus notes that "[i]ronically, the. . .[EPA] has sometimes encouraged this diversion" of waste to on-land or subsurface disposal. *Id.* at 211, n. 3, citing EPA, PROPOSED GROUNDWATER PROTECTION STRATEGY III, at 11 (1980).

9. Nearly anything we dump, spill or spread on the ground has the potential to leach down through the soil and into groundwater. Groundwater contaminants are not always exotic chemicals; most of us make use of the products and engage in or benefit from the activities that contribute to groundwater problems. A list of the most familiar sources of contamination includes: leachate from landfills; septic systems; septage and sludge disposal; liquid waste storage lagoons; underground storage tanks; highway salting and storage of salt; pesticide and fertilizer storage and application; animal waste storage and spreading; and mining.

10. The United States Congress has enacted numerous laws which address the need for groundwater protection in some way. For example, 33 U.S.C. §§ 1251-1387 (1982 & Supp. IV 1986), the Federal Water Pollution Control Act (FWPCA) (also known as the Clean Water Act); 42 U.S.C. §§ 201, 300(f)-300j-11 (1982 & Supp. IV 1986), The Safe Drinking Water Act (SDWA); 42 U.S.C. §§ 6901-6991i (1982 & Supp. IV 1986), the Resource Conservation and Recovery Act (RCRA); 42 U.S.C. §§ 9601-9675 (1982 & Supp. IV 1986), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) or "Superfund"; 15 U.S.C. §§ 2601-2629 (1982 & Supp. IV 1986), the Toxic Substances Control Act (TOSCA); and 7 U.S.C. §§ 136-136y (1982 & Supp. IV 1986), the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). A detailed summary of these and other federal regulatory programs may be found in many publications, including DI NOVO & JAFFE, *supra* note 2, at 41-54; T. HENDERSON, J. TRAUBERMAN AND T. GALLAGHER, GROUNDWATER: STRATEGIES FOR STATE ACTION 35-50 (1984); and Tripp & Jaffe, *supra* note 8, at 9-25.

11. Based on an informal survey by the Environmental Protection Agency Regional Offices in 1982, approximately forty states and territories "have general environmental statutes which include authority to protect groundwater; 15 states have laws that apply specifically to groundwater. Forty-seven states have more than one major agency dealing with groundwater issues; some have as many as eight." EPA STRATEGY, *supra* note 1, at 21.

12. The Supreme Court has dealt with the issue of groundwater protection in several

state[14] courts have begun to recognize the value and necessity of groundwater protection. Once groundwater contamination occurs, pollutants may persist for many years, many decades, or even longer, making the resource virtually unusable over periods of time.[15] If clean-up of contaminated groundwater is possible, it is often very difficult and very costly.[16] Therefore, many observers agree that the emphasis of regulations should be on the prevention of groundwater contamination rather than on the monitoring and clean-up of pollutants once contamination has occurred.[17]

There is disagreement, however, both as to the best approach to prevent contamination and as to which level or levels of government are best suited to carry out these tasks.[18] Since there are a number of important variables affecting which approach is best

cases. *See, e.g.*, Sporhase v. Nebraska *ex rel.* Douglas, 458 U.S. 941 (1982), (holding that groundwater is an article of commerce subject to congressional regulation and there is a federal interest in conservation as well as in the fair allocation of groundwater); Cappaert v. United States, 426 U.S. 128 (1976) (the United States may protect federal waters from diversions whether the diversion is of surface or groundwater and "[g]roundwater and surface water are physically interrelated as integral parts of the hydrologic cycle." (citing C. Corker, GROUNDWATER LAW, MANAGEMENT AND ADMINISTRATION, NATIONAL WATER COMMISSION LEGAL STUDY No. 6, p. xxiv (1971))).

13. *See, e.g.*, Blodgett v. County of Santa Cruz, 698 F.2d 368 (9th Cir. 1982), (the Court of Appeals affirmed a United States District Court opinion which upheld a ten acre minimum lot size requirement in part because plaintiff's lots were within a designated groundwater recharge area). *See also* Barre Mobile Home Park v. Town of Petersham, 592 F. Supp. 633 (D. Mass. 1984), in which the court ruled that a municipality properly prohibited trailer parks from the town where it was shown, *inter alia*, that construction of such a park might endanger the groundwater supply.

14. *See, e.g.*, D & R Pipeline Const. Co. v. Greene County, 630 S.W.2d 236 (Mo. Ct. App. 1982), in which the court held that "[i]n order to prevent pollution of water reservoirs, it is proper for zoning regulations to require larger parcels of land per residence near those reservoirs than ordinarily required in other areas." *Id.* at 237 (citations omitted). *See also* Moviematic Industries Corp. v. Board of County Commissioners of Metro. Dade County, 349 So. 2d 667 (Fla. Dist. Ct. App. 1977) (court upheld rezoning from industrial to single-family residential use where objectives of county zoning included preservation of an adequate drinking water supply and the area's ecological balance).

15. EPA STRATEGY, *supra* note 1, at 11.

16. Wisconsin Department of Natural Resources and University of Wisconsin-Extension, *supra* note 2, at 26.

17. *See, e.g.*, Tripp & Jaffe, *supra* note 8, at 2; EPA STRATEGY, *supra* note 1, at 11.

18. *See, e.g.*, Ehrhardt, *Approaches to Groundwater Management at the Local Level: Trends in Legal/Regulatory Strategies Across the United States* 89, 1984 International Symposium on Urban Hydrology, Hydraulics and Sediment Control (July 23-26, 1984) (University of Kentucky, Lexington, Kentucky). Ehrhardt explains that municipalities have adopted many different approaches to protect groundwater. He discusses the approaches taken by various communities in several states including Massachusetts, New Jersey and Michigan.

designed to protect groundwater within a given jurisdiction,[19] it may be argued that there is no single regulatory approach that all governments should use; regulations should ideally reflect the hydrogeologic and land use characteristics of a given jurisdiction and should involve a cooperative effort between federal, state, and local governments.

The primary focus of this article is the role that local governments can play in a conjunctive state and local regulatory scheme to protect groundwater quality. While Wisconsin statutes and case law are used by way of illustration, the same general legal principles will apply in most states.

II. FEDERAL AND STATE GROUNDWATER REGULATION

A. *Federal Regulation*

Currently, the federal government and many state and local governments have regulations which directly or indirectly protect groundwater quality; some activities and facilities affecting groundwater quality are extensively regulated while others are only partially regulated or are not regulated at all. While numerous federal laws exist to deal with selected aspects of groundwater contamination,[20] many commentators have long recognized that these programs "do not create a complete or consistent federal approach"[21] to groundwater protection.

In an attempt to coordinate federal and state regulatory efforts, the Environmental Protection Agency (EPA) developed a Ground-Water Protection Strategy.[22] An important aspect of the strategy is the EPA's emphasis on the role of both state and local

19. Factors that influence the choice of protection strategies include: the hydrogeologic features of the state or locality; existing groundwater quality; the state's choice of a level or degree of desired groundwater protection and the resultant policies formed; and the ability (including regulatory authority, financial resources, technical expertise, etc.) and desire of local governments to control activities and land uses which affect groundwater quality. *See generally* HENDERSON, *supra* note 10.

20. *See supra* note 10.

21. Tarlock, *Prevention of Groundwater Contamination*, 8 ZONING AND PLAN. LAW REP. 121, 122 (May 1985). The National Groundwater Policy Forum, *supra* note 4, also noted in regard to federal groundwater laws that "[b]ecause many of the laws were written at different times and for different purposes, they often add up to a program of groundwater protection that is neither coherent nor consistent, even if those laws are implemented to the limits of the enacted authority." *Id.* at 6-7.

22. EPA STRATEGY, *supra* note 1, at 4. According to the EPA, the Strategy includes four major components that address critical needs. They are:

— Short-term build-up of institutions at the State level;

governments in groundwater protection. The EPA stated that: "*states, with local governments, have the principal role in groundwater protection and management* . . . states are best suited to undertake direct implementation and enforcement of groundwater protection programs."[23]

The increasing emphasis on state and local government regulation of groundwater is well-placed since state and local governments are, in many respects, better suited to regulate for this purpose than is the federal government. Fundamentally, state and local governments are often more acutely aware of the nature of state and local resources and the real as well as potential threats to those resources. Because groundwater quality is, in most areas, highly dependent upon local land use activities, local governments can play a significant role in protecting this resource by regulating where land use activities may be located and how these activities may be conducted. By exercising these traditionally local functions, local governments are able to reflect in their regulations unique local characteristics which higher levels of government are often unable to consider because of the need to generalize regulations across greater geographic areas.

B. *State Regulation: Wisconsin*

The federal government's reliance on state and local groundwater programs is consistent with federal policy in many other areas of pollution control:

> Congress gives a federal agency the lead role in developing the necessary scientific data, technical standards and regulatory framework. Using federal grants, states are given the responsibility to develop programs modeled after the federal framework in order to achieve the federal standards. While the process of assuming primacy is voluntarily entered into by the states, the minimum requirements that state programs must meet are federally mandated. If a state seeks to assume primacy, the responsible federal agency must ensure that the state

— Assessing the problems that may exist from unaddressed sources of contamination—in particular, leaking storage tanks, surface impoundments, and landfills;
— Issuing guidelines for EPA decisions affecting groundwater protection and cleanup; and
— Strengthening EPA's organization for groundwater management at the Headquarters and Regional levels, and strengthening EPA's cooperation with Federal and State agencies.

Id. at 4.

23. *Id.* at 21 (emphasis in original).

> program adequately reflects the minimal federal requirements. Otherwise, the federal agency assumes implementation responsibilities.[24]

Wisconsin, like most other states, has assumed primacy over many of the major federal environmental statutes that provide for groundwater protection.[25] Wisconsin statutes and administrative rules dealing with groundwater quality, in general, are thus not preempted by federal law.[26]

While the EPA strategy to support retention of the states' lead role in groundwater management and protection has been endorsed by the Wisconsin Department of Natural Resources (DNR),[27] the state agency does not agree with the EPA's use of an aquifer classification scheme[28] as the basis for its groundwater protection framework. "Since all of Wisconsin's aquifers are used for drinking water, the DNR is dissatisfied with . . . [the EPA's]

24. HENDERSON, *supra* note 10, at 44-45 (citations omitted).

25. For example, Wisconsin has assumed primacy in the administration of the Safe Drinking Water Act (*see* WIS. STAT. §§ 162.01 - 162.07 (1985)), the hazardous waste program under RCRA (*see* WIS. STAT. §§ 144.60-144.74 (1985)) and FIFRA (*see* WIS. STAT. §§ 94.67-94.71 (1985)).

26. In areas in which the state has assumed primacy over federal laws, federal "preemption" of state laws and administrative rules theoretically would not occur since the federal government must approve state regulations before primacy is granted. In subject areas in which the state has not assumed primacy, it is often unclear whether courts will find federal preemption; *see, e.g.*, Comment, *Preemption Doctrine in the Environmental Context: A Unified Method of Analysis*, 127 U. PA. L. REV. 197 (1978). In either case, the question of federal preemption is a continuing inquiry since federal and state legislatures may amend statutes (and agencies amend administrative regulations) at any time. *See, e.g.*, Liberty Homes, Inc. v. Dep't of Industry, Labor and Human Relations, 125 Wis. 2d 492, 374 N.W.2d 142 (Wis. Ct. App. 1985) (state administrative regulation on formaldehyde in mobile homes was valid until federal law was amended to expressly preempt non-identical state and local standards), *aff'd on other grounds*, 136 Wis. 2d 368, 401 N.W.2d 805 (1987).

Since federal preemption law is not the focus of this article, it is assumed that none of the state or local laws discussed within this article have been preempted by current federal law; this may, however, be a factor in assessing the validity of local groundwater protection ordinances. *See, e.g.*, Defendant's Brief in Opposition to Amended Motion for Summary Judgment at 31-48, Mortier v. Town of Casey, Washburn County, Wis. Circuit Court Case No. 86-CV-134 (1987); *see also* Plaintiff's Brief in this case.

27. "An intent by the EPA to give states the lead role in groundwater protection and management meets with DNR endorsement." Groundwater Report, *DNR Looks at Planning Process for State Groundwater Management* (S. Buckner ed., Dec. 1984) (available from the Wisconsin DNR, P.O. Box 7921, Madison, WI 53707).

28. The EPA classifies aquifers according to current use and value and defines three classes of aquifers:

> Class I: *Special Ground Waters* are those that are highly vulnerable to contamination because of the hydrological characteristics of the areas under which they occur *and* that are also characterized by either of the following two factors:

'some groundwaters need protection, others don't really matter' notion . . . The DNR feels that, although the EPA classification scheme might be applicable nationally, it isn't good for Wisconsin."[29] Rather than adopt the EPA aquifer classification scheme, the Wisconsin legislature adopted protection standards[30] that apply uniformly to all groundwater within the state.[31] The emphasis of Wisconsin's groundwater law is the establishment of a two-tiered set of numeric standards for substances that could contaminate groundwater.[32] These standards "will become criteria for the protection of public health and welfare, to be achieved in groundwater regulatory programs concerning the substances for which standards are adopted."[33] The numeric standards add a

a) Irreplaceable . . .or,

b) Ecologically vital . . .

Class II: *Current and Potential Sources of Drinking Water and Waters Having Other Beneficial Uses* are all other ground waters that are currently used or are potentially available for drinking water or other beneficial use.

Class III: *Ground Waters Not Considered Potential Sources of Drinking Water and of Limited Beneficial Use* are ground waters that are heavily saline, . . . or are otherwise contaminated beyond levels that allow cleanup using methods reasonably employed in public water system treatment. These ground waters also must not migrate to Class I or II ground waters or have a discharge to surface water that could cause degradation.

EPA STRATEGY, *supra* note 1, at 5-6 (emphasis in original).

29. Groundwater Report, *supra* note 27, at 5.

30. Although the EPA strategy establishes guidelines (including the aquifer classification scheme) to be applied in all federal regulatory programs, states may develop their own protection programs provided they are no less stringent than the federal program. EPA STRATEGY, *supra* note 1, at 7.

31. The bill containing these standards, Wisconsin 1983 Assembly Bill 595, was enacted into law on May 4, 1984 as 1983 Wisconsin Act 410. WIS. STAT. §§ 160.001 - 160.50 (1984) [*hereinafter* "Wisconsin's groundwater law"]. Wisconsin's groundwater management program was selected for inclusion in this article because it illustrates issues involved in intergovernmental regulation where there is a broad-ranging state regulatory program as well as specific authorization to local governments to zone to protect groundwater and adopt other regulations. Much of the discussion and many of the regulatory techniques discussed herein are applicable nationwide, however.

32. The state law establishes two levels of numerical standards. "Enforcement standards" are maximum concentrations of substances that will be allowed in groundwater. *See* WIS. STAT. §§ 160.07, .09, and .13 (1987). "Preventive action limits" (PALs) are set at a percentage of the enforcement standard. WIS. STAT. § 160.15 (1987). It is intended that PALs will function as an early warning mechanism, alerting state agencies that low levels of contamination exist and that some action may be necessary to prevent contaminant levels from increasing. The PAL is 10% of the enforcement standard for substances that have been linked to cancer or birth defects in animal tests; for substances that have other health effects, the PAL is 20% of the enforcement standard, and for substances of "public welfare concern" the PAL is 50%. *Id.* Enforcement standards and PALs were recently promulgated under Wis. Admin. Code Ch. NR 140 (1988).

33. WIS. STAT. § 160.001 (Legislative intent) (1987).

new dimension to the state regulation of water resources which is already fairly extensive.[34] The law also provides for numerous new programs; many of these are designed to fill some of the regulatory gaps that existed[35] while others create new regulatory authority.[36]

Significantly, the new Wisconsin groundwater law provides for three optional programs at the local government level which address the issues of land disposal of septage,[37] county well code ordinances,[38] and zoning to encourage the protection of groundwater.[39] By providing for these local government programs, the legislature established a de facto state/local partnership in groundwater protection and thereby evinced an intention to allow local governments to share the responsibility for groundwater protection.[40] An analysis of the Wisconsin approach can serve as

34. The state regulates many aspects of activities affecting surface and groundwater quality. *See, e.g.*, WIS. STAT. ch. 144 (1987) (which provides for numerous water protection programs).

35. For example, although the State Department of Industry, Labor and Human Relations (DILHR) regulated the storage of flammable and combustible liquids prior to the enactment of the new groundwater law, these regulations were promulgated primarily for the purposes of fire prevention and safety (WIS. STAT. § 101.14(1)(a) (1988)); the groundwater law requires that DILHR also provide for the protection of the waters of the state due to contamination by these substances (WIS. STAT. § 101.09(3) (1988)). Similarly, the Department of Agriculture, Trade and Consumer Protection (DATCP) regulates the storage of bulk quantities of fertilizer and pesticides (WIS. STAT. § 94.645 (1987)). The Department of Transportation (DOT) regulates the bulk storage of salt and other chlorides intended for application to highways during winter months (WIS. STAT. § 85.17 (1987)).

There are also general requirements which provide that as enforcement standards and PALs are established, state agencies must review their rules and promulgate new rules or amend existing ones to ensure that facilities, activities, etc. regulated by the agency comply with the groundwater protection standards found in WIS. STAT. ch. 160 (WIS. STAT. § 160.19 (1987)).

36. The new groundwater law establishes, *inter alia*, a program to assist with the repair or replacement of contaminated wells (WIS. STAT. § 144.027 (1987)); a laboratory certification program (WIS. STAT. § 144.95); and a council to coordinate state groundwater activities (WIS. STAT. § 160.50).

37. WIS. STAT. § 146.20(5m) (1987).

38. *Id.* at § 59.067(2).

39. *Id.* at § 59.97(1) (counties); *Id.* at § 60.61(2)(g) (towns); and *Id.* at § 62.23(7)(g) (1988) (cities) (and villages under WIS. STAT. § 61.34 (1988)). The legislature has provided that these powers shall be liberally construed. *See* WIS. STAT. §§ 59.97(13), 60.61(1)(b) and 62.23(7)(a)(1988), respectively.

40. The groundwater law thus serves to clarify a state statute which appears to delegate comprehensive power over all aspects of water protection to the state Department of Natural Resources. *See* WIS. STAT. § 144.025(1) and (2) (1987). Although the DNR serves as the lead agency in water protection, other state agencies and various units of local government also regulate to protect water quality, dispelling any notion of total DNR preemption.

a useful example to other states which choose to implement a system of joint state and local legislation.

III. Local Government Power to Adopt Groundwater Protection Regulations

In Wisconsin, local involvement in groundwater protection is a stated intention for some activities, but determining the specific limits of local power over the wide variety of possible local regulatory activities raises a number of questions. As local governments propose to enact ordinances dealing with groundwater quality, they must determine whether they possess the authority to enact regulations on a specific subject; then, they must determine whether the state has preempted that authority. Local officials must also consider whether the proposed ordinance meets state and federal constitutional requirements.

Fundamentally, states possess all the powers not delegated to the federal government by the constitution, nor prohibited by it to the states.[41] The Wisconsin legislature has delegated various regulatory powers to its local units of government including statutes dealing with groundwater quality, statutory home rule authority, and zoning and subdivision statutes. Local governments exercise these powers via a variety of regulatory techniques to focus, for example, on the regulation of: (1) hazardous materials or potentially contaminating activities; (2) wellhead protection areas within the cone of depression of a municipal well or its recharge area; (3) vulnerable areas where soils, subsoils or bedrock permit easy access of contaminants to the groundwater; (4) aquifer recharge areas; or (5) areas "down flow" from known or suspected sources of contamination.

Land use controls such as zoning and subdivision regulations can clearly play an important role in regulating land use to protect groundwater quality. Since these regulations deal primarily with *prospective* land uses, however, it may be necessary to enact additional special purpose ordinances which deal with existing (and future) land uses and the specific activities connected with them.

41. U.S. Const. amend. X.

A. *Counties*

As unincorporated units of government, counties in Wisconsin are considerably more limited in the range of powers they may exercise than are cities and villages. Counties have only those powers which are expressly conferred by statute and those which may be clearly implied from statute.[42] Although counties in Wisconsin have been granted administrative home rule powers[43] and broadly-worded authority to provide governmental services,[44] it is unlikely that either of these statutes could be used to regulate for groundwater protection.[45] The Wisconsin legislature, how-

42. Brown County v. Dep't of Health and Social Services [DHSS], 103 Wis. 2d 37, 307 N.W.2d 247 (1981); County of Dane v. Wisconsin Dep't of Health and Social Services, 79 Wis. 2d 323, 255 N.W.2d 539 (1977); City of Janesville v. County of Rock, 107 Wis. 2d 187, 319 N.W.2d 891 (Wis. Ct. App. 1982). The Wisconsin Constitution places the following limits upon county powers: "[t]he legislature may confer upon the boards of supervisors of the several counties of the state such powers of a local, legislative and administrative character as they shall from time to time prescribe." WIS. CONST. art. IV, § 22.

43. WIS. STAT. § 59.025 (1987) apparently confers only administrative powers, not broad regulatory powers. It provides that: "[e]very county may exercise any organizational or administrative power, subject only to the constitution and any enactment of the legislature which is of statewide concern and which uniformly affects every county." WIS. STAT. § 59.026 (1987) provides that:

> [f]or the purpose of giving to counties the largest measure of self-government in accordance with the spirit of the administrative home rule authority granted to counties in s. 59.025, it is hereby declared that this chapter shall be liberally construed in favor of the rights, powers and privileges of counties to exercise any organizational or administrative power.

44. WIS. STAT. § 59.083 (1987) provides in part that:

> [e]xcept as elsewhere specifically provided in these statutes, the county board of any county is hereby vested with all powers of a local, legislative and administrative character, including without limitation because of enumeration, the subject matter of water, sewers, streets and highways, fire, police, and health, and to carry out these powers in districts which it may create for different purposes, or throughout the county, and for such purposes to levy county taxes, to issue bonds, assessment certificates and improvement bonds, or any other evidence of indebtedness. The powers hereby conferred may be exercised by the county board in any town, city or village, or part thereof located in such county upon the request of any such town, city or village, evidenced by a resolution adopted by a majority vote of the members-elect of its governing body, designating the particular function, duty or act, and the terms, if any, upon which the same shall be exercised by the county board or by a similar resolution adopted by direct legislation in the town, city or village in the manner provided in s. 9.20.

45. Although they are of arguably limited authority (*see* Christenson, *The State Attorney General*, 1970 WIS. L. REV. 298, 326-333), several Wisconsin Attorney General opinions have addressed the relatively limited power of counties to regulate under these statutes. The original county home rule statute (1985 Wis. Act 29 repealed and recreated WIS. STAT. § 59.025 and created § 59.026 (1987) (*see supra* note 43)) appeared to grant broad regulatory powers but "a series of crippling intepretations by the Attorney General made

ever, has delegated to county governments authority over several optional groundwater protection programs previously noted (disposal of septage, well code ordinances and zoning). Statutes which address the power of county boards to manage the concerns of the county, preserve public peace and adopt building and sanitary codes[46] may provide additional authority to regulate some matters affecting groundwater quality. County regulation of zoning,[47] subdivisions,[48] manure storage facilities[49] and nui-

the [original] statute virtually meaningless." Hazelbaker, *County Home Rule*, WIS. COUNTIES 11, Feb. 1985. In this regard *see, e.g.*, 81 Op. Wis. Att'y Gen. 68 (1979); 153 Op. Wis. Att'y Gen. 67 (1978); 317 Op. Wis. Att'y Gen. 63 (1974). (A more detailed discussion of home rule and its application to cities and villages is found *infra* beginning on p. 16.)

With regard to WIS. STAT. §59.083 (1987), the Attorney General noted that county powers are restricted because a town, city or village must request county action before such authority is exercised. 37 Op. Wis. Att'y Gen. 608 (1948).

46. WIS. STAT. § 59.07 (1987) addresses the powers of the county board; it provides in part that "[t]he board of each county may exercise the following powers, which shall be broadly and liberally construed and limited only by express language. . . ." Sections 59.07(5), (51) and (64) specify that county boards may:

(5) Have the management of the business and concerns of the county in all cases where no other provision is made. . . .

(51) Adopt building and sanitary codes, make necessary rules and regulations in relation thereto and provide for enforcement of the codes, rules and regulations by forfeiture or otherwise. . . . "Sanitary code" does not include a private sewage system ordinance adopted under § 59.065. "Building and sanitary codes" does not include well code ordinances adopted under § 59.067.

(64) Enact ordinances to preserve the public peace and good order within the county.

Note that the legislature amended WIS. STAT. § 59.07(51) to specifically exempt private sewage system ordinances and well code ordinances from inclusion within the definition of a sanitary code. One implication is that ordinances regulating these matters of public health concern were covered by the definition before the amendments. Thus, it could be argued that county authority to adopt sanitary regulations could be used to set up a permitting system to regulate potential pollution sources before groundwater contamination occurs. Several counties have used a model ordinance (Yanggen, Jackson and Thompson, *Regulatory Approaches for Animal Waste Management Ordinances*, University of Wisconsin-Extension Publication G3269 (1984)) to adopt regulations governing animal waste storage and disposal under § 59.07(51) on the theory that improper waste management can cause groundwater contamination and that this is a legitimate subject of a sanitary code.

Note also that all units of local government in Wisconsin have the authority to challenge the validity of administrative rules in limited circumstances; *see infra* note 478.

47. Counties may zone "to encourage the protection of groundwater resources." WIS. STAT. § 59.97(1) (1987). Note, however, that a county zoning ordinance applies only to the unincorporated parts of the county and is not effective in a particular town until approved by the town board (WIS. STAT. § 59.97(5)(c) (1987)) except that county shoreland zoning ordinances do not require town board approval. WIS. STAT. § 59.971(2)(a) (1987).

48. WIS. STAT. § 236.13 (1987) provides that approval of subdivision plats shall be based upon, *inter alia*, the provisions of WIS. STAT. Ch. 236, any municipal, town or county ordinance, and the DILHR rules relating to lot size and elevation necessary for proper sanitary conditions in an unsewered subdivision.

49. WISC. STAT. § 92.16 (1987).

sances[50] also provides some control over potential groundwater contaminants..

Despite the somewhat limited scope of their existing regulatory authority, counties have the potential to play a key role in groundwater protection. Although county geographic boundaries do not necessarily coincide with aquifer or watershed boundaries, counties do cover a greater geographic area than cities, villages or towns; county regulations may therefore reflect a more regional assessment of needed protection measures yet still include provisions which reflect the peculiar characteristics of the area.[51] Counties could, for example, be explicitly authorized to adopt special purpose ordinances regulating well field protection, hazardous materials, underground storage tanks, animal waste management and other activities and potential sources of pollution.[52]

50. WIS. STAT. § 823.01 (1987) provides that: "Any person, county, city, village or town may maintain an action to recover damages or to abate a public nuisance from which injuries peculiar to the complainant are suffered, so far as necessary to protect the complainant's rights and to obtain an injunction to prevent the same." Rock County, Wisconsin, has adopted an ordinance defining groundwater contamination as a public nuisance. Rock County, Wis., Traffic and General Ordinances ch. XIII (Public Health) (revised March 1987). Such a regulation can be helpful but its primary focus is on abating pollution once it has occurred.

51. *See* Groundwater Report, *supra* note 27, at 4-5. The DNR recognized the value of this approach when it chose to formulate groundwater management plans at the county level as part of its groundwater protection program.

52. Several of these topics are discussed within this article in the context of city, village or town regulation. Note the case of Muench v. Public Service Comm'n, 261 Wis. 492, 53 N.W.2d 514, 55 N.W.2d 40 (1952), in which the court held, on rehearing, that the legislature may not completely delegate to counties control of matters which are of "paramount statewide concern" so as to impair or destroy the public's right to enjoy navigable waters under the trust doctrine. The court later held *Muench* to its facts, however, finding that it was a case in which "[t]he purpose of the delegation as well as the area of concern in which it is made appear relevant and material on the issue of whether delegation of state authority to local municipalities is proper or permissible." Menzer v. Elkhart Lake, 51 Wis. 2d 70, 78, 186 N.W.2d 290, 294-95 (1971). The *Menzer* court held, *inter alia*, that a delegation to municipalities to enact boating regulations within certain prescribed limits was valid. Note that interestingly, the court in *Menzer* included the following remarks:

> However, we feel compelled to alert the legislature to the fact that a sharper delineation of the area the legislature intends shall be available for local regulation insofar as boats, lakes and related problems would be an insurance of the exact legislative intention being carried out. While some degree of flexibility to meet changing conditions is to be maintained, vagueness is no virtue when it comes to the spelling out of areas for state and local action in a particular field. As the pressing public concern for protecting human health, promoting public safety and preserving public resources is predictably reflected in legislative enactments dealing with lakes, rivers and streams, it is crystal clear that, if local units of government are to be given a share of the authority and responsibility for dealing with the problems that arise, a more precise phrasing of

Statutes could, in addition, provide that county regulations control in cities, villages and towns unless these local units have adopted more stringent regulations covering the same subject matter.

B. *Towns*

Town governments in Wisconsin are subject to the same general statutory limits on their regulatory authority as are counties; *i.e.*, towns have only those powers which are expressly conferred by statute and which may be clearly implied from statute.[53] Towns can elect to exercise village powers which allow them to exercise the authority conferred upon cities and villages as long as there are no limits on the town's exercise of such powers.[54] Towns with

> what local government can and cannot do would avoid controversy and effectuate the public policy of partnership between various levels of government.

Id. at 84-85, 186 N.W.2d at 298 (1971).

53. Adamczyk v. Town of Caledonia, 52 Wis. 2d 270, 190 N.W.2d 137 (1971); 66 Op. Wis. Att'y Gen. 58 (1977). Another important limitation on town powers is the uniformity requirement found within the Wisconsin Constitution. WIS. CONST. art. IV, § 23, provides in part that "[t]he legislature shall establish but one system of town government, which shall be as nearly uniform as practicable. . . ."

54. WIS. STAT. § 60.10(2)(c) (1987) provides in part that the town meeting may "[a]uthorize the town board to exercise powers of a village board under § 60.22(3)"; WIS. STAT. § 60.22(3) (1987) provides that town boards with village powers "may exercise powers relating to villages and conferred on village boards under ch. 61, except those powers which conflict with statutes relating to towns and town boards." *See, e.g.*, Boerschinger v. Elkay Enterprises, Inc., 26 Wis. 2d 102, 133 N.W.2d 333 (1965) (dictum) in which the Wisconsin Supreme Court found that a town with village powers could not wholly exclude rendering plants from its borders since statutes specifically (gave this power to cities and villages but) limited towns' authority to do so.

It is unclear whether towns with village powers possess broad powers similar to the statutory home rule authority granted to villages by WIS. STAT. § 61.34(1) (1987). A Wisconsin Attorney General opinion states that WIS. STAT. § 60.18(12) (now WIS. STAT. §§ 60.10(2)(c) and 60.22(3) (1987)) "would not be authority for the use of such home rule village powers even where a town meeting had authorized the town board to exercise village powers." 66 Op. Wis. Att'y Gen. 58, 59 (1977). The opinion also states that such an exercise of "home rule power is inherently inconsistent with the constitutional rule requiring one system of uniform town government." *Id.* at 59.

Several Wisconsin judicial opinions, on the other hand, indicate that towns which have been granted village powers (pursuant to what are now WIS. STAT. §§ 60.10(2)(c) and 60.22(3) (1987)) are authorized to exercise broad regulatory powers. *See, e.g.*, Town of Norway v. State Board of Health, 32 Wis. 2d 362, 145 N.W.2d 790 (1966) (in dictum, the court noted that a town with village powers had the power to "manage and control navigable water and to act for the health, safety, welfare and convenience of the public [WIS. STAT.] § 61.34(1)." *Id.* at 370, 145 N.W.2d at 794 (1966)). *See also* Town of Wilson v. Kuntsmann, 7 Wis. 2d 387, 96 N.W.2d 709 (1959) (dictum) (court found that even if the town did not have the authority to regulate trailer parks pursuant to WIS. STAT. § 60.297 (1977), "we deem it clear that a village board would have had power to regulate individual

village powers thus have substantially broader regulatory authority to protect groundwater quality than towns without village powers. Towns may, of course, use their zoning and subdivision power to protect groundwater quality.[55] Towns may also form sanitary districts and regulate aspects of the use and/or construction of public water and sewage systems[56] and private sewage systems.[57] Towns also have the authority to abate a nuisance[58] and to perform other functions such as inspections of underground storage tanks to ensure groundwater protection.[59]

On the whole, however, towns do not possess a great deal of authority to regulate for groundwater protection, particularly when compared to counties and incorporated municipalities, *i.e.* cities and villages. For example, towns in counties which have not adopted county zoning may not adopt a town zoning ordinance unless the town petitions the county to enact a county zoning ordinance and the county either refuses or fails to enact an ordinance within a designated time.[60] Even if a town has village powers it must receive county board approval to adopt or amend a town zoning ordinance in counties with a county zoning ordinance.[61] The trend in Wisconsin has largely been away from granting powers to towns and instead granting them to counties.

trailer sites under § 61.34 stats, and that the town board of the town of Wilson had acquired the same power under § 60.18(12)." *Id.* at 392, 96 N.W.2d at 712); and City of Fond du Lac v. Town of Empire, 273 Wis. 333, 77 N.W.2d 699 (1956), discussed *infra*.

If towns with village powers have this authority, it would greatly increase the ability of these governments to regulate for groundwater protection. For purposes of this article it is presumed that towns with village powers possess broad regulatory authority similar to that granted to villages by WIS. STAT. § 61.34(1) (1987) (*see, e.g.*, discussion of town ordinance regulating pesticide application, *infra* part IV-B-2).

55. WIS. STAT. §§ 60.61(2)(g) (1987) (zoning) and 236.10 (1987) (subdivision approval). *See infra* part V.

56. *See* WIS. STAT. §§ 60.70-60.79 (1987). Town sanitary districts may be formed by the town board (WIS. STAT. § 60.71(1) (1987)) or by citizen petition (WIS. STAT. § 60.71(2) (1987)); the state DNR may order district formation if a public health or other threat exists (WIS. STAT. § 60.72 (1987)), but this is uncommon.

57. Town sanitary district commissions are authorized, *inter alia*, to require the installation of private sewage systems (WIS. STAT. §§ 60.77 (5)(b) and (c) (1987)) and to regulate these systems (WIS. STAT. § 145.20 (1987)). However, no town or city or village can regulate items covered by a county private sewage system ordinance. WIS. STAT. § 59.065(1) (1987).

58. *See supra* note 50; *see also* WIS. STAT. § 66.052 (1987).

59. WIS. STAT. § 101.14(2) (1987). *See infra* part IV-B-1 for a more detailed discussion of underground tank regulation.

60. WIS. STAT. §§ 60.61(2) and (3) (1987).

61. WIS. STAT. § 60.62(3) (1987).

The new groundwater law provides, for example, that counties have the primary responsibility to adopt ordinances regulating the land disposal of septage[62] and exclusive authority to adopt private well codes.[63] The legislature could strengthen the power of towns to protect groundwater quality by, for example, providing that in some circumstances, towns may enact ordinances if counties fail to do so[64] or that town (and city and village) ordinances preempt county regulations if the former are more stringent than the latter.

C. *Cities and Villages*

In addition to those powers expressly granted and implied by the legislature, Wisconsin cities and villages possess regulatory power in the form of constitutional[65] and statutory[66] home rule.

62. WIS. STAT. § 146.20(5m) (1987).

63. WIS. STAT. § 59.067 (1987).

64. For example, WIS. STAT. § 146.20(5m)(b) (1987) provides in part that "[n]o city, village or town may adopt or enforce a septage disposal ordinance if the county has adopted such an ordinance." In other words, if a county does not adopt such an ordinance, other units of local government may do so.

65. WIS. CONST. art. XI, § 3(1) was adopted in 1924 and provides that:

> Cities and villages organized pursuant to state law may determine their local affairs and government, subject only to this constitution and to such enactments of the legislature of statewide concern as with uniformity shall affect every city or every village. The method of such determination shall be prescribed by the legislature.

The legislature provided that local governments must adopt a charter ordinance to invoke constitutional home rule powers (*see* WIS. STAT. § 66.01 (1985)). It is important to note that § 66.01, *not* the statutory home rule provisions (*see infra* note 66), was enacted as a means for cities and villages to implement constitutional home rule; this issue has been a source of confusion among Wisconsin courts. *See infra* note 69.

66. WIS. STAT. § 62.11(5) (1987) was first adopted in 1921 and provides statutory home rule powers to cities:

> Except as elsewhere in the statutes specifically provided, the council shall have the management and control of the city property, finances, highways, navigable waters, and the public service, and shall have power to act for the government and good order of the city, for its commercial benefit, and for the health, safety, and welfare of the public, and may carry out its powers by license, regulation, suppression, borrowing of money, tax levy, appropriation, fine, imprisonment, confiscation, and other necessary or convenient means. The powers hereby conferred shall be in addition to all others grants, and shall be limited only by express language.

WIS. STAT. § 61.34(1) (1987) similarly confers statutory home rule powers on villages; it was first adopted in 1933.

> General Grant. Except as otherwise provided by law, the village board shall have the management and control of the village property, finances, highways, streets, navigable waters, and the public service, and shall have power to act for the government and good order of the village, for its commercial benefit and for the health, safety, welfare and convenience of the public, and may carry its powers into effect by license, regulation, suppression, borrowing, taxation, special assessment, appropriation, fine,

Home rule power in Wisconsin is based upon the theory that although local governments have no inherent powers,[67] cities and villages should be permitted to regulate activities which affect the local community as long as there is no conflict with the exercise of state regulatory power (*i.e.*, as long as the state has not preempted local regulation).[68]

It is important to note that only statutory and not constitutional home rule is applicable to this discussion. Constitutional home rule was enacted in part to enable local governments to determine their local affairs (subject to uniform enactments of the legislature) by electing not to be bound by state legislation. The authors do not suggest that cities and villages elect not to be bound by state groundwater laws nor do we suggest that groundwater protection is of local concern only.[69] Rather, we advocate

> imprisonment, and other necessary or convenient means. The powers hereby conferred shall be in addition to all other grants and shall be limited only by express language.

WIS. STAT. § 61.34(5) (1987) provides that village statutory home rule power shall be liberally interpreted. A similar provision is found in WIS. STAT. § 62.04 (1987) and applies to city statutory home rule. The Wisconsin Supreme Court in Wisconsin's Environmental Decade, Inc. v. Dep't of Natural Resources, 85 Wis. 2d 518, 271 N.W.2d 69 (1978) noted that the revision of statutes in Wisconsin Annotations (1950) concisely summarized the effect of § 62.11(5):

> Prior to the enactment of the this section by ch.242, Laws 1921 (revision of City Charter Law) cities possessed specific powers. Their powers were limited to those expressed in the statutes and those necessarily implied by the expressed powers. All other powers were regarded as having been denied. That rule changed by said chapter. Since then cities possess all powers not denied them by the statutes or constitution. Instead of the powers being specified, as formerly, the limitations are now enumerated.

Decade at 532-533, 271 N.W.2d at 75-76 (1978), *See also* Hack v. City of Mineral Point, 203 Wis. 215, 235 N.W. 82 (1931).

67. "[A]lthough some state courts have held that municipalities have inherent powers to govern, this view has been expressly repudiated in Wisconsin." Solheim, *Conflicts Between State Statute and Local Ordinance in Wisconsin*, 1975 WIS. L. REV. 840, 841 (citing Van Gilder v. City of Madison, 222 Wis. 58, 59, 268 N.W. 108, 109 (1936)).

68. *See generally, e.g.*, 5 MCQUILLIN, MUNICIPAL CORPORATIONS § 15.20 (3rd Ed. 1981); *see, e.g.*, the discussion of state preemption of local zoning ordinances beginning *infra* part IV.

69. The court in Wisconsin's Environmental Decade, Inc. v. Dep't of Natural Resources, 85 Wis. 2d. 518, 271 N.W.2d 69 (1978), dealt with the applicability of the two home rule provisions to city regulation of its surface waters and determined that statutory (rather than constitutional) home rule was applicable in that case:

> Initially, it might be useful to point out what is not involved in this case. It does not involve the home-rule amendment to the constitution, § 3, art. XI, WIS. CONST. This amendment empowers municipalities to determine their "local affairs...subject only to this constitution and to such enactments of the legislature of state-wide concern...." "Local affairs" has been construed to include matters which primarily affect the peo-

that cities and villages use their broad statutory home rule power to supplement state statutes and administrative rules where necessary to protect groundwater quality. Home rule provisions vary widely from state to state, as does judicial interpretation of the extent of these powers.[70] Statutory home rule can be an important source of local regulatory authority. The analysis of Wisconsin's statutory home rule[71] and state preemption law is presented as an example of the type of evaluation that can be undertaken for other states.

IV. State Preemption of Local Ordinances Designed to Protect Groundwater Quality in Wisconsin

A. *The Wisconsin Preemption Test*

Determination of whether the state preempts local groundwater regulations enacted under statutory home rule authority involves the basic issue of the appropriate division of power between various levels of government.[72] It is often difficult to

> ple of the locality, in contrast to matters of "statewide concern" which affect all the people of the state. Muench v. Public Service Comm., 261 Wis. 492, 53 N.W.2d 514, 55 N.W.2d 40 (1952); Van Gilder v. Madison, 222 Wis. 58, 268 N.W. 108 (1936). While there exist situations where classification according to the above criteria might prove difficult, this case is not such a one. The quality of the waters of Lakes Mendota and Monona has a clear non-local impact and is *emphatically a matter of state-wide concern*. Whatever authority the City of Madison may exercise regarding the chemical treatment of noxious weeds on Madison lakes, it is not constitutional in nature. It must, therefore, depend on a legislative grant of power. Appellant city does not contest this.

Id. at 530-531, 271 N.W.2d at 74-5 (emphasis supplied).

Similarly, groundwater regulation is a matter of statewide concern and must be regulated pursuant to statutory rather than constitutional home rule.

70. *See* 3 Anderson, American Law of Zoning, §§ 2.16, 2.17 (1986); *See also* Sandalow, *The Limits of Municipal Power Under Home Rule: A Role for the Courts*, 48 Minn. L. Rev. 643 (1964).

71. Unless otherwise noted, reference to "home rule" will hereinafter be to statutory home rule.

72. Solheim, *supra* note 67, at 840, points out that:

> [t]he division of power between different levels of government makes possible the realization of certain basic values of a democratic state. Exercise of governmental power over people by two different levels of government, however, raises questions of how the power should be divided and whether a particular level is acting within its power. These questions as between the federal and state governments are dealt with by the United States Constitution, the cases interpreting it, and, to some degree, many federal statutes and much administrative law. As between state and local governments the division of power is controlled only by the state constitution, state statutes, state administrative law, and the courts' construction of these.

determine whether the state has preempted a local ordinance since home rule provisions are often broadly worded. In addition, holdings in preemption cases are highly dependent upon the particular subject and the facts involved in each case. Whether state preemption exists is also an ongoing inquiry since the state legislature may preempt local ordinances at any time, whether enacted under the statutory home rule power[73] or other statutory authority.[74]

The Wisconsin Supreme Court has enunciated a test to be used to determine whether a preemption challenge to an ordinance adopted pursuant to statutory home rule might be sustained. The court will examine:

(1) whether the legislature has expressly withdrawn the power of municipalities to act;
(2) whether the ordinance logically conflicts with the state legislation;
(3) whether the ordinance defeats the purpose of the state legislation; or
(4) whether the ordinance goes against the spirit of the state legislation.[75]

Since the relationship between state and local powers varies widely by subject area, courts in Wisconsin have considered many different factors in applying the four-part preemption test. For example, courts have examined both statutes and administrative rules[76] to determine if there is preemption through an express

73. *Id.*, at 848.

74. *See, e.g.*, a discussion of local zoning power and state preemption beginning *infra* part V.

75. Anchor Savings & Loan Assoc. v. Equal Oppor. Comm'n, City of Madison, 120 Wis. 2d 391, 397, 355 N.W.2d 234, 238 (1984) (citing Wis. Stat. § 62.11(5) (1983); Fox v. City of Racine, 225 Wis. 542, 546-47, 275 N.W. 513, 515 (1937); State *ex rel.* Michalek v. LeGrand, 77 Wis. 2d 520, 530, 253 N.W.2d 505, 508-09 (1977); and Solheim, *supra* note 67). *See also* Wisconsin Ass'n of Food Dealers v. City of Madison, 97 Wis. 2d 426, 432-33, 293 N.W.2d 540, 544 (1980).

76. Administrative agencies may specify the scope of local regulatory power as long as the exercise of agency power is within statutory limits; as creatures of the legislature, agencies have only those powers expressly conferred or necessarily implied from the statutory provisions under which they operate. WIS. STAT. § 227.11(2) (1987). Administrative rules are extensively reviewed before they are promulgated and may be amended to reflect changes in statutory and case law (*see infra* for an overview of this process).

Courts in numerous Wisconsin cases have examined administrative rules to help determine whether state preemption exists. *See, e.g.*, Anchor Savings, 120 Wis. 2d 391, 355 N.W.2d 234; Hartford Union High School v. City of Hartford, 51 Wis. 2d 591, 187 N.W.2d 849 (1971); Caeredes v. City of Platteville, 213 Wis. 344, 251 N.W. 245 (1933) *sub nom.* Olson v. City of Platteville; Konkel v. Town of Raymond, 101 Wis. 2d 704, 305 N.W.2d

withdrawal of local power. Courts have also looked at statutes and rules to determine whether local regulatory power has been limited in some way and how these limiting statements should be interpreted and applied.[77]

Applying the second preemption test, whether the ordinance and state legislation logically conflict, is sometimes a difficult task. Wisconsin courts have examined, among other factors, whether the statutes, administrative rules and ordinance can coexist;[78] whether the ordinance forbids what the legislature has licensed or whether it authorizes what the legislature has expressly forbidden;[79] and whether the ordinance "goes farther in its prohibition,—but not counter to the prohibition under the statute."[80]

In applying the tests of whether a local ordinance defeats the purpose or goes against the spirit of state legislation,[81] courts have considered, among other factors, whether the legislature expressly provided for or otherwise manifested an intent to estab-

190 (Wis. Ct. App. 1981)); Volunteers of America Care Facilities v. Village of Brown Deer, 97 Wis. 2d 619, 294 N.W.2d 44 (Wis. Ct. App. 1980).

Note that cities, villages, towns and counties, while also "creatures" of the legislature, may nonetheless challenge the validity of administrative rules under some circumstances. *See infra* note 478 and accompanying text.

77. *See, e.g.*, Menzer v. Village of Elkhart Lake, 51 Wis. 2d 70, 186 N.W.2d 290 (1971) (local ordinance which prohibited power boats on a lake on certain Sundays upheld); *see also* State v. Village of Lake Delton, 93 Wis. 2d 78, 286 N.W.2d 622 (Wis. Ct. App. 1979) (court upheld an ordinance which provided for the exclusive use of a section of a lake by water exhibition licensees). These cases dealt with WIS. STAT. § 30.77 (1969) and (1977), respectively, which placed limitations on municipal power to enact boating regulations (the law was amended by ch. 203, Laws of 1973).

78. *See, e.g.*, City of Madison v. Schultz, 98 Wis. 2d 188, 295 N.W.2d 798 (Wis. Ct. App. 1980) (since ordinance regulating massage parlors extended but did not contradict the criminal code provisions, the ordinance and statutes could effectively coexist). *See also* Fox v. City of Racine, 225 Wis. 542, 275 N.W. at 513 (1937), and MCQUILLIN, *supra* note 68 at § 15.20.

79. *See, e.g.*, Fox v. City of Racine, 225 Wis. 542, 275 N.W. 513 (1937) (court held that an ordinance prohibiting all endurance contests was not void as prohibiting what the legislature had licensed since the statute merely indicated a tolerance for some types of contests; in addition, local regulatory power had not been expressly withdrawn as required by WIS. STAT. § 62.11(5) (1935)). *But see* Wisconsin's Environmental Decade, 85 Wis. 2d 518, 271 N.W. 2d 69 (1978) (court held void an ordinance which prohibited all chemical weed treatment of city lakes since the state, through delegation of power to the DNR, expressly provided for the treatments). (*See infra* for further discussion of this case).

80. *Fox*, 225 Wis. at 546, 275 N.W. at 515. *See, e.g.*, *Schultz*, 98 Wis. 2d 188.

81. Since these tests are similar in content, they are often considered together. *See, e.g.*, *Fox*, 225 Wis. at 545, 275 N.W. at 514 and the discussion within Solheim, *supra* note 67, at 848.

lish a uniform state rule.[82] The breadth of the state's regulatory scheme has also been considered, but Wisconsin courts have rarely found preemption based upon a relatively comprehensive state regulatory scheme alone.[83] Courts have also concluded in some cases that the legislature did not intend to preclude all local regulation where statutes and/or state administrative codes (in accord with statutory provisions) provided for local government participation in regulation.[84]

The wide variety of factors considered by Wisconsin courts makes it difficult to determine whether preemption has occurred and the extent of such preemption from simply reading the particular ordinance(s), statute(s) and administrative rule(s) in-

82. *See, e.g.*, Volunteers of America Care Facilities v. Village of Brown Deer, 97 Wis. 2d 619, 294 N.W. 2d 44 (Wis. Ct. App. 1980), in which the court ruled that village ordinances requiring, *inter alia*, local registration of nursing homes were "in direct conflict with the comprehensive regulatory authority given DHSS to provide uniform statewide licensing, inspection and regulation of community-based nursing homes." *Id.* at 625, 294 N.W.2d at 47. WIS. STAT. § 50.02(1) (1987 & Supp. 1988) expressly provided that DHSS had the "authority to provide uniform, statewide" standards. *Compare* Konkel v. Town of Raymond, 101 Wis. 2d 704, 305 N.W. 2d 190 (Wis. Ct. App. 1981) where the court ruled that although statutes required DILHR to publish uniform statewide rules governing plumbing and private sewage systems, statutes also provided that these standards "shall be uniform and of state-wide concern *so far as practicable*" (WIS. STAT. § 145.02(2) (1979) (emphasis added)). The court ruled that by including the "so far as practicable" language, the legislature recognized that complete statewide "uniformity is neither envisioned nor practical" and that a town ordinance prohibiting the use of holding tanks for sewage disposal was therefore valid. *Id.* at 708, 305 N.W.2d at 192. Wisconsin administrative regulations and policy supported this conclusion. *Id.* at 709-710, 305 N.W.2d at 192-195.

83. The Wisconsin Court of Appeals ruled that a city did not have the statutory home rule authority to condition the issuance of a liquor license upon the payment of the licensee's state and federal taxes because "[t]he legislature has enacted a comprehensive scheme for the levy assessment and collection of taxes." Tavern League of Wisconsin v. City of Madison, 131 Wis. 2d 477, 484, 389 N.W.2d 54, 56 (Ct. App. 1986) (citations omitted). More often, Wisconsin courts have relied on several different factors to determine that preemption exists. *See, e.g.*, Anchor Savings & Loan Ass'n v. Equal Opportunities Comm'n, 120 Wis. 2d 391, 355 N.W. 2d 234 (1984), (the court ruled that the city ordinance was both contrary to the spirit of the state statutes (i.e., to regulate all aspects of savings and loans) *and* conflicted with the state's requirements for loan qualification); Vanderwerker v. City of Superior, 179 Wis. 638, 192 N.W. 60 (1923) (state's comprehensive regulation of jitneys preempted local regulation; also, local ordinance and statutes conflicted and could not coexist). *Cf.* City of Madison v. Schultz, 98 Wis. 2d 188, 295 N.W.2d 798 (Wis. Ct. App. 1980) ("[t]he fact that the state has enacted comprehensive legislation governing...[a certain subject] does not mean that municipalities cannot adopt ordinances in the same area which go farther in prohibition." *Id.* at 201, 295 N.W.2d at 804.)

84. *See, e.g.*, Hartford Union High School v. City of Hartford, 51 Wis. 2d 591, 187 N.W. 2d 849 (1971) and Caeredes v. City of Platteville, 213 Wis. 344, 251 N.W. 245 (1933), *sub nom.* Olsen v. City of Platteville.

volved. There are exceptions, of course, such as where the legislature clearly withdraws the regulatory power of a local government unit or the local ordinance is clearly incompatible with state law.

Regarding groundwater quality, it is clear that the state legislature did not intend to have the state preempt *all* local regulation of activities affecting groundwater quality since it expressly provided for several regulatory programs at the local level[85] and it did not expressly withdraw all additional regulatory powers. Before local governments enact ordinances regulating groundwater quality, however, it is important to determine whether the state has preempted the proposed ordinance in whole or part. The preemption analyses which follow illustrate the legal issues involved in typical groundwater protection ordinances. The analyses discuss the groundwater problems addressed by the local ordinance, the provisions of the ordinance, and the relationship between the exercise of power by the state and local government over the subject matter addressed by the ordinance.

B. *The Relationship Between State and Local Power to Protect Groundwater Quality*

1. Underground Flammable and Combustible Liquid Storage Tanks

The first hypothetical ordinance deals with the relationship between state and local regulation of the underground storage of flammable and combustible liquids,[86] a potential threat to groundwater quality in many states. A city may find, for example, that there are a number of older gasoline storage tanks located upgradient from the wells which supply the city's drinking water. Because older tanks located in the corrosive and highly permeable soils of the city are more likely to fail with attendant rapid movement of contaminants to municipal and private wells,[87] the

85. *See supra* notes 37-39 and accompanying text.

86. *See* DRAFT WIS. ADMIN. CODE § ILHR 10.01(22) and 10.01(10) (June, 1987), respectively, for definitions of "flammable" and "combustible" liquids. Note that the draft rule also pertains to large *aboveground* tanks with a capacity of greater than 5000 gallons (*see* DRAFT WIS. ADMIN. CODE § ILHR 10.74 (June, 1987)). Although the emphasis of this subsection is on the regulation of underground tanks, the reader should be aware that aboveground tanks also present a threat to groundwater contamination.

87. Leaking underground tanks are one of the most common sources of groundwater contamination dealt with by the Wisconsin Department of Natural Resources. T. BERGAMINI, CONTROL OF UNDERGROUND PETROLEUM STORAGE SYSTEMS LEAKS 1 (Draft, Nov.

council decides that proposed state regulations represent inadequate means of well protection. The city therefore enacts an ordinance pursuant to its statutory home rule power[88] requiring that all existing underground tanks be inspected annually for tank integrity rather than every five years as required for most tanks by proposed DILHR regulations.[89] The local ordinance requires that technical standards for tank integrity be the same as those specified by the state.[90] Tank owners may avoid annual inspection only if the owner can prove that the tank 1) is less than ten years old; 2) met state standards when installed; and 3) does not currently leak. The ordinance requires tank removal if an owner refuses to submit qualifying tanks to inspection.

In Wisconsin, the Department of Industry, Labor and Human Relations (DILHR) is the agency primarily responsible for regulation of the underground storage of flammable and combustible liquids.[91] Prior to the enactment of the groundwater law, DILHR regulated these tanks primarily for the purpose of fire prevention.[92] The groundwater law added to DILHR's responsibilities the protection of groundwater quality;[93] it required, *inter alia*, that DILHR promulgate rules for the construction, maintenance and

1985) (available from the Wis. Dep't of Natural Resources, P.O. Box 7921, Madison, WI 53707). Many of the existing underground tanks in Wisconsin (as well as other states) were installed in the 1950's and 1960's and most were constructed of steel unprotected or poorly protected against corrosion; while unprotected tanks may last for 20 or more years without leaking when in soils of low corrosivity, "[m]ost of Wisconsin's soils...are moderately or highly corrosive. In corrosive soils, failure [of tank integrity] from external corrosion can occur in as little as seven years and a tank over 15 years old can be described as a 'senior citizen.' " *Id.* at 14-15.

88. *See supra* note 66.

89. DRAFT WIS. ADMIN. CODE § ILHR 10.18(2)(b) (June, 1987) provides that existing tanks be inspected "periodically," noting that inspections at public buildings and places of employment shall be part of the fire prevention inspections mandated under WIS. STAT. § 101.14 (1985) (i.e., every six months) but that all other tanks shall be inspected at least once every five years.

90. *Id.*, at §§ ILHR 10.25-10.27.

91. WIS. STAT. ch. 101 (1987) (discussed in more detail within this section). The DNR and the Department of Administration, Division of Emergency Government, also play a part in the regulation of underground tanks but their roles are largely limited to responding to spills and leaks. *See* WIS. STAT. ch. 144 and ch. 166 (1987), respectively. Bergamini notes that the DNR may also have authority under WIS. STAT. § 144.76 (1987) to regulate tanks to prevent contamination, but this power is as yet untested. BERGAMINI, *supra* note 87, at 35. (The DNR also regulates the underground storage of hazardous wastes. *See* Chapter NR 181 (1985).)

92. WIS. STAT. § 101.02 (1987).

93. The groundwater law requires all state agencies to regulate activities to protect groundwater quality. WIS. STAT. § 160.19 (1987).

abandonment of underground tanks[94] and that DILHR conduct an inventory of unused underground petroleum product storage tanks.[95]

The draft DILHR rule designed to implement these programs requires, *inter alia*, that tank owners obtain a permit for existing[96] and new and replacement[97] underground tanks (and some aboveground tanks)[98] and that they use a release detection system.[99] No later than 20 years after the rule becomes effective all existing tank systems must comply with the requirements for new tank systems, have a field-installed cathodic protection system, or

94. WIS. STAT. § 101.09(3) (1987) provides in part that:

> [t]he department shall promulgate by rule construction, maintenance and abandonment standards applicable to tanks for the storage, handling or use of flammable and combustible liquids, and to the property and facilities where the tanks are located, for the purpose of protecting the waters of the state from harm due to contamination by flammable and combustible liquids. The rule shall comply with ch. 160. The rule may include different standards for new and existing tanks, but all standards shall provide substantially similar protection for the waters of the state. The rule shall include maintenance requirements related to the detection and prevention of leaks.

Existing and proposed state regulation of underground tanks reflect recent amendments to RCRA. *See supra* note 10. These amendments provide the EPA with, *inter alia*, expanded authority to regulate the underground storage of petroleum and other "regulated substances" (as defined in section 9601 (14) of CERCLA (*see supra* note 10)) with the exclusion of hazardous wastes already regulated under subchapter III of sub-chapter IX (42 U.S.C. § 6991 (2) (1982 & Supp. IV 1986). Under the RCRA amendments, states may choose to administer the program using federal standards (or their own standards, as long as they are no less stringent than federal standards). Now that final federal standards have been established (Underground Storage Tanks, Final Rules, 53 Fed. Reg. 37,082 (1988) (to be codified at 40 C.F.R. §§ 280-81)). Wisconsin officials plan to modify existing administrative rules and apply for authorization to administer this program.

In the meantime, the EPA's draft standards for underground tanks (*see* Underground Storage Tanks; Proposed Rules, 52 Fed. Reg. 74,12262 (1987) (to be codified in 40 C.F.R. secs. 280 and 281)) have been incorporated into the draft ILHR code. As EPA standards are finalized the Wisconsin code may require amendment to reflect the final EPA standards. Several Wisconsin legislators have stressed, however, that it is more important to enact a rule and begin more stringent regulation of tanks *now* and then wait until promulgation of final EPA standards (possibly not until 1988 or 1989, or later).

95. *See* WIS. STAT. § 101.142 (1988). Proposed administrative rules implementing this section require registration of existing, new and replacement storage tanks, and abandoned or removed tanks. *See* DRAFT WIS. ADMIN. CODE §§ ILHR 10.13 -10.15 (June, 1987).

96. *See* DRAFT WIS. ADMIN. CODE § ILHR 10.17 (June, 1987).

97. *Id.*, at § ILHR 10.16 (June, 1987).

98. *See supra* notes 86, 94.

99. *See* DRAFT WIS. ADMIN. CODE §§ ILHR 10.59 - 10.62 (June, 1987).

permanently close.[100] State statutes and rules provide for local aid in inspecting and permitting some underground tanks.[101]

DILHR regulations thus require, *inter alia*, that owners of underground tanks register their tanks and follow specified procedures to help ensure that the tanks present neither a fire hazard nor a threat to the maintenance of groundwater quality. The hypothetical city ordinance requires that tank owners apply the same technical standards used by the state to regulate underground tanks, but provides that for some tanks integrity testing be conducted more frequently than the state requires. Since both the state and the city regulate tank integrity testing, the issue therefore becomes whether or not the state has preempted the stricter city ordinance.

Applying the first element of the Wisconsin four part preemption test,[102] one sees that the state has not expressly withdrawn the power of cities to enact regulations dealing with underground tank storage. In fact, the draft DILHR rule provides that "[t]his chapter may not limit the power of cities, villages and towns to make, or enforce, additional or more stringent regulations, provided the regulations do not conflict with the chapter, or with any other rule of the department, or law."[103]

Applying the second prong of the preemption test, there appears to be no logical conflict between the ordinance and state law. Significantly, more stringent regulations are expressly pro-

100. *Id.*, at § ILHR 10.52 (June, 1987).

101. WIS. STAT. § 101.14(2) (1987) provides that local fire department chiefs are constituted DILHR deputies and they (or their designees) are required to inspect all buildings and facilities for fire prevention purposes. The draft DILHR rule on underground tanks provides that these officials may elect to administer and enforce the groundwater protection-related provisions for underground tanks which have a capacity of less than 1000 gallons. DRAFT WIS. ADMIN. CODE § ILHR 10.10 (June, 1987). Where local officials elect not to administer these provisions, approval shall be obtained from DILHR. *Id.* (Previous DILHR rules provided for local oversight of tanks with a capacity of less than 5000 gallons. WIS. ADMIN. CODE § IND 8.114(2) (1985).).

102. *See supra* part IV-A and accompanying notes.

103. DRAFT WIS. ADMIN. CODE § ILHR 10.10(5) (June, 1987). The significance of this provision is discussed *infra*. A related provision is also included in the draft DILHR rule as "special note #3:" "[a]pproval of plans as to compliance with the requirements of this chapter covers only the department administrative rules, and flammable and combustible liquid facilities and structures may be subject to compliance with additional requirements in applicable building codes, local zoning and similar ordinances." A similar provision is included in the existing DILHR rule on underground tanks. *See* WIS. ADMIN. CODE § IND 8.11(5) (1985).

vided for in the draft DILHR section on local powers.[104] In addition, the ordinance and state regulations can coexist;[105] the proposed ordinance simply calls for more frequent inspections than does the draft administrative rule. The Wisconsin Supreme Court has long held that "city ordinances may go more into detail and may include severer regulations, when reasonably necessary, than those of the state code."[106] "The city does not attempt to authorize by this ordinance what the legislature has forbidden; nor does it forbid what the legislature has expressly licensed, authorized or required."[107] A court is thus unlikely to find that such an ordinance logically conflicts with state regulations.

The final components of the preemption analysis involve a determination of whether the ordinance defeats the purpose or spirit of the state legislation. The existence of the DILHR draft provision on local regulatory powers aids in making this determination since the Wisconsin Supreme Court has decided two preemption cases involving similar administrative rule provisions. These cases shed some light on how administrative rule provisions affect a court's assessment of the purpose and spirit of state regulations and are thus useful in assessing whether the state intended to preempt the hypothetical ordinance discussed herein.

The Wisconsin Supreme Court dealt with a provision which was almost identical to the provision contained in the DILHR draft code on underground tanks in *Caeredes v. City of Platteville*.[108] This case dealt with the validity of a city building code which required both new and existing theaters to conform to the fire protection standards contained in the state building code; the state code required only new buildings to comply with its regulations.[109] The city possessed the power to regulate such matters pursuant to Wisconsin Statute section 62.11(5), the court found,[110] and the state building code itself provided for stricter local regulations in

104. *Id.*

105. *See supra* note 78 and accompanying text.

106. Caeredes v. City of Platteville, 213 Wis. at 350, 251 N.W. at 248 (1933). This case is discussed *infra* notes 108-113 and accompanying text. *See also* City of Milwaukee v. Piscuine, 18 Wis. 2d 599, 119 N.W.2d 442 (1963).

107. Fox v. City of Racine, 225 Wis. at 546, 275 N.W. at 515 (1937).

108. 213 Wis. 344, 251 N.W. 245 (1933).

109. *Id.* at 349, 251 N.W. at 248 (1933). The plaintiff had complied with state regulations pertaining to existing buildings and had obtained a state permit for the operation of his theater. *Id.* at 349, 251 N.W. at 247-48.

110. *Id.*

Order No. 5004: "[t]his code shall not limit the power of cities, villages, and towns to make or enforce additional or more stringent regulations, provided the same do not conflict with this code or with any order of the Industrial Commission."[111]

The *Caeredes* court found that although the city had increased the requirements of the state code, the local ordinance had "in no sense of the word run counter to the state requirements. The city moved farther in the same direction the commission did; it has gone farther but not counter to the building code."[112] While the court did not specifically address the question of whether the city ordinance defeated the purpose or spirit of the state legislation on building codes, it did find that "[t]here is no conflict between any of the 'general orders' or requirements of the building code and the ordinances in question. City ordinances go more into detail and may include severer [sic] regulations, when reasonably necessary, than those of the state code."[113] The language of the administrative code provision authorizing cities to make and enforce additional or more stringent regulations and the fact that the city ordinance did not conflict with the state code apparently persuaded the court that there was no state preemption. The ordinance was upheld.

Similarly, the case of *Hartford Union High School v. City of Hartford*[114] presented the issue of whether the construction of an addition to a public high school by a school district was subject to the provisions of a municipal building code despite relatively extensive state regulation of the subject. The court rejected the theory of sovereign immunity as a bar to the application of municipal codes to the school district and relied instead on a test of whether the state had preempted local regulation of the subject matter.[115] The court adopted a somewhat different framework for its preemption analysis, finding that:

> consideration must be given to the nature of the educational mandate, the structure of the governmental arm empowered to carry out the mandate, the specific legislation delegating the responsibility for school construction to the state agency, and

111. *Id.* at 350, 251 N.W. at 248.

112. *Id.*, (citing 3 MCQUILLIN, MUN. CORP. § 894).

113. *Id.* at 350, 251 N.W. at 248.

114. 51 Wis. 2d 591, 187 N.W.2d 849 (1971).

115. *Id.* at 593, 187 N.W.2d at 850.

> the nature and comprehensiveness of the legislation regulating the construction of public school buildings.[116]

The court noted that while the state superintendent of schools is authorized to establish standards providing for healthful, safe school facilities and school districts have been delegated authority over site selection and management of schools, "this delegation is hardly a pre-emption in the area of school construction."[117] Similarly, the court found, although state statutes provide for DILHR review of plans for public buildings,[118] "this legislation does not purport to be exclusive"[119] since statutes also provide that DILHR shall accept review of plans and building inspections by local officials in some circumstances. The court stressed that the administrative codes were promulgated as minimum standards of performance[120] and that the code "[e]xpressly does not attempt to pre-empt the field";[121] DILHR administrative rules provided that "[t]his code shall not limit the power of cities, villages, and towns to make, or enforce, additional or more stringent regulations, provided the same do not conflict with this code or with any other rule of the department of industry, labor and human relations."[122]

The court in *Hartford* concluded that despite the existence of extensive statutes and administrative codes on school construction and school district regulation in general, the statutes providing a local role in inspections and plan certification and the administrative code section providing for additional local regulation evinced a lack of intent on the part of the legislature to preempt local regulation of school construction.[123] The holdings in the *Caeredes* and *Hartford* cases thus indicate that the existence of administrative agency provisions granting local government regulatory powers suggest a definite lack of intent on the part of the legislature and the agencies involved to preempt local regulation even in subject areas where state regulations are quite comprehensive.

116. *Id.* at 595, 187 N.W.2d at 851.
117. *Id.* at 597, 187 N.W.2d at 852.
118. WIS. STAT. § 101.101 (1969).
119. *Hartford* at 597, 187 N.W.2d at 852 (1971).
120. *Id.* at 598, 187 N.W.2d at 852.
121. *Id.*
122. WIS. ADMIN. CODE § IND 50.04 (1969).
123. *Hartford* at 598, 187 N.W.2d at 852.

Looking specifically at the regulation of underground tanks, it is therefore unlikely that the hypothetical local ordinance would be preempted due to conflict with either the purpose or spirit of state law.[124] The draft DILHR provision on local powers is very similar to the DILHR provisions involved in the *Caeredes* and *Hartford* cases; if the draft code is promulgated with this provision intact, it will effectively indicate that the spirit of state law may be characterized in part as regulation of underground tanks through concurrent state/local jurisdiction. The state's current reliance on local officials for tank permitting and inspection[125] supports this conclusion. In addition, the city ordinance regulates tank integrity testing for the same purpose the state does:[126] protection of ground (and surface) water quality. There would, therefore, be no conflict with either the purpose or spirit of state law.

Where the legislature and administrative agencies include provisions granting some measure of local regulatory power, it is clear that there is no withdrawal of all local regulatory power and that the enactment of local ordinances is not contrary to the spirit or purpose of state law *per se*. Whether a *specific* ordinance is incompatible with state regulations due to logical conflict or incompatibility with the purpose or spirit of state law must, however, be determined on a case-by-case basis.

2. Pesticides

A second municipal ordinance which might be enacted in Wisconsin to protect groundwater quality involves regulation of the application of pesticides. Suppose, for example, that a town with

124. Note that the spirit of state legislation may be characterized in many different ways, as can the purpose of a law. It may be argued that for this reason, the third and fourth preemption tests vest too much discretion in the courts in deciding preemption cases. (*But see* Sandalow, *supra* note 70, Solheim noted that preemption due to a conflict with the purpose or spirit of a law "would seem to be unlikely to occur in Wisconsin since the legislature's broad grant of power to the municipalities can be 'limited only by express language.' " Solheim, *supra* note 67, at note 46. Subsequent to Solheim's article, however, Wisconsin courts have relied on this criteria at least in part to find state preemption of local ordinances in the absence of express language denying local power. *See, e.g., Anchor Savings*, 120 Wis. 2d. at 397, 355 N.W.2d at 238.

125. *See supra* note 101 and accompanying text.

126. Where a local government regulates for the same purpose as the state, there is obviously little question of conflict with the purpose of state law. Note that local governments *need* not enact ordinances for the same purpose as state law as long as the effect of the ordinance is not contrary to the purpose of state law. *Accord*, Highway 100 Auto Wreckers v. City of West Allis, 6 Wis. 2d 637, 96 N.W.2d 85 (1958), *reh'g denied*, 6 Wis. 2d 651a, 97 N.W.2d 423 (1959).

village powers[127] passes an ordinance prohibiting the application of all pesticides on areas in excess of 20,000 square feet, effectively precluding use for commercial agriculture. This ordinance reflects the results of studies which indicate that there is a high potential for groundwater contamination by the widespread use of pesticides in areas which, like the town, are characterized by highly permeable, sandy soils upon which extensive agriculture is practiced.

Neither Wisconsin statutes nor administrative rules contain provisions expressly granting or limiting local governmental authority to regulate pesticides. The statutory language relating to state regulation of the storage, application, sale and other aspects of pesticide use is, however, relatively expansive.[128] Statutes provide, for example, that the state Department of Agriculture, Trade and Consumer Protection (DATCP) "may promulgate rules. . . [t]o govern the use of pesticides, including their formulations, and to determine the times and methods of application and other conditions of use."[129] Statutes also provide that "[t]he department shall promulgate rules when it determines that it is necessary for the protection of persons or property from serious pesticide hazards and that its enforcement is feasible and will substantially eliminate or reduce such hazards."[130]

The DATCP has promulgated and implemented administrative rules relating to the use of pesticides; these rules include provisions which address the storage,[131] application, use and disposal of pesticides.[132] Administrative rules provide, *inter alia*, that "[n]o person may apply a pesticide to or cause a pesticide to enter waters of the state directly or through sewer systems . . . ."[133] Pesti-

127. *See supra* note 54.

128. Expansive statutory language alone does not necessarily indicate state preemption of local ordinances. *See supra* note 83 and accompanying text.

129. WIS. STAT. § 94.69(9) (1987); *see generally* WIS. STAT. §§ 94.67 - 94.71 (1987). Other agencies also regulate various aspects of pesticide use; *e.g.*, the DNR regulates pesticide use under Use of Pesticides on Land and Water Areas of the State of Wisconsin, WIS. ADMIN. CODE ch. NR 80 (West Supp. 1987).

130. WIS. STAT. § 94.69(10) (1987).

131. WIS. ADMIN. CODE § Ag. 29.12 (1983); *see also* WIS. ADMIN. CODE ch. Ag. 163 (1985) on pesticide bulk storage.

132. WIS. ADMIN. CODE § Ag. 29.15(2)(a) (1982).

133. *Id.*

cides must also be used in accordance with label instructions.[134] The DATCP has, in addition, promulgated more extensive regulations where it has determined that application of particular pesticides should be carefully controlled[135] through, *e.g.*, a certification program for users of "restricted use pesticides."[136] Pesticide use may also be prohibited where contamination has already occurred.[137]

Aside from these regulations, however, persons are free to use most pesticides (*i.e.*, "general use pesticides")[138] and are not required to apply to DATCP for an application permit. Given the extent of pesticide regulation by the state, is the town ordinance likely to be preempted by the state?

This hypothetical conflict is partially analogous to the controversy within the case of *Wisconsin's Environmental Decade, Inc. v. Wisconsin Department of Natural Resources*.[139] The *Decade* case is not, however, necessarily dispositive on all of the issues of state preemption in this instance. The controversy in the *Decade* case arose when the DNR granted permits allowing the chemical treatment of weeds in Madison lakes despite a city resolution prohibiting such treatment in most cases.[140] In its opinion the Wisconsin Supreme Court discussed, *inter alia*, whether the Madison resolution was an unlawful exercise of the city's power and whether its

134. WIS. ADMIN. CODE § Ag. 29.15(1) (1982) provides in part that "[n]o person may mix, handle, store, transport, display or use a pesticide in a manner inconsistent with its labeling or in a negligent manner."

135. The DATCP places special emphasis on the regulation of several types of pesticides including "restricted use" pesticides (*see* WIS. ADMIN. CODE § Ag. 29.01(31) (1982) (pesticides classified for use only by certified applicators)), prohibited pesticides (*see* WIS. ADMIN. CODE § Ag. 29.03 (1983) (e.g., DDT, endrin, etc.)) and pesticides which have been designated for use by special permit only (*see* WIS. ADMIN. CODE § Ag. 29.04 (1983) (strychnine, chlordane, etc.)).

136. *See* WIS. STAT. § 94.705 (1985).

137. *See, e.g.*, WIS. ADMIN. CODE § Ag. 161.08 (1985) which provides that pesticide application may be prohibited on a site-specific basis where the concentration of a pesticide exceeds an enforcement standard.

138. "General-use pesticide" is defined in part as "a pesticide, for which certain or all of its uses are classified as being for general use...and available for general use or application by persons who are not required to be certified private or commercial applicators." WIS. STAT. § 94.67(15) (1987).

139. 85 Wis. 2d 518, 271 N.W.2d 69 (1978).

140. The city resolution provided, in part, that "it is the policy . . . of the City of Madison to prohibit . . . the application of all herbicides and chemicals in Madison lakes except for reasons of public health . . . ." Madison, Wis., Resolution No. 21.527 (Jan. 12, 1971).

enactment was inconsistent with state statutes.[141] The court found that Madison had the statutory home rule authority to prohibit chemical treatments unless there was a withdrawal of power by the state or a conflict with state law.[142]

While the *Decade* court found no express withdrawal of the city's power to act in this area, it did find that the city's authority to enact a prohibition on weed treatment was limited by the legislature's affirmative grant of power to the DNR to control lake weeds. Wisconsin statutes provided that the DNR had the authority to issue permits and "shall supervise chemical treatment of waters for the suppression of algae, aquatic weeds, swimmers itch and other nuisance producing plants and organisms."[143] The court found that:

> the legislature has expressly sanctioned the chemical treatment of aquatic nuisances under the control of the DNR . . . not only is section 144.025(2)(i) specific authority for the proposition that the DNR possesses the power to issue chemical treatment permits over the objections of the City of Madison, it is also persuasive evidence for the view that Madison may not legitimately forbid these legislatively authorized treatments in any case, regardless of the extent of the DNR's control.[144]

The court found that the resolution also conflicted with DNR rules and policy providing for such chemical treatments: "[t]he city's policy conflicts with the DNR's program under section 144.025(2)(i) involving limited chemical treatment by individuals or groups operating by permit and under the supervision of the department."[145] Thus, the court concluded that "[t]he resolution and the statute as implemented by the DNR are diametrically opposed"[146] and the resolution was therefore invalid.

Based upon this analysis, the holding of the *Decade* case would probably control to preempt the hypothetical town prohibition as it applies to the use of those pesticides which the DATCP has specifically sanctioned through the establishment of a certification or similar permitting program (*e.g.*, restricted use pesticides). A local prohibition of the use of these pesticides would directly con-

141. *Decade*, 85 Wis.2d at 525, 271 N.W.2d at 72.
142. *Id.* at 534, 271 N.W.2d at 76.
143. WIS. STAT. § 144.025(2)(i) (1987).
144. *Decade*, 85 Wis.2d at 529, 271 N.W.2d at 74.
145. *Id.* at 535, 271 N.W.2d at 77. *See* WIS. ADMIN. CODE ch. NR 107 (1985).
146. *Decade*, 85 Wis.2d at 535, 271 N.W.2d at 77.

flict with what the state has "expressly licensed, authorized or required."[147]

A different issue arises, however, as to the prohibition of the use of general use pesticides *not* specifically sanctioned by DATCP certification or licensing programs. The question in such a case is whether the freedom to use pesticides not otherwise restricted is the same as an affirmative state authorization to use them.[148] Wisconsin courts apparently have not addressed this question and it is unclear how this issue might be resolved since the hypothetical facts fall somewhere in between those involved in the *Decade* case and in the case of *Fox v. City of Racine*.[149]

The *Fox* case dealt with an ordinance which prohibited all dance marathons and similar endurance contests within the city of Racine; state statutes prohibited marathons which exceeded specified time limits.[150] The court in *Fox* ruled that the legislature had merely indicated a tolerance for some marathons but had not expressly sanctioned them[151] nor had it expressly withdrawn the power of cities to regulate marathons.[152] The *Fox* court held that the city ordinance did not logically conflict with the state statute since it went farther in its prohibition, but not counter to the pro-

147. *Fox*, 225 Wis. at 545, 275 N.W. at 515.

148. It may be argued that the federal system of pesticide regulation under FIFRA, 7 U.S.C. sections 136-136y (1982 & Supp. IV 1986), (whereby all pesticides are registered for use) constitutes just such an affirmative (albeit federal) authorization and therefore preempts local pesticide ordinances like the one proposed here. FIFRA expressly provides, however, that a "state" may regulate pesticides (7 U.S.C. § 136v), and the argument that this power includes the authority to delegate the local units of government authority over pesticides is persuasive. *See* Defendant's Brief at 31-48, Mortier v. Town of Casey, Wis. Circuit Ct. Case No. 86-CV-134 (1987). In addition, note that Congress considered but rejected language which would have expressly preempted local powers. *Id.* at 32-33.

149. 225 Wis. 542, 275 N.W. 513.

150. WIS. STAT. § 352.48 (1935) provided that:

> [n]o person, firm or corporation shall advertise, operate, maintain, attend, participate in, promote or aid in advertising, operating, maintaining or promoting any physical endurance contest, exhibition, performance, or show of a like or similar nature, whether or not an admission is charged or a prize is awarded to any person for participation in such physical endurance contest, wherein any person participates in such contest for a period of more than sixteen hours in any twenty-four hours over a period of more than six days in one month.

151. *Fox*, 225 Wis. at 544, 275 N.W. at 514 (1937).

152. The *Fox* court held that even if marathons could be deemed legalized by the state statute, "that implication cannot be held to constitute such 'express language' as is required by § 62.11(5)" (*Id.* at 545, 275 N.W. at 514) so as to render the city ordinance invalid.

hibition contained within the state statute, nor did it "forbid what the legislature had expressly licensed, authorized or required."[153]

The city in the *Decade* case had argued, *inter alia*, that the resolution prohibiting chemical weed treatment was not logically inconsistent with state statutes, implying that it was simply a more stringent version of the state law and was therefore valid;[154] the city relied in part on the *Fox* case to make this point. The *Decade* court disagreed with this contention, however, and summarily distinguished *Fox* as involving an ordinance which did not conflict with the state statutes involved.[155]

Although the *Decade* court did not discuss its reasons for finding the city's reliance on the *Fox* case inappropriate, one might surmise that this was due in part to the fact that the statute involved in the *Fox* case was one of several miscellaneous public health provisions;[156] responsibility for the implementation and enforcement of the statute was not delegated to an administrative agency, nor, apparently, had the state taken any affirmative steps to encourage, license or supervise marathons.[157] Conversely, the statute involved in the *Decade* case specifically gave the DNR affirmative supervisory powers over chemical weed treatment. The DNR, in response to this delegation of authority, adopted administrative rules which allow chemical treatment in virtually every instance[158] and require direct supervision of the treatment by DNR personnel unless specifically exempted.[159] The *Decade* court viewed the city's prohibition of all treatments as being in direct conflict with statutes, administrative rules and practice providing for such treatment, leading the court to conclude that the city resolution was invalid.[160]

153. *Id.* at 546, 275 N.W. at 515.

154. *Decade*, 85 Wis.2d at 530, 271 N.W.2d at 74.

155. *Id.* at 535, 271 N.W.2d at 77. The city also relied on the case of La Crosse Rendering Works, Inc. v. City of La Crosse, 231 Wis. 438, 285 N.W. 393 (1939) for this point. The *La Crosse* case is more easily distinguished than the *Fox* case, however, since the *La Crosse* case involved a statute which expressly gave cities and villages the power to regulate rendering plants within their borders (WIS. STAT. § 146.11(1) (1937)). There was, therefore, no question of local regulatory power pursuant to statutory home rule authority.

156. *See* WIS. STAT. § 352 (1937).

157. Telephone interview with Gary Poulson, Assistant Revisor of Statutes, State of Wisconsin (July 23, 1987).

158. *See generally* WIS. ADMIN. CODE ch. NR 107 (1985).

159. *Id.*, at § NR 107.05 (1985).

160. *Decade*, 85 Wis.2d at 539, 271 N.W.2d at 78.

The hypothetical prohibition of unregulated pesticides shares aspects of both the *Decade* and *Fox* cases in that like *Decade*, the legislature has delegated authority to regulate the subject area at issue to an administrative agency. The hypothetical differs from *Decade*, however, in that DATCP has not promulgated administrative rules specifically sanctioning and providing for permits or supervision of the application of general use pesticides. In this sense the hypothetical is similar to the *Fox* case where the state had not affirmatively authorized marathons (but merely indicated that some would be tolerated) and thus the local prohibition of such did not constitute conflict with state law.

It is thus unclear how a court would rule on state preemption of the hypothetical ordinance as it applies to general use pesticides since neither case law nor statutory law are dispositive on this issue. A court may find that existing state law does not constitute an affirmative state authorization to use these pesticides (but merely indicates a tolerance for their use) and that local governments may therefore prohibit their use. Or, a court might find that the general freedom to use these pesticides *does* constitute such an authorization and the ordinance is therefore preempted due to a conflict with state law.

Alternatively, a situation may arise in which local regulations supplement state law and the state has not preempted the activity at issue. The *Decade* court never reached these issues. Absent a finding of total state preemption of all local pesticide regulation,[161] local governments might, *e.g.*, address special conditions such as use of pesticides in locally-delineated wellhead protection areas[162] and other areas vulnerable to groundwater contamination. Legislative clarification of the local role[163] in pesticide regulation would greatly aid both local governments and state officials (and the courts, where necessary) in determining the appropriate

161. A court might find that the purpose and spirit of state regulations preempt all local regulation of pesticides. This is unlikely, however, since there are significant gaps in the state's pesticide regulatory scheme in terms of substance, administration and enforcement. Defendant's Brief at 4-9 and 18-20, Mortier v. Town of Casey, Wis. Circuit Ct. Case No. 86-CV-134 (1987). Note that the federal pesticide regulatory scheme is similarly incomplete. *Id.* Such ordinances might be enacted pursuant to statutory home rule (*see supra* note 66), statutes authorizing local ordinances to protect public health, or other statutory authority.

162. The establishment of locally-delineated wellhead protection areas is discussed *infra* part IV-B-4.

163. Reasonableness and constitutional validity of ordinances are discussed, generally, *infra*.

state/local regulatory relationship in this subject area. Note that this discussion has addressed only the issue of state preemption and not the reasonableness or constitutional validity of the hypothetical ordinance.[164] A court might find that the local prohibition is unreasonable but that other, less stringent regulations are acceptable.

3. Hazardous Substances

A third hypothetical ordinance regulates the storage and handling of selected hazardous substances (as distinguished from hazardous wastes).[165] In this instance, assume that members of a city council become concerned when they are informed that the storage and handling of hazardous substances are virtually unregulated.[166] The council members learn that improper storage and handling of these materials could lead to spills, fires, and other accidents and constitute a serious threat to public health, safety and welfare due to potential groundwater contamination, the inhalation of toxic gases, and so on, if accidents do occur. The council is concerned since local fire departments are often unaware of what substances are stored at local facilities, making fire prevention difficult and fire fighting potentially dangerous.[167]

The city council enacts an ordinance[168] pursuant to statutory home rule authority[169] which is designed to regulate certain aspects of hazardous substance use. The ordinance provides for the regulation of the storage and handling of substances other than those used in ordinary household amounts. It requires that hazardous substances be stored and handled in accordance with

164. Discussed *infra* part VII.

165. *See infra* part IV-B-3 and accompanying notes on distinguishing hazardous wastes from hazardous substances.

166. State (and federal) regulations are discussed beginning *infra* part IV-B-3 and in accompanying notes.

167. The importance of knowing which hazardous substances are used and stored at a facility was illustrated by the danger and confusion which resulted at a fire at a chemical plant in Oregon, Wisconsin. Firefighters and other officials were hampered in their efforts to control the fire and properly clean up the site because they did not know which chemicals were used at the plant. Beck, "County Chemical Notice Sought," Wisconsin State J., Feb. 7, 1986 § 1 at 4, col. 1.

168. Numerous communities have enacted laws regulating hazardous and other potentially contaminating materials. *See, e.g.*, Horsley, *Beyond Zoning: Municipal Ordinances to Protect Ground Water*, State, County, Regional and Municipal Jurisdiction of Ground-Water Protection, Proceedings of the Sixth National Ground-Water Quality Symposium 73 (1982).

169. WIS. STAT. § 62.11(5) (1987); *see supra* note 66 and accompanying text.

specified rules to help ensure that spills and other accidents do not occur.[170] The ordinance also requires semi-annual registration with the local fire department of the hazardous substances used and stored by each facility so that the fire department will be able to deal safely and effectively with problems as they occur. Facility operators must provide information on the location of materials within the facility. The ordinance requires each facility to maintain monthly inventories of the hazardous substances on the premises.[171]

"Hazardous wastes" are solid or liquid materials that are intended to be discarded and have been identified as having the potential to pose a threat to human health and the environment if they are disposed of improperly.[172] Hazardous wastes comprise a subset of the larger group of "hazardous substances" which includes

> any substance or combination of substances including any waste of a solid, semisolid, liquid or gaseous form which may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible

170. Such regulations would also potentially benefit the facility owner and operator since courts are increasingly placing liability on these persons for damages resulting from hazardous substance spills, dumping, etc. (*See, e.g.*, State v. Mauthe, 123 Wis. 2d 288, 366 N.W.2d 871 (1985)).

171. October, 1986 amendments to the Superfund law contain emergency planning and community right-to-know provisions for hazardous and toxic chemicals (42 U.S.C. §§ 11001-11046 (1982 & Supp. IV 1986) (the Superfund Amendments and Reauthorization Act of 1986 (SARA)) and are designed to build upon federal, state and local regulations. The amendments provide, *inter alia*, for emergency response planning, emergency notification in case of a release of substances, reporting requirements (applying primarily to manufacturers and importers) and toxic chemical release reporting (applying to manufacturing facilities). The amendments apply only to those facilities producing, using, or storing designated chemicals in "greater than threshold planning quantities," however, and do not provide standards for the handling and storage of chemicals, key provisions which differ significantly from the proposed city ordinance. The Wisconsin Legislature recently enacted 1987 Wisconsin Act 342, designed to implement the federal program through the creation of a state emergency response commission and local emergency planning committees. These bodies are to propose plans for responding to the release of hazardous substances from specific facilities and to establish notification and reporting requirements for users of hazardous substances.

Note that the federal government and the state of Wisconsin require hazardous waste generators, transporters and operators of waste recycling facilities to provide information similar to that proposed in this hypothetical. *See* 42 U.S.C. § 6930 (1982 & Supp. IV 1986) and WIS. ADMIN. CODE § NR 181.06 (1985), respectively.

172. United States Environmental Protection Agency, Office of Solid Waste and Emergency Response, Does Your Business Produce Hazardous Wastes? (June 1985). (The DNR administers the federal hazardous waste program in Wisconsin. *See infra* note 179.).

> illness or which may pose a substantial present or potential hazard to human health or the environment. . . . [173]

For purposes of this discussion, "hazardous substances" includes those substances listed above with the exclusion of hazardous wastes, pesticides and petroleum and other substances stored underground, since the state and/or federal government currently regulate at least some aspects of the storage and handling of these substances.[174]

The State of Wisconsin and the federal government both regulate aspects of hazardous substance use including community right-to-know and emergency planning,[175] labeling,[176] transportation[177] and employees' "right to know" of hazardous substances in the workplace.[178] However, the emphasis of both state and federal regulatory efforts in this subject area has been on the regulation of hazardous wastes.[179] Although the 1984 amendments to

173. WIS. STAT. § 144.01(4m) (1987).

174. *See* discussion above as well as parts IV-B-2 (pesticides) and IV-B-1 (underground flammable and combustible liquids).

175. *See supra* note 171.

176. Wisconsin regulates hazardous substance labeling under the Hazardous Substance Act, WIS. STAT. § 100.37 (1985). The federal government also regulates labeling under, *e.g.*, the Fair Packaging and Labeling Act (15 U.S.C. § 1451-1461 (1982 & Supp. IV 1986)).

177. Having adopted federal transportation regulations contained in 49 U.S.C. §§ 1801-1812 (1982 & Supp. IV 1986) (Hazardous Materials Transportation) and C.F.R. §§ 171-177 (1985), the Wisconsin State Patrol now regulates hazardous materials transportation under state law (rather than assisting the federal government in the administration of federal law). *See* WIS. ADMIN. CODE ch. TRANS 326 (1985).

178. Both Wisconsin and the federal government regulate employees' right to know; *see* WIS. STAT. §§ 101.58-101.599 (1987) and 29 U.S.C. § 669 (Supp. IV 1986), respectively. Amendments to federal law provide for federal preemption of state and local right to know laws with respect to employees working in the *manufacturing* sector; states may assume primacy in regulation of manufacturers if the state's plan is approved by the Occupational Safety and Health Administration (OSHA) Agency. SENECZKO, HAZARD COMMUNICATION AND THE "RIGHT TO KNOW": A NEW ERA OF WORKPLACE SAFETY IS BORN 34 (March 1986) (available from the Wisconsin Association of Manufacturers and Commerce, 501 E. Washington Ave., Madison, WI 53705). "Nonmanufacturing sector employers must comply with all of the provisions of the Wisconsin law (at least until OSHA expands the current scope of the HCS)" [Hazard Communication Standard]. *Id.* at 39.

Note that regulation of employees' right to know illustrates that although the federal government may ultimately decide to preempt all or part of the regulation of an activity, facility, etc., state and/or local governments can often provide critical interim regulations and/or administer federal programs.

179. Wisconsin regulates numerous aspects of hazardous waste storage, handling, transportation, treatment, disposal, etc. *See, e.g.*, WIS. STAT. §§ 144.60-144.74 (1987) (Hazardous Waste Management Act) and WIS. ADMIN. CODE ch. NR 181 (1985) (Hazardous Waste Management). These regulations are based upon RCRA. *See supra* note 10. On January 31, 1986, the Wisconsin DNR received final authorization from EPA to assume

RCRA provided for regulation of the underground storage of some hazardous substances,[180] the aboveground storage and handling of most hazardous substances remains virtually unregulated by either the state[181] or federal government.[182]

A court is unlikely to find that the State of Wisconsin has preempted the proposed city ordinance. Application of the first part of the Wisconsin four-part preemption test reveals that the legislature has not expressly withdrawn or limited the power of municipalities to act in this subject area. Such an exercise of a city's statutory home rule power similarly does not logically conflict with state law since statutes (and administrative rules as implemented by the DNR) do not deal with routine hazardous substance storage and handling.[183]

Lastly, the ordinance does not violate either the spirit or purpose of state law since there is little evidence of intent on the part

primacy in the administration of RCRA as it applies to hazardous wastes; now, state generators, storers, treaters, etc. of hazardous waste need only comply with state regulations.

180. *See supra* note 94.

181. Wisconsin statutes do provide that the DNR may issue orders to prevent hazardous substance discharges "if the department finds that existing control measures are inadequate to prevent discharges." WIS. STAT. § 144.76(4)(a) (1987). (*See also* WIS. STAT. § 144.025(2)(d) (1987) which grants to the DNR general authority to control pollution of the waters of the state.) Section 144.76(4)(a) could potentially be used by the DNR to establish regulations for hazardous substance handling and storage. As of early 1986, however, it had been used only infrequently to regulate individuals with a history of hazardous substance spill violations. The DNR does anticipate promulgation of revised rules (WIS. ADMIN. CODE ch. NR 158) to implement WIS. STAT. § 144.76(4)(a) within the next two to three years; these may contain regulations on hazardous substance storage and handling. Telephone interview with Linda Wymore, Wis. DNR, Feb. 10, 1986. The DNR intends to emphasize scrutiny of unregulated practices in the coming years through on-site evaluations, technical assistance and enforcement. Letter from Marcia Penner (Wis. DNR) to Douglas Yanggen (September 17, 1986).

182. Significantly, note that the 1984 amendments to RCRA also provide, *inter alia*, for the establishment of a small scale hazardous waste generator program. This program regulates those who generate between 100 and 1000 kg. of waste per month (and never accumulate more than this amount at any time). It is estimated that these new regulations will add 100,000 hazardous waste generators to the 14,000 regulated prior to the amendments. Harrington, *The 1984 Amendments to the Resource Conservation and Recovery Act*, WIS. BAR BULLETIN 17 (June 1985). The Wisconsin DNR anticipates revision of Wis. Admin. Code ch. NR 181 in the near future to regulate these small scale generators. Letter from Linda Wymore (Wis. DNR) to Leslie Amrhein (September 3, 1986).

The need for local governments to regulate the storage and handling of small amounts of hazardous waste is lessened due to the existence of new federal regulations. However, despite the significant potential for human health and environmental damage posed by the improper storage and handling of hazardous *substances*, this aspect of use has not been comprehensively regulated by either the state or federal government.

183. *See supra* notes 179-181 and accompanying text.

of the legislature to establish a "complex and comprehensive statutory structure dealing with all aspects"[184] of hazardous substance management. The legislature has not enacted a comprehensive[185] program which regulates hazardous substance storage and handling and the inspection of facilities which use hazardous substances.

Wisconsin case law demonstrates that, in general, where the state has not regulated a specific aspect of an activity, cities and villages may often enact reasonable ordinances regulating that aspect[186] pursuant to statutory home rule power. In the case of *Johnston v. City of Sheboygan*,[187] for example, the Wisconsin Supreme Court ruled that a city ordinance[188] enacted pursuant to home rule authority[189] was valid despite the existence of statutes which dealt with the same general subject.[190] The court found that the statute and the ordinance did not conflict since they regulated two different operations of a bakery,[191] recognizing "that

184. Anchor Savings and Loan Ass'n v. Equal Opportunities Comm'n, 120 Wis. 2d 391, 397, 355 N.W.2d 234, 238 (1984).

185. Although Wisconsin regulates some aspects of hazardous substance handling and storage (*see supra* note 181), such regulation is by no means "comprehensive."

186. *See also* 5 McQUILLIN, *supra* note 68, at § 15.20.

187. 30 Wis. 2d 179, 140 N.W.2d 247 (1966).

188. Sheboygan, Wis. General Ordinance 23-63-64 creating § 13.14 of the Sheboygan Municipal Code provided in part:

> License Required: No person, firm, corporation or agent thereof shall sell, offer for sale, exchange or deliver in the City of Sheboygan, or with the intent to do so, have in his possession, food or food products without first having procured a license to do so from the Board of Health of the City of Sheboygan. The License fee shall be $5.00 for each establishment . . . .

Johnston, 30 Wis. 2d at 182, 140 N.W.2d at 249.

189. The court found that the City of Sheboygan had authority to enact the ordinance under *both* constitutional and statutory home rule powers (*Id.* at 185-186, 140 N.W.2d at 251). It appears, however, that the ordinance was enacted pursuant to statutory home rule power since it was a general ordinance of the city; if the ordinance had been enacted pursuant to constitutional authority, it would necessarily have been a charter ordinance as required by WIS. STAT. § 66.01 (*see supra* note 65).

190. WIS. STAT. §§ 97.10 and 97.12 (1965). Section 97.10 provided, in part:

> Bakery License. No person shall operate a bakery without a license from the department as provided in S.97.12. The term 'bakery' means any place where bread, crackers, pies, macaroni, spaghetti, or any other food product of which flour or meal is the principal ingredient are baked, cooked or dried, or prepared or mixed for baking, cooking or drying, for sale as food; provided, that the term 'bakery' shall not include a restaurant, hotel or other place wherein such products are prepared and sold exclusively with meals or lunches.

191. *Johnston*, 30 Wis. 2d at 184, 140 N.W.2d at 250. *See also* Dyer v. City of Beloit, 250 Wis. 613, 27 N.W.2d 733 (1947)(ordinance validated where the state regulated the use of

the distinction that we make here is a narrow one."[192] The court found that the city ordinance did not deal with the specific aspect of bakery operation covered by state law; it distinguished the state and local regulations on the ground that the state statutes dealt with the "production activities of a bakery, while the ordinance related to the *sale* of food products, including baked goods."[193] The ordinance was therefore valid.

Although the cases dealt with activities other than the regulation of hazardous substances, it is reasonable to assume that the proposed city ordinance regulating hazardous substances would similarly be upheld. The state has not expressly withdrawn local regulatory power in this area. Nor has the state enacted a comprehensive statutory scheme regulating hazardous substance handling or storage, or manifested an intent to preempt all local regulation of these substances. The proposed ordinance is clearly authorized by Wisconsin Statute section 62.11(5)[194] and it would, therefore, likely be validated as not preempted by state law.

4. Zoning to Protect Municipal Well Recharge Areas

Previous subsections have discussed hypothetical local ordinances designed to supplement state regulation of various potential pollution sources. These ordinances represented three categories: (1) regulating an aspect of an activity not comprehensively regulated by the state,[195] (2) administering state regulations more stringently than the state[196] and (3) prohibiting an

milk in manufacturing but left to municipalities the regulation of milk for direct human consumption).

192. *Id.* at 184, 140 N.W.2d at 250 (citations omitted).

193. *Id. See also, e.g.*, City of Janesville v. Garthwaite, 83 Wis. 2d 866, 266 N.W.2d 418 (1978) and Steel v. Bach, 124 Wis. 2d 250, 369 N.W.2d 174 (Wis. Ct. App. 1985) in which Wisconsin courts held that local ordinances which regulated aspects of traffic control not regulated by the state met the statutory requirement of consistency with state statutes (*see* WIS. STAT. § 349.03(1)(a) (1987)). The courts in these cases also found that the ordinances were valid because city regulation of traffic is expressly authorized (as required by WIS. STAT. § 349.03(1)(b) (1987)) by the home rule statute (WIS. STAT. § 62.11(5); *see also* § 61.34(1)). Although there is no parallel express authorization for the local regulation of hazardous substances *per se*, Wisconsin courts have repeatedly held that city and village powers need not be enumerated. *See supra* note 66.

194. The ordinance is designed to protect public health, safety and welfare, objectives expressly authorized by WIS. STAT. §§ 62.11(5) and 61.34(1) (1987).

195. *See supra* part IV-B-3 (hazardous substances).

196. *See supra* part IV-B-1 (underground flammable and combustible liquid storage tanks).

activity partially regulated by the state.[197] Zoning to protect municipal wells is a different form of local ordinance.[198]

In the area of land use controls, local government plays the lead role rather than a supplementary role. In most states, regulating general land use is primarily a local rather than a state function.[199] For example, the zoning power delegated by the Wisconsin legislature to units of local government including counties, towns, cities and villages has been broadly construed by Wisconsin courts to allow reasonable control of land use for the general purposes of promoting health, safety and general welfare.[200]

The Wisconsin groundwater law amended local zoning enabling statutes to include as a purpose of all zoning authorities "to encourage the protection of groundwater resources." Despite this explicit grant of power to all local governments, situations may arise in which there is apparent incompatibility between state statutes or administrative rules and local zoning ordinances designed to protect groundwater quality. The question under these circumstances is whether the local government has the power to regulate a particular activity under its zoning authority in light of the state's regulation of the same subject matter.[201]

197. *See supra* part IV-B-2 (pesticides).

198. *See* WIS. ADMIN. CODE § NR 111.03(2) (1985). As used in this article, "zoning to protect municipal wells" means the exercise of the zoning authority by general purpose governments under Wisconsin statutes (*see supra* note 39) to regulate land use in order to protect water wells serving a community water system.

199. While most states continue to regard zoning as primarily a local concern, a number of states are becoming involved in controlling land use. 3 R. ANDERSON, AMERICAN LAW OF ZONING §§ 2.01-2.03 (1986). The State of Wisconsin, *e.g.*, requires local government to regulate shorelands (WIS. STAT. § 59.971 (1987)), floodplains (WIS. STAT. § 87.30 (1987)) and wetlands within shoreland areas (WIS. STAT. §§ 61.35 and 62.231 (1987)). Statutes also provide that local zoning ordinances may be overridden when siting solid and hazardous waste facilities.

200. *See generally*, *e.g.*, State *ex rel.* B'nai B'rith Foundation v. Walworth County Bd. of Adjustment, 59 Wis. 2d 296, 208 N.W.2d 113 (1973). The Wisconsin Supreme Court has also held that "[t]his court indulges every presumption and will sustain the [zoning] law if at all possible" (Quinn v. Town of Dodgeville, 122 Wis. 2d 570, 364 N.W.2d 149 (1985)).

201. This discussion assumes that the state has not formulated a state wellhead protection plan under federal statutes (*see* discussion *infra*, part VII-B-4). If the state does adopt such a plan, federal statutes require states to specify, *inter alia*, the duties of the state and local governments and public water authorities in developing and implementing the program. If statutes are adopted specifying the respective regulatory roles, a conflict such as the one discussed within this hypothetical would be less likely to occur. Until the state of Wisconsin develops a wellhead protection or similar program, or further clarifies the state/local regulatory role, however, the issues raised within this discussion remain of importance.

Imagine, for example, that one of two existing municipal wells within a town is found to be contaminated. It is determined that the source of contamination is a nearby industry which located in the vicinity of the well five years after the well was installed. A review of the town zoning ordinance reveals that there are no special provisions to control the location of potentially contaminating land uses near existing or planned municipal wells. In order to protect its existing uncontaminated well and those wells which will be constructed in the future, the municipality decides to strictly regulate land uses that could pollute its drinking water supply. The town amends its zoning ordinance to create an overlay zoning district[202] which imposes additional and more stringent requirements beyond that of the underlying zoning district. Within these "wellhead protection districts,"[203] the location of potentially polluting land uses is controlled.[204]

More specifically, the town identifies two types of wellhead protection overlay districts within the ordinance: Zone A corresponds to the wells' "cones of depression"[205] and adjacent alluvial de-

202. For definitions and a discussion of the statutory and case law authority of local governments in Wisconsin to employ overlay zoning techniques, conditional uses and other land use controls, *see infra* part V-A.

203. Wellhead protection areas identify the land areas contributing groundwater to a well. The outer limits of the area may include the entire upgradient portion of the aquifer recharge area in which groundwater moves toward the well or a smaller portion of this area may be chosen for management purposes. The extent of this area may be expressed in terms of time or distance, based on the concept that pollution tends to be attenuated the longer the time and distance traveled.

204. Communities which have enacted or propose to enact similar zoning ordinances designed to protect municipal well supplies are discussed in, *e.g.*, CRYSTAL, MUNICIPAL GROUND-WATER QUALITY MANAGEMENT THROUGH LAND USE REGULATION AND ZONING, 1983 NAT'L WATER WELL ASS'C. EASTERN REGIONAL CONFERENCE ON GROUND-WATER MANAGEMENT 432 (1983); RURAL NEW ENGLAND, INC., AQUIFER PROTECTION ZONING (available from Rural New England, Inc., P.O. Box 764, Wakefield, R.I. 02880); URISH, OZBILGIN AND BOBROWSKI, GROUND WATER POLLUTION PROTECTION BY ZONING, *id.* at 393. GROUNDWATER PROTECTION PRINCIPLES AND ALTERNATIVES FOR ROCK COUNTY, WISCONSIN (A. Zaporozec ed., Sept. 1985)(available from Wisconsin Geological and Natural History Survey, 3817 Mineral Point Rd., Madison, Wis.).

205. The "cone of depression"

> includes that portion of the catchment area in which groundwater elevations are lowered by pumping. Any well, when pumped, creates a cone of depression. When pumping is started, the original water table in the vicinity of a pumped well drops. The surface projection of the cone of depression is circular or oval depending on the slope of the water table. The size and shape of each cone varies depending upon the pumping rate, duration of pumping, slope of the water table, and recharge within the zone of influence of the well. Pollutants entering the ground above the cone of depression can move rapidly to the well and thus pose the greatest threat. Therefore, this area should always be protected against undesirable uses.

posits; Zone B constitutes the remainder of the upgradient well recharge area.[206] In Zone A, all business and industrial uses are prohibited. In Zone B, business and industrial uses are made conditional, meaning that after a public hearing is held, the zoning agency must consider the effects of these proposed business and industrial uses at the proposed site. The agency may then condition development permission upon requirements designed to prevent groundwater contamination. Homes are required to be connected to a public sewer system in both zones.

Chapter 162 of the Wisconsin statutes is the primary statute regulating the use of groundwater for human consumption; it provides in part that the state DNR:

> shall have general supervision and control of all methods of obtaining groundwater for human consumption including sanitary conditions surrounding the same, the construction or reconstruction of wells and generally to prescribe, amend, modify or repeal any rule or regulation theretofore prescribed and shall do and perform any act deemed necessary for the safeguarding of public health.[207]

The DNR has promulgated several administrative rules dealing with various aspects of both private and public well construction and use.[208]

Application of the first prong of the Wisconsin preemption test to the town zoning ordinance requires an examination of whether the legislature has expressly withdrawn the power of towns to act in this subject area. Wisconsin statutes provide that "[n]o city,

GROUNDWATER PROTECTION PRINCIPLES AND ALTERNATIVES FOR ROCK COUNTY, WISCONSIN, *supra* note 204, at 57.

206. The upgradient recharge area (catchment area) may be defined as the area surrounding the well in which the flow of groundwater is toward the well, *i.e.*, the entire area contributing groundwater to a well. *Id.*

207. WIS. STAT. § 162.01(1) (1987). WIS. STAT. § 162.03(1) (1987) also provides in part that the DNR "may exercise such powers as are reasonably necessary to carry out and enforce the provisions of this chapter." Also note WIS. STAT. § 144.04 (1987) which provides for DNR approval of plans for proposed sewer systems, plants or extensions thereof. The DHSS, Public Service Commission (PSC) (*see* WIS. STAT. § 167.27 and ch. 196 (1987), respectively) and other state agencies also regulate various aspects of water utility operation.

208. *See, e.g.*, WIS. ADMIN. CODE ch. NR 108 (1987) (General Requirements for Community Water Systems, Sewerage Systems and Industrial Wastewater Treatment Facilities); WIS. ADMIN. CODE ch. NR 109 (1985) (Safe Drinking Water); WIS. ADMIN. CODE ch. NR 111 (1985) (Requirements for the Operation and Design of Community Water Systems); WIS. ADMIN. CODE ch. NR 112 (1985) (currently undergoing revision)(Well Construction and Pump Installation); and WIS. ADMIN. CODE ch. NR 145 (1987) (County Administration of Chapter NR 112, the Private Well Code).

village or town may adopt or enforce an ordinance regulating matters covered by Chapter 162 or by department rules under Chapter 162."[209] At first glance, this statute, along with the section of Chapter 162 quoted above, might appear to indicate preemption of the town zoning ordinance. However, it is important to note that the statutes do not expressly withdraw the local zoning power. It may be argued that in terms of state preemption, Wisconsin case law and statutes afford a special status to local government zoning where there is no express withdrawal of local zoning authority.

The case of *Nelson v. Department of Natural Resources*[210] illustrates this point. Although of somewhat limited precedential value,[211] *Nelson* is cited here because the fundamental reasoning the Wisconsin Court of Appeals used to characterize the relationship between the local zoning power and state regulations is sound and is applicable to determining the appropriate relationship between state and local powers to protect municipal wells. Briefly, the court in *Nelson* found that despite the state's enactment of statutes giving the DNR broad regulatory power over activities relating to solid waste disposal, the DNR did not have the authority to preempt the local zoning power absent express legislative authority to do so.

The controversy in the *Nelson* case arose when Columbia County denied a city-landowner's application for a conditional use permit to use agriculturally-zoned land as a public dump. Despite the county denial, the DNR issued a solid waste permit for the site. Numerous citizens appealed from a county circuit court opinion upholding the DNR's action. The court of appeals ruled that statutes[212] gave the DNR broad powers to regulate solid waste disposal and the authority to supercede various local approvals, permits, and requirements.[213] Without express authority to the contrary, however, the DNR's power to override local per-

209. WIS. STAT. § 59.067(5) (1987).

210. 96 Wis. 2d 730, 292 N.W.2d 655 (1980), *aff'g* 88 Wis. 2d 1, 276 N.W.2d 302 (Wis. Ct. App. 1979).

211. The precedential value of the *Nelson* case is limited because although the Wisconsin Supreme Court summarily affirmed the court of appeals' decision, it limited its holding to the proper construction of the 1975 statutes, refusing to extend it to the 1977 statutory amendments. WIS. STAT. § 144.445 (1975) was amended by ch. 377, Laws of 1977. *Nelson* at 731, 292 N.W.2d at 656 (1980).

212. WIS. STAT. §§ 144.30-144.46 (1975).

213. *Nelson*, 88 Wis. 2d at 8-9, 276 N.W.2d at 306.

mits was limited to those permits referred to in Wisconsin Statute sections 144.435(2) and 144.44(2),[214] not to zoning ordinances enacted under entirely different statutory authority.[215] The court found that although the legislature gave the DNR

> central and preemptive power to license and supervise maintenance and operation of specific facilities, and to promulgate uniform general standards for location of sites and general rules of regulation, it left with the county the traditional powers of planning and developing community lands according to the long range goals of the local community. These powers do not inherently conflict.[216]

The court of appeals also examined whether the power to override local zoning ordinances was implicit within the provisions of Wisconsin Statute Chapter 144. It found that despite the statewide importance of solid waste facility siting and the major role the DNR plays in the siting process, the legislature intended to have local zoning considerations remain of "major consequence"[217] in facility siting. It noted that the legislature expressly provided that county zoning powers "shall be liberally construed in favor of the county exercising them."[218] The court found that:

> [t]he power of the DNR to set minimum standards generally applicable to the location of sites, and to license specific facilities which meet those standards, *is fundamentally different from the power of a county to zone its land* set forth in section 59.97(1), Stats . . . In exercising its zoning authority under this section, the county is required to consider a much broader range of local concerns than those addressed in chapter 144, Stats. Zoning officials charged with planning the long range growth and development of their own communities are arguably, if not presumably, in a better position than a state agency to weigh the competing factors of those concerns and evaluate the present and future impact of locating a solid waste disposal facility within a particular region of the community.[219]

214. WIS. STAT. §§ 144.435(2) and 144.44(2) (1975).

215. *Nelson*, 88 Wis. 2d at 9-10, 276 N.W.2d at 306.

216. *Id.* at 15, 276 N.W.2d at 309, *citing* La Crosse Rendering Works v. City of La Crosse, 231 Wis. 438, 285 N.W. 393 (1939); Fox v. Racine, 225 Wis. 542, 275 N.W. 513 (1937). *Cf.* Jefferson County v. Timmel, 261 Wis. 39, 51 N.W.2d 518 (1952) (fact that the state had the power to restrict the use of land along a highway did not preclude county from doing so by proper zoning ordinance in the absence of the state exercising such power so as to conflict with the county zoning ordinance). The *Jefferson* court also cited the *Fox* case.

217. *Nelson*, 88 Wis. 2d at 12, 276 N.W.2d at 307.

218. *Id.* at 14, 276 N.W.2d at 308.

219. *Id.* at 13-14, 276 N.W.2d at 308 (emphasis added).

The court concluded that unless and until the legislature provided the DNR with "the power to veto such local zoning determinations . . . such zoning policies are subject to review by the courts, and not by the DNR"[220] and the local zoning ordinance was therefore valid.

The similarities between the *Nelson* case and the hypothetical zoning ordinance suggest that a court applying the same logic would not find the zoning ordinance preempted by the state. Significantly, the legislature gave to the DNR extensive powers to regulate both solid waste and groundwater quality but in neither instance did the state explicitly withdraw the power of local governments to zone, a power "fundamentally different"[221] from the power of the state to license specific facilities.

Note that since the state and local regulations involved in *Nelson* were apparently promulgated with different objectives in mind,[222] the court did not reach the issue of whether the state preempts local zoning ordinances enacted for the same purpose as state regulations. This *is* an issue in the preemption analysis of the hypothetical town zoning ordinance, however, since both the ordinance and state regulations were promulgated for the purpose of protecting groundwater quality. Examination of the groundwater law and related statutes and rules indicates that the legislature did not intend to preempt all local zoning regulations enacted to protect groundwater quality. On the contrary, although local governments possessed the authority to zone for this purpose prior to the enactment of the groundwater law,[223] the legislature expressly provided that local governments could zone with this objective in mind.[224] Inclusion of this provision was arguably intended to address the preemption question[225] and to indicate

220. *Id.* at 16, 276 N.W.2d at 309.

221. *Id.* at 13-14, 276 N.W. 2d at 308.

222. The state regulations dealt primarily with construction standards while the local zoning ordinance was concerned primarily with maintaining land use compatibility between the proposed landfill and surrounding properties. *See also* Highway 100 Auto Wreckers v. City of West Allis, 6 Wis. 2d 637, 96 N.W.2d 85 (1958).

223. WIS. STAT. § 60.61 (1) (1981).

224. *See supra* note 39. Significantly, this is the same legislative act which created Wis. Stat. § 59.067(5) (providing that no city, village or town may adopt ordinances regulating matters covered by WIS. STAT. ch. 162 (*see supra* text accompanying note 209)).

225. By expressly providing that local governments may zone to encourage groundwater protection, the legislature implicitly addressed the third and fourth tests of the Wisconsin preemption test; it effectively declared that such local ordinances do not defeat the purpose or spirit of state legislation designed to protect groundwater.

that local governments clearly had the authority to zone for this purpose despite the extensive authority delegated to the DNR to regulate for groundwater protection, including municipal well regulation.

This conclusion is supported by the fact that there is no logical conflict or incompatibility between state regulations on municipal wells and the town zoning ordinance; they can coexist.[226] State administrative rules require, *inter alia*, that wells be located on a lot with minimum dimensions of 100′ × 100′[227] and that plans for new wells include a discussion of existing and proposed facilities that may have an impact on groundwater quality.[228] They also specify that once a well is in place, minimum separating distances must be maintained between the well and various types of proposed activities.[229] The state's evaluation of a proposed well site and of the proposed construction at times results in denial of the site or required changes in well construction.[230] The authority of the state to protect municipal wells from contamination is limited, however, in that the state cannot require the municipality to own or otherwise control the cone of depression or the broader well recharge area, nor can it prevent all new potentially contaminating uses from locating within these areas.[231]

The hypothetical town zoning ordinance does not conflict with state regulations—it simply complements existing state statutes and rules. The ordinance regulates the location of potentially contaminating land use activity near a planned or existing well based on extensive consideration of detailed local hydrogeologic and other information.[232] In addition, the ordinance reflects

226. *See supra* note 78 and accompanying text.

227. WIS. ADMIN. CODE § NR 111.31(4)(a) (1985).

228. *Id.* at § NR 111.11(1)(b).

229. *See, e.g.*, DRAFT WIS. ADMIN. CODE § NR 112.09(5) (Feb. 7, 1986). WIS. STAT. § 62.23(7)(g) (1987) may provide cities and villages with the authority to require, through zoning, greater minimum separating distances than are required by applicable state administrative rules or statutes.

230. Letter from Robert Krill (Wis. DNR) to Douglas Yanggen (September 15, 1986).

231. *Id.* The location of many types of hazardous substances and other sources of potential pollution in proximity to municipal wells, for example, are not regulated by the state. For some activities, minimum separating distances may be specified but unless the DNR requires a permit for an activity, there is typically no mechanism to enforce the standards.

232. In drafting its well protection ordinance, the town of Rib Mountain, Wisconsin, for example, relied on studies that not only calculated the town wells' cones of depression but also identified the recharge area surrounding the wells and the areas within the recharge area particularly vulnerable to contamination, details not typically considered by the state.

traditional local land use concerns not considered by the state such as compatibility of land uses and provision of open space. The town zoning authority is exercised on a continuing basis to provide long-term protection of the well. Thus, although the state regulations and hypothetical town zoning ordinance were both enacted (at least in part) for the purpose of protecting groundwater quality, the two provisions can coexist and do not inherently conflict. The town ordinance simply reflects local concerns which are, for the most part, not controlled by the state administrative agency.

Thus, the general language of Wisconsin Statute section 59.067(5) should not be read to preempt local zoning authority in areas near municipal wells.[233] Wisconsin case law holds that local zoning powers may be exercised for broad land use purposes unless the power is expressly withdrawn. The legislature did not expressly withdraw the local zoning authority to protect groundwater. Rather, it explicitly provided that all local governments could zone with this objective in mind, despite the existence of state rules and statutes promulgated for the same purpose. In

(Note that the descriptions of the hypothetical town zoning ordinance and the physical setting within the town are modeled after the ordinance and the physical characteristics of Rib Mountain.) The wells in Rib Mountain are particularly susceptible to contamination because of the local hydrogeology and land use. The soils in the vicinity of the wells are thin and the aquifer very permeable; the relatively small size of the drainage basin is another local factor influencing the type of protection needed. Because the wells are located down gradient from residences and industrial and commercial establishments, contaminants produced by these land uses flow toward the well. BORN, YANGGEN, CZECHOLINSKI, TIERNEY AND HENNINGS, AN ANALYSIS AND TEST APPLICATIONS OF THE WELLHEAD PROTECTION DISTRICT CONCEPT IN WISCONSIN (1987) [*hereinafter* WELLHEAD PROTECTION IN WISCONSIN].

Note that the Federal Wellhead Protection Program (*see infra* note 510 and accompanying text) may provide funds to states to develop such information for wellhead protection areas.

233. Rather than preempt local regulation of *all* matters addressed in WIS. STAT. ch. 162, WIS. STAT. § 59.067(5) was apparently intended to address the fact that only counties could adopt private well codes. This is evidenced by the inclusion of § 59.067(5) only within ch. 59 and the administrative rule implementing that section (Wis. Admin. Rule § NR 145.03 (1987)), and its exclusion from ch. 162 itself. The Wisconsin Supreme Court has found that if a statute contains a given provision, the omission of such provision from a similar statute concerning a related subject is significant in showing a different intention existed. Kimberly-Clark Corp. v. Public Service Comm'n of Wis., 110 Wis. 2d 455, 329 N.W.2d 143 (1983). If the legislature had intended to preempt all local regulation of matters relating to public and private wells, it is logical to assume that it would have included this provision in WIS. STAT. ch. 162 (1983). Even if read only to apply to county well codes, § 59.067(5) results in confusion since cities, villages and towns are *required* to adopt well abandonment ordinances. WIS. ADMIN. CODE § NR 111.16(4) (1985).

addition, the town ordinance does not conflict with state statutes since the ordinance reflects traditional local land use concerns not controlled by the state.

Note also that the hypothetical town zoning ordinance may be distinguished from the ordinances involved in the case of *City of Fond du Lac v. Town of Empire*.[234] In that case, the Wisconsin Supreme Court invalidated several town ordinances designed in part to restrict the construction of a proposed city well in order to prevent depletion of groundwater supplies. The case involved three ordinances enacted by a town with village powers.[235] Two of the ordinances prohibited the drilling of a well with a casing larger than six inches in diameter and the commercial sale or use of water other than on the premises without town approval; the third ordinance was designated as an "interim zoning ordinance" and prohibited certain uses of property, among which were commercial wells.[236] The city of Fond du Lac contested the validity of these ordinances; the court invalidated them on the basis that they exceeded the town's regulatory authority, conflicted with the common law,[237] and conflicted with a statute which authorized municipalities to operate water supply facilities outside their corporate limits.[238]

The hypothetical town zoning ordinance may be distinguished from the *Fond du Lac* case because the court found that the town of Empire was not specifically authorized to regulate to protect

234. 273 Wis. 333, 77 N.W.2d 699 (1956).

235. *Id.* By discussing home rule powers in this case, the court implied that towns with village powers possess expanded regulatory authority similar to that of cities and villages (*see* discussion beginning *supra*, part III-B). Note, however, that the court confused the application of constitutional and statutory home rule powers. Where a matter is of both statewide and local concern, as the court indicated that groundwater use is (*Fond du Lac*, 273 Wis. at 338-9, 77 N.W.2d at 701-02 (1956)), local governments may enact ordinances to regulate these matters pursuant to statutory home rule authority (assuming no state preemption, etc.). The *Fond du Lac* court refers to both types of home rule power, however, and mistakenly applied the paramount interest test (*Id.* at 337-39, 77 N.W.2d at 701-02) as if the ordinances had been enacted pursuant to constitutional home rule.

236. *Id.* at 335, 77 N.W.2d at 700.

237. The court found that the ordinances conflicted with the holding in the case of Huber v. Merkel, 117 Wis. 355, 94 N.W. 354 (1903). The court in the *Huber* case found that a landowner could use groundwater supplies to the detriment of his neighbor, even if he was motivated by malicious motives. *Huber* was, however, expressly overruled in State v. Michels Pipeline Construction, 63 Wis. 2d 278, 217 N.W.2d 339 (1974), which adopted the Restatement (Second) of Torts rule on liability for use of groundwater. (Restatement (Second) of Torts, § 858A (Tentative Draft No. 17, April 26, 1971)). *Michels Pipeline* at 301-303A, 217 N.W.2d at 351 (1974).

238. WIS. STAT. § 66.066(1a) (1955).

groundwater; all local governments are now authorized to zone for this purpose.[239] In addition, the hypothetical ordinance may be factually distinguished from the *Fond du Lac* case; the latter involved water quantity regulation and conflicted with case law and statutes while the former involves water quality regulation and conflicts neither with the common law nor with state statutes. A fundamental premise of the Wisconsin groundwater law is that there is no unlimited right to pollute groundwater and the hypothetical town zoning ordinance is in accord with that principle.

It is unlikely that the town zoning ordinance designed to protect well recharge areas would be preempted by state law in states which, like Wisconsin, allow a special status to local zoning where there is no express legislative withdrawal of that power. The analysis demonstrates the need for legislative clarification of the local regulatory role in several program areas, however.

V. ZONING AND SUBDIVISION CONTROLS TO PROTECT GROUNDWATER QUALITY

Zoning and subdivision controls which may prohibit uses that have the potential to cause serious contamination, permit other uses only under certain conditions, limit the density of development, and regulate the locations within which the various uses are permitted, play a potentially valuable role in local government protection of groundwater quality. Zoning and subdivision controls such as conventional zoning, flexible zoning devices, subdivision regulations and extraterritorial controls are all measures which can require that new land uses are undertaken in a way to protect groundwater quality.

When the Wisconsin legislature authorized zoning to "encourage the protection of groundwater resources," it acknowledged the important relationship between land use, typically controlled by local zoning, and groundwater quality, typically protected by state regulations. Local land use controls can address important aspects of groundwater quality which are not adequately covered by state regulations. Substances vary widely in terms of their potential to contaminate groundwater.[240] There is also wide variability in terms of the susceptibility of various lands

239. *See supra* note 39.

240. Substances range from the relatively innocuous to those listed as hazardous by the federal and state governments. *See, e.g.*, WIS. ADMIN. CODE ch. NR 181 (1985) (Hazardous Waste Management).

to contamination. Some areas are particularly susceptible to pollution because the soils, subsoils or bedrock permit rapid movement of contaminants to groundwater.[241] In other areas where soil materials are deeper and more finely textured, potentially contaminating substances are in contact longer with the materials through which they move and thus natural attenuation may occur. The assimilative capacity of the soil also depends upon the loading rates of the contaminants and the density of the sources, for example, the number of private waste systems per acre.[242] Another factor to be considered is the population at risk, because contaminants in close proximity to a municipal well may move quickly into the drinking water where they could threaten the health of large numbers of people.

A. *Zoning Techniques*

Zoning first developed in an urban context where its traditional purposes were to prevent conflicts between incompatible land uses and to limit overcrowding.[243] In subsequent years, zoning has taken on an environmental focus through the regulation of "sensitive" lands such as shorelands, floodplains, wetlands and most recently, groundwater protection areas.

Zoning provisions establish use districts in which specific uses are permitted as a matter of right, while other uses are conditionally permitted or are prohibited. Zoning can have flexibility in controlling land use by, *e.g.*, designating conditional uses (special exceptions) to help decide whether a particular use is appropriate for a specific site and adding overlay zoning to a conventional zoning ordinance.

Zoning authority may also be used to enact density provisions which govern the dimensions of lots and the dimensions of structures, and the location of structures on the lot. The basic purposes of these dimensional provisions are to control density and provide open space. Regulating the density of development indi-

241. In Wisconsin these are primarily areas of thin soil, coarse and highly permeable soils, creviced dolomite and fractured granite bedrock, a high water table or some combination of these features.

242. Analytical modeling procedures have been developed which, for example, assess the impact of loading rates from various development densities and their impacts on aquifer-wide nitrate levels. *See, e.g.*, Crystal and Heeley, *Comprehensive Aquifer Evaluation and Land Use Planning for Aquifer Restoration and Protection in Acton, Massachusetts*, Third National Symposium on Aquifer Restoration, National Water Well Association (1983).

243. D. MANDELKER, LAND USE LAW, § 1.3 at 3 (1982 and Supp. 1986).

rectly controls the amount of potential pollutants reaching the groundwater; maintaining natural, vegetated open space can improve the amount and quality of infiltration into the groundwater.

Conditional uses are devices that allow individualized treatment of certain uses according to the terms spelled out in the zoning ordinance. Conditional uses, which are referred to as "special exception uses" in many states' zoning enabling laws, are expressly authorized for use by Wisconsin counties,[244] towns[245] and cities and villages.[246] Permitted uses are automatically allowed if they meet the dimensional standards of the zoning district. Conditional uses, however, are not allowed as a matter of right because they may create special problems or hazards. Instead, a public hearing is held[247] and a determination can be made concerning, for example: (1) the specific characteristics of the proposed use, *e.g.*; type of materials utilized or type of wastes generated; (2) important features of the proposed site, *e.g.*, soil and subsoil conditions and aquifer characteristics; (3) the possible effects of permitting that particular use at that specific location, *e.g.*, the likelihood of groundwater contamination; and (4) whether adverse effects can be mitigated or eliminated by attaching appropriate conditions to the location, design or operation of the use. This information can then be used to set specific requirements for the proposed use at the proposed location.

Overlay zoning is another device that can add both flexibility and precision to zoning ordinances. An overlay zone is a mapped district that sets additional requirements over and above those in the underlying zoning district. Overlay zoning is well suited to protect environmentally sensitive areas which have a geographic location that does not coincide with the underlying zoning district. A groundwater protection overlay district applied to the basic zoning of a residential district, for example, may impose additional controls such as reduced density and special waste disposal provisions.

There are several types of special management areas that may be protected through the use of overlay districts; these include

244. WIS. STAT. § 59.99(1) (1987).

245. *Id.* at § 60.65(1).

246. *Id.* at § 62.23(7)(e)(1); (§ 62.23 applies to village planning pursuant to Wis. Stat. § 61.35).

247. WIS. STAT. § 59.99(6) (1987) (counties); WIS. STAT. § 60.61(4)(c) (1987) (towns), and WIS. STAT. § 62.23(7)(e)(6) (1987) (cities and villages).

vulnerable areas, aquifer recharge areas, areas of suspected contamination and well protection areas. The type of overlay district selected will depend upon the problems present and the information available. "Vulnerable areas" can be identified where contaminants can easily enter the groundwater, such as areas of shallow soil over fractured bedrock, high water table soils and excessively well-drained soils. In areas of suspected contamination such as locations downflow from landfill sites, special precautions such as requiring subdivisions to be served by a single deep well rather than shallow individual wells can be used to ensure a safe water supply. Areas recharging existing and future municipal wells or clusters of private wells, *i.e.* "wellhead protection districts," may also be delineated and regulated.[248] Flexibility is added by making many of the uses in overlay zones conditional uses,[249] thus taking into account their likely impact on groundwater.

B. *Subdivision Regulations*

Subdivision regulations focus on the process of dividing larger tracts of land into lots for the purpose of sale or building development. Among the stated purposes of local subdivision regulations authorized by Wisconsin statutes are: "to promote the public health, safety and general welfare . . . facilitate adequate provision for . . . water, sewerage . . . ; providing the best possible environment for human habitation . . ."[250] and to "prohibit the division of land in areas where such prohibition will carry out the purposes of this section."[251] Groundwater protection provisions are clearly within the scope and intent of these statutes. Although traditionally directed at residential development, local subdivision ordinances can also be drafted to apply to commercial and industrial development.

248. *See supra*, part IV(B)(4) for a discussion of zoning to protect municipal well recharge areas; *see also, infra*, part VII(B)(4).

249. Although not central to its decision, the Wisconsin Supreme Court made the following observation about overlay zones and conditional uses in a zoning case: "[w]here the imposition of conditions on land development is desirable, it might better be done by uniform ordinances providing for special uses, special exceptions and overlaid districts. . . .Conditions imposed in such cases have a sounder legal basis because guidelines for their imposition are spelled out in the ordinance." State *ex rel.* Zupancic v. Schimenz, 46 Wis. 2d 22, 33, 174 N.W.2d 533, 539 (1970)(dictum).

250. WIS. STAT. § 236.45(1) (1987).

251. *Id.* at § 236.45(2)(a).

Subdividers whose lots meet the state's definition of a subdivision[252] are required to prepare "plats," *i.e.*, detailed maps of the land to be subdivided.[253] These "state defined" plats are always subject to review by local authorities and state agencies before the plat can be recorded by the county register of deeds.[254] State statutes provide that plats may be reviewed to ensure, *inter alia*, the physical suitability of the area for a subdivision; sufficiency of water supply and waste disposal systems; proper stormwater management; control of erosion and sedimentation; the adequacy of the street system; proper dimensions and layout of lots; and adequate open space.[255] Review by state administrative agencies does not consider groundwater contamination hazards except for limited review in the case of an unsewered subdivision.[256]

All counties, towns, cities and villages which have established a planning agency may, however, enact subdivision ordinances which are more restrictive than state statutory provisions.[257] Such ordinances may, for example, have a more inclusive definition of what constitutes a subdivision.[258] These "locally defined" plats are subject to review in that locality.[259] A local government does not, however, have discretion under Wisconsin Statute Chapter 236 to reject a plat in the absence of previously adopted standards or guidelines for approval.[260]

252. WIS. STAT. § 236.02(12) defines a "subdivision" to be the division of a lot where "[t]he act of division creates 5 or more parcels or building sites of 1 1/2 acres each or less in area; or . . .(f)ive or more parcels or building sites of 1 1/2 acres each or less in [an] area are created by successive divisions within a period of 5 years." Local governments may adopt ordinances governing subdivisions which are more restrictive than state statutes. *See infra*, notes 257-260 and accompanying text.

253. WIS. STAT. § 236.03 (1987).

254. *Id.* at § 236.12 (1987) (county approval may also be required in some cases).

255. *Id.* at §§ 236.01 and 236.45.

256. *Id.* at § 236.13(1)(d); this review focuses on the adequacy of on-site waste disposal systems. Note that current review of unsewered subdivisions (under WIS. ADMIN. CODE ch. ILHR 83 (1987)) does not specifically take into account nitrogen loading from septic effluent. This topic will likely be addressed in the future revision of the code since the new groundwater law specifically directed that the state plumbing code conform to groundwater protection standards, and these standards contain limits on nitrogen contamination. *See* WIS. STAT. § 145.12(4) (1987) and WIS. ADMIN. CODE § NR 140.10 (1986).

257. WIS. STAT. § 236.45(2)(a) (1987).

258. *Id.*

259. *Id.* at § 236.45(2).

260. State *ex rel.* Columbia Corp. v. Pacific Town Bd., 92 Wis. 2d 767, 286 N.W.2d 130 (Wis. Ct. App. 1979). These standards and guidelines can be part of a locally adopted subdivision ordinance, local master plan, official map or other ordinance. WIS. STAT. § 236.13(1) (1987).

Towns, cities and villages may also impose additional conditions related to groundwater protection by, for example, requiring that a subdivider provide a safe drinking water supply[261] or that lots be served by public sewer where necessary to avoid contamination of groundwater from septic tank systems.

C. *Extraterritorial Land Use Controls*

The source of potential contamination of a local government's groundwater may be outside the locality's boundaries. In such circumstances cities and villages in Wisconsin are authorized to adopt extraterritorial subdivision[262] and extraterritorial zoning[263] regulations. This extraterritorial authority extends 3 miles beyond the corporate limits of a first, second or third class city and 1.5 miles beyond those of a fourth class city or village.[264] A municipality can control platting outside its boundaries, however, only with respect to that part of the plat lying within its plat approval jurisdiction; it cannot regulate the part of a plat that may be outside such limits.[265] When more than one local government has plat approval authority and their requirements conflict, the plat must comply with the strictest of the applicable requirements.[266]

Extraterritorial zoning allows cities and villages to zone land outside their municipal borders the same distances provided by their extraterritorial plat approval jurisdiction. The municipality may adopt an interim zoning ordinance which freezes the existing zoning or uses in the surrounding jurisdiction for up to two years while a comprehensive zoning plan is being prepared.[267] If the municipality is to make the extraterritorial zoning permanent, it must be approved by a majority vote of a six-member committee

261. WIS. STAT. § 236.13(2)(a) (1987).

262. *Id.* at §§ 236.45(3) and 236.10(1)(b)2 and (2).

263. *Id.* at § 62.23(7a).

264. *Id.* at § 236.02(5). WIS. STAT. § 62.23(7a) (1987) defines "extraterritorial zoning jurisdiction" to encompass the same distance.

265. Brookhill Dev. Ltd. v. City of Waukesha, 103 Wis. 2d 27, 307 N.W.2d 242 (1981).

266. WIS. STAT. § 236.13(4) (1987).

267. *Id.* at § 62.23(7a)(b). *See* Walworth County v. City of Elkhorn, 27 Wis. 2d 30, 133 N.W.2d 257 (1965)(Wisconsin Supreme Court upheld the validity of a two-year freeze of existing town zoning. *See also*, Town of Grand Chute v. City of Appleton, 91 Wis. 2d 293, 282 N.W.2d 629 (Wis. Ct. App. 1979)(interim extraterritorial ordinance could allow an interim freeze on existing zoning where the area is zoned and it could allow an interim freeze on the existing uses, where there is no zoning).

composed of three town and three city (or village) representatives.[268]

Although the specific provisions of zoning ordinances and subdivision regulations will vary from situation to situation, the basic regulatory strategies which might be employed to protect groundwater quality include: (1) prohibiting uses with a potential to seriously contaminate groundwater; (2) requiring the developer to provide detailed information about proposed conditional uses, their plan of operations and the physical characteristics of the proposed site; (3) setting conditions under which activities may be permitted through the use of design standards, performance standards and operational controls; (4) limiting density by specifying minimum lot size, percentage of lot coverage and minimum separating distances; and (5) using overlay districts to designate special management areas such as aquifer recharge areas, well protection districts and other locations particularly susceptible to groundwater contamination. Many of these strategies are discussed in the following section which contains an overview of judicial decisions involving local groundwater protection ordinances.

VI. THE VALIDITY OF LOCAL PROTECTIVE ORDINANCES

Most courts have only relatively recently begun to recognize that groundwater is an integral part of the hydrologic cycle. It was not until 1974, for example, that the Wisconsin Supreme Court recognized the "inseparable relationship between all water" in *State v. Michels Pipeline Construction, Inc.*[269] The Wisconsin court held that:

> [i]t makes very little sense to make an arbitrary distinction between the rules to be applied to water on the basis of where it happens to be found. There is little justification for property rights in groundwater to be considered absolute while rights in surface streams are subject to a doctrine of reasonable use.[270]

Local government ordinances designed to protect groundwater quality have been challenged on *ultra vires*,[271] statutory[272] and,

268. WIS. STAT. § 62.23(7a)(c) (1987).

269. 63 Wis. 2d at 292, 217 N.W.2d 339 at 345 (1974), quoting Beuscher, *Wisconsin's Law of Water Use*, 31 WIS. BAR BULL. 30 (Oct. 1958).

270. *Michels Pipeline*, 63 Wis. 2d at 292, 217 N.W.2d at 345.

271. Tarlock, *supra* note 21, notes that "a successful ultra vires challenge in the 1980's seems quite remote in view of a series of cases in the early 1970's that sustained the use of

most commonly, constitutional grounds.[273] An analysis of federal and state court decisions suggests certain regulatory techniques local governments can employ to withstand constitutional challenges.

Most of the cases cited deal with groundwater; they are discussed in terms of the relevant hydrogeologic factors, regulatory techniques and legal principles courts have found important in analyzing the validity of groundwater protection ordinances. Some of the cases deal with the regulation of wetlands, floodplains, coastal areas and surface waters; they were included because they discuss legal principles relevant to groundwater protection. Common statutory and constitutional bases make land use case law transferable from one state to another in many respects;[274] the fact-sensitive nature of these cases must also be considered, however. Although this section deals primarily with local zoning ordinances, many of the points discussed might also apply to an analysis of the constitutionality of local ordinances enacted pursuant to home rule or other authority.[275]

density controls to protect water quality." *Id.* at 126, citing Salamar Builders Corp. v. Tuttle, 29 N.Y.2d 221, 275 N.E.2d 585, 825 N.Y.S.2d 933 (1971) (discussed *infra* note 285 and accompanying text) and Nattin Realty Corp. v. Ludewig, 67 Misc.2d 828, 324 N.Y.S.2d 668 (1971), *aff'd* 40 A.D.2d 535, 334 N.Y.S.2d 483, *aff'd* 32 N.Y.S.2d 681, 343 N.Y.S.2d 360, 296 N.E.2d 257 (1973) (discussed *infra* note 294 and accompanying text).

272. Efforts to protect groundwater quality may also face statutory challenges based on substantive or procedural law. Tarlock, *supra* note 21, at 126, citing City of Schenectady v. Flacke, 100 A.D.2d 349, 475 N.Y.S.2d 506 (1984) (condemnation of land overlying aquifer successfully challenged where city designated improper lead agency to prepare environmental impact statement).

273. This discussion assumes that there is no federal or state preemption of the ordinances discussed herein.

274. D. MANDELKER, *supra* note 243, at 2.

275. Note that several states have considered the validity of police power ordinances which, for example, prohibit bathing in lakes used as a source of municipal drinking water. The results have been mixed. *See* Kusler, *Carrying Capacity Controls for Recreation Water Uses*, 1973 WIS. L. REV. 1 in which the author notes that several states have invalidated such ordinances as unconstitutional. *Id.* at 23, citing Bino v. Hurley, 273 Wis. 10, 76 N.W.2d 571 (1956); Pounds v. Darling, 75 Fla. 125, 77 So. 666 (1918); People v. Hulbert, 131 Mich. 156, 91 N.W. 211 (1902); George v. Village of Chester, 202 N.Y. 398, 95 N.E. 767 (1911); *Contra*, State v. Heller, 123 Conn. 492, 196 A. 337 (1937); Commonwealth v. Hyde, 230 Mass. 6, 118 N.E. 643 (1918); State v. Quattropani, 99 Vt. 360, 123 A. 352 (1926); *see also* Harvey Realty Co. v. Borough of Wallingford, III Conn. 352, 150 A. 60 (1930) and State v. Morse, 84 Vt. 387, 80 A. 194 (1911). *See supra* for a discussion of the authority of local governments in Wisconsin to enact groundwater protection ordinances.

A. *Constitutional Requirements*

1. The Regulations Must Serve Valid Public Objectives

In most if not all states, zoning ordinances are regarded as legislative enactments and are presumed constitutionally valid;[276] in case of doubt, ordinances are usually upheld.[277] "Accordingly, a legislative decision in such matters may not be disturbed unless the legislature has exceeded its powers or has acted in an arbitrary or unreasonable manner. Legislative judgment in a zoning matter may not be annulled solely because a court disagrees with the wisdom of such judgment."[278] The burden of proof in most states, therefore, rests on the party challenging the ordinances.[279] Although states vary as to the degree of proof that must be offered by the challenger, this burden is quite substantial in most cases.[280] "The pivotal question is whether the ordinance is a rea-

276. ANDERSON, *supra* note 199, at § 3.14. In Wisconsin, *see, e.g.*, Quinn v. Town of Dodgeville, 122 Wis. 2d 570, 364 N.W.2d 149 (1985), in which the court stated that "[t]his court indulges every presumption and will sustain the law if at all possible. If any doubt exists as to a law's unconstitutionality, it will be resolved in favor of its validity." *Id.* at 577, 364 N.W.2d at 154 (citation omitted).

277. MCQUILLIN, *supra* note 68, at § 25.294.

278. ANDERSON, *supra* note 199, at § 3.14 (citations omitted).

279. MCQUILLIN, *supra* note 68, at § 25.296. *See also* ANDERSON, *supra* note 199, at § 3.16. There are, of course, exceptions to this rule, such as where an ordinance is invalid on its face or has the effect of excluding low or moderate income families from residing within a certain area. When an ordinance has an exclusionary effect (*see* discussion *infra*), the burden of proof may be modified. "While the presumption of validity persists in the exclusionary zoning cases, and the challenging litigant's burden of proof remains formidable, there is evidence in the more recent cases that the burden has been reduced." ANDERSON, *supra* note 199, at § 8.21.

Some states reverse the burden of proof if, for example, an ordinance prohibits certain lawful uses. *See, e.g.*, Lower Southampton Tnshp. Bd. of Supervisors v. Schurr, 72 Pa. Commw. 322, 456 A.2d 702 (1983), in which a Pennsylvania court reversed the burden of proof because plaintiffs had shown that a legitimate use had been totally prohibited and their land was otherwise suitable for that use. (This case is discussed in more detail *infra* note 335 and accompanying text).

280. ANDERSON, *supra* note 199, at § 3.16. Anderson notes that "[t]he objective of proof everywhere is to demonstrate that the ordinance or its specific application is unreasonable and arbitrary;" courts have described the degree of proof by various terms: a preponderance of the evidence, clear and convincing evidence, by proof beyond a reasonable doubt, etc. *Id.* The Wisconsin Supreme Court has stated, for example, that "it is an elementary rule of construction that an ordinance will be held constitutional unless the contrary is shown beyond a reasonable doubt and the ordinance is entitled to every presumption in favor of its validity." Highway 100 Auto Wreckers v. West Allis, 6 Wis. 2d 637,642, 96 N.W.2d 85, 90 (1958).

sonable exercise of the police power having a discernable tendency to serve the public health, safety or moral welfare."[281]

While most local zoning ordinances are accorded a presumption of validity, they will be found constitutionally valid only if they meet certain basic conditions of substantive and procedural due process, equal protection, etc. Courts do not, however, always draw a clear distinction between these elements; they are sometimes grouped together and surface as a test of whether the ordinance constitutes a "reasonable application" of the local government's police powers. One way of characterizing some of the individual federal constitutional requirements is as follows:

(1) The regulations must serve valid public objectives which promote public health, safety and general welfare;
(2) The regulatory provisions must constitute reasonable means to achieve these objectives;
(3) There must be a reasonable basis for the classification of uses and lands subject to the regulations; and
(4) The property owner must be left with some reasonable use (usually framed in economic terms) of the property.[282]

The first two tests raise issues of substantive due process. The reasonableness of the classification of uses in the zoning text and the location of district boundaries on the zoning map involve the equal protection guarantee.[283] Excessive restriction on the use of private property which constitutes a taking involves the taking clause.[284] Various cases in which plaintiffs have claimed that water-related zoning ordinances did not meet one or more of these conditions are discussed briefly, below.

Protection of the public health, safety and general welfare is the basic theoretical objective of zoning and other police power measures. Numerous courts have upheld the validity of ordi-

281. ANDERSON, *supra* note 199, at § 3.23.

282. *See generally* D. MANDELKER, *supra* note 243, at 15-45. Local ordinances must also meet other constitutional conditions such as procedural due process requirements (discussed within the next section on suggested regulatory techniques). These elements should not be considered an absolute "checklist" for drafting valid ordinances, however, since various courts may place differential weight on one or more elements and may consider factors not discussed herein.

283. *See* U.S. CONST. amend. XIV, § 1. Note that this clause, along with the Federal Fair Housing Act (Title VIII of the Civil Rights Act of 1968) has also served as the basis for claims of exclusionary zoning based on racial discrimination in the federal courts. *See* MANDELKER, *supra* note 243, at chapter 7.

284. U.S. CONST. amend. V. The Fourteenth Amendment makes the clause applicable to the states. U.S. CONST. amend. XIV, § 1. Most state constitutions also contain similar provisions. *See, e.g.*, WIS. CONST. art. I, § 13.

nances designed to protect groundwater quality because they served valid public objectives. In *Salamar Builders Corp. v. Tuttle*,[285] for example, the New York Court of Appeals upheld the validity of a zoning ordinance which increased the minimum residential lot size from one to two acres, intended, in part, to protect groundwater quality:

> Obviously, measures in the form of water pollution control are 'held by the . . . preponderant opinion to be greatly and immediately necessary to the public welfare' (Matter of Wulfsohn v. Burden, 241 N.Y. 288, 299, 150 N.E. 120, 123, *supra*), do relate to some subsisting evil which should be controlled, and, therefore, serve some legitimate public purpose.[286]

Similarly, a District Court of Appeal of Florida upheld a rezoning of a plaintiff's property which required a five-acre minimum lot size to protect groundwater quality in *Moviematic Industries Corp. v. Board of County Commissioners of Metropolitan Dade County*.[287] The court found "that ecological considerations are legitimate objectives of a zoning ordinance or resolution."[288] The court noted that the comprehensive study upon which the rezoning was based stated that the rezoned

> property area overlies one of the most permeable aquifers in the world, the Biscayne Aquifer. This aquifer serves as the source of virtually all drinking water in Dade County and must be protected from contamination.[289]

2. Reasonable Regulation to Achieve Valid Public Purposes

While groundwater protection may be considered a valid public objective, ordinances designed for this purpose may nonetheless be invalidated if a court finds that a zoning authority has employed unreasonable means to accomplish this goal. Local governments may utilize regulatory techniques such as density controls, conditional use provisions, prohibition of potentially contaminating uses, and designation of special management areas

285. 29 N.Y.2d 221, 275 N.E.2d 585, 325 N.Y.S.2d 933 (1974).

286. *Id.* at 227, 275 N.E.2d at 589, 325 N.Y.S.2d at 938-39.

287. 349 So.2d 667 (Fla. Dist. Ct. App. 1977).

288. *Id.* at 670. *See also, e.g.*, Barre Mobile Home Park, Inc. v. Town of Petersham, 592 F. Supp. 633 (D. Mass. 1984); M & I Marshall & Ilsley Bank v. Town of Somers, 141 Wis. 2d 271, 414 N.W.2d 824 (1987); Just v. Marinette County, 56 Wis. 2d 7, 201 N.W.2d 761 (1972); Nattin Realty Corp., Inc. v. Ludewig, 67 Misc. 2d 828, 324 N.Y.S.2d 668 (1971), *aff'd* 40 A.D.2d 535, 334 N.Y.S.2d 483 (1972), *aff'd* 32 N.Y.2d 681, 343 N.Y.S.2d 360, 296 N.E.2d 257 (1973).

289. *Moviematic*, 349 So.2d at 670.

particularly susceptible to contamination to protect groundwater quality.

Density controls are used to increase minimum lot size where overcrowding of land would result in health and safety hazards including groundwater contamination, particularly in areas where topography and/or soil conditions create physical limits to more dense development. The use of density controls to protect groundwater quality has received a mixed reception in the courts, although recent cases indicate a greater acceptance of this technique when justified by health and environmental concerns.

Several cases from the 1960s and 1970s upheld the use of density controls where the link between increased population and potential groundwater contamination was proven. In *Salamar Builders*,[290] the New York Court of Appeals upheld the rezoning of plaintiff's land to require a larger minimum lot size. The court found that the town introduced expert testimony which indicated that:

> the topography and soil conditions were such as to inhibit the installation of central sewer and water systems, so that any present residential development would necessarily be limited to the use of wells and septic tanks; and that, in turn, largely because of the area's topography, its location within or contiguous to the New York City watershed, and drainage difficulties, the area would best be zoned for residences on two-acre plots in order to provide ample space for drainage and thus minimize the danger of water pollution.[291]

The court found that the means employed by the city were reasonable: the rezoning "reasonably serve[d] to vindicate the policy sought to be effected,"[292] *i.e.*, "the requirement of larger parcels. . . would indeed tend to minimize the danger of pollution."[293]

Similarly, in *Nattin Realty, Inc. v. Ludewig*,[294] a New York Supreme Court upheld an amendment which rezoned plaintiff's property from multiple-family to single-family residential. The town had presented expert testimony which demonstrated that construction of plaintiff's proposed multi-family dwellings in the

290. Salamar Builders Corp. v. Tuttle, 29 N.Y.2d 221, 275 N.E.2d 585, 325 N.Y.S.2d 933 (1971).

291. *Id.* at 223-24, 275 N.E.2d at 587, 325 N.Y.S.2d at 935-36.

292. *Id.* at 227, 275 N.E.2d at 589, 325 N.Y.S.2d at 937.

293. *Id.*

294. 67 Misc. 2d 828, 324 N.Y.S.2d 668 (1971).

absence of a public water supply was likely to lead to drinking water contamination.[295] The court found that:

> the municipality has here presented sufficient evidence to warrant the rezoning of the petitioner's property, for it was prompted to do so by ecological considerations based not upon whim or fancy but upon scientific findings. . . .
>
> The court is not unmindful that zoning changes prompted by such environmental considerations may appreciably limit the uses and profitability of land; yet if both factors were to be placed upon the scales, the *pro bono publico* considerations must prevail. If there is substantial evidence sustaining the municipality's determination to rezone because of ecology, the court should not void such legislative determination.[296]

In addition to New York, Connecticut cases have upheld density controls to protect groundwater.[297] Early cases in Ohio and Texas also upheld large-lot zoning on similar grounds[298] as did the First Circuit Court of Appeals,[299] although the latter court

295. *Id.* at 671.

296. *Id.* at 672. *See also, e.g.*, Wilson v. Town of Sherborn, 3 Mass. App. 237, 326 N.E.2d 922 (1975) (court upheld two-acre minimum lot size where town had shown that there was a reasonable relationship between the zoning ordinance and the potential for water contamination in the town); and Omnia Properties, Inc. v. Town of Brookhaven, No. 77 Civ. 574 (E.D.N.Y. Dec. 26, 1979) (two-acre minimum lot size upheld based on hydrologic zoning considerations). *But cf.* Kasparek v. Johnson County Bd. of Health, 288 N.W.2d 511 (Iowa 1980) and State *ex rel.* Nagawicka Island Corp. v. City of Delafield, 117 Wis. 2d 23, 343 N.W.2d 816 (Wis. Ct. App. 1983) (these cases are discussed *infra* note 381 and accompanying text).

297. Williams notes that "[t]his sewage disposal [groundwater quality] argument for large-lot zoning has turned up frequently in Connecticut cases, which have taken a strong position in favor of recognizing such considerations." WILLIAMS, AMERICAN LAND PLANNING LAW: LAND USE AND THE POLICE POWER § 38.16 (1974) citing, *e.g.*, Zygmont v. Planning and Zoning Comm'n of Town of Greenwich, 152 Conn. 550, 210 A.2d 172 (1965), Senior v. Zoning Comm'n of Town of New Canaan, 146 Conn. 531, 153 A.2d 415 (1959), *appeal dismissed* 363 U.S. 143 (1960), and DeMars v. Zoning Comm'n of Town of Bolton, 142 Conn. 580, 115 A.2d 653 (1955), *aff'g* 19 Conn. Supp. 24, 109 A.2d 876 (Ct. Com. Pl. 1954). *See also* Chucta v. Planning and Zoning Comm'n of the Town of Seymour, 154 Conn. 393, 225 A.2d 822 (1967) (increase in lot size upheld based in part upon the unavailability of public sewers and the desire to protect the water supply).

298. WILLIAMS, *supra* note 297, at § 38.16, citing, *e.g.*, State *ex rel.* Mar-Well, Inc. v. Dodge, 113 Ohio App. 118, 17 Ohio Op.2d 111, 177 N.E.2d 515 (1960); Caruthers v. Board of Adjustment of City of Bunker Hill Village, 290 S.W.2d 340 (Tex. Civ. App. 1956).

299. Steel Hill Development, Inc. v. Town of Sanbornton, 469 F.2d 956 (1st Cir. 1972). The court upheld a zoning ordinance providing for three- and six-acre minimum lot sizes in a rural New Hampshire resort community based on considerations which included topography and soil conditions and their potential effect on surface water pollution, improper sewage disposal, poor drainage, the area's ecological balance, erosion, scenic values and the availability of open space. *Id.* at 960-61.

cautioned against the use of this technique merely to keep out undesirable development.

More recent cases have also validated the use of reasonable density controls to protect groundwater quality. In *Sanderson v. Town of Greenland*,[300] for example, the court upheld a 60,000 square-foot minimum lot size requirement based on its concern for groundwater pollution. In *Curtiss-Wright Corp. v. Town of East Hampton*,[301] the court considered preservation of the quality and quantity of the local water supply (threatened by potential salt water intrusion) and maintenance of the natural and rural qualities of the land in upholding a two-acre minimum lot size.

While "[j]udicial deference to local land use classifications continues unabated in a majority of states,"[302] some courts on the more heavily populated eastern coast (particularly those in Pennsylvania) have taken a more skeptical view of density controls. Primarily in the 1960s and 1970s, several courts invalidated local ordinances because they found that large-lot zoning had an impermissible exclusionary effect.[303] In an important case, *National Land and Investment Co. v. Kohn*,[304] the Pennsylvania Supreme Court invalidated a zoning amendment which required a minimum lot size of four acres in certain residential districts, ruling that the zoning restriction was *per se* invalid because it had an exclusionary effect. The court ruled that the ordinance's primary purpose was to exclude newcomers and avoid burdens upon public services and facilities.[305] The township had failed to prove that the increased density was "a necessary . . . [or] a reasonable method"[306] to, *inter alia*, protect water supplies from septic system contamination and that even if there was such a danger, ex-

300. 122 N.H. 1002, 453 A.2d 1285 (1982).

301. 82 A.D.2d 551, 442 N.Y.S.2d 125 (1981).

302. *A New Deference Towards Exclusionary Zoning in Pennsylvania: Appeal of M.A. Kravitz Co.*, 28 WASH. U.J. OF URB. AND CONTEMP. L. 381 (1985) citing D. MANDELKER, LAND USE LAW, *supra*, note 243, at §§ 1.13-1.16 (1982).

303. Other state courts have also invalidated density controls on this basis. *See, e.g.*, Board of County Supervisors of Fairfax County v. Carper, 200 Va. 653, 107 S.E.2d 390 (1959) (although enacted in part to protect groundwater quality and quantity, court invalidated two acre minimum lot size requirement because it had the practical effect of excluding low income persons from the designated area).

304. 419 Pa. 504, 215 A.2d 597 (1965).

305. *Id.* at 532, 215 A.2d at 612.

306. *Id.* at 526, 215 A.2d at 609. This conclusion was based in part upon the failure of the township to introduce relevant testimony into evidence and the court's perception of a key township witness as "vague and unconvincing". *Id.* at 525, 215 A.2d at 608-09.

isting township sanitary and subdivision regulations did not provide the necessary protection against pollution.[307] The Pennsylvania courts have, to some extent, modified their position on density controls and exclusionary zoning since the *National Land* case.[308] The decision did, however, form the basis for several other cases which invalidated large-lot zoning enacted at least in part for groundwater protection purposes[309] and contributed to a judicial skepticism that lots in excess of an acre are required to protect the public health.[310]

Several recent cases outside the state of Pennsylvania reflect other approaches to resolution of the exclusionary zoning issues related to large-lot zoning. A landmark approach to resolving the frequent conflict between concerns for environmental protection and provision of low and moderate income housing was taken by the New Jersey Supreme Court in the *Southern Burlington N.A.A.C.P. v. Township of Mount Laurel* cases (*Mt. Laurel I* and *II*).[311] The *Mt. Laurel I* court declined to uphold a one-half acre minimum lot size on the basis that smaller lot sizes would endanger the water supply. The court found, *inter alia*, that the township

307. *Id.*, at 526, 215 A.2d at 609.

308. *See* MANDELKER, *supra* note 243, at §§ 7.15-7.17 and 1985 Supp. § 7.17, (citing Appeal of M.A. Kravitz Co., 501 Pa. 200, 460 A.2d 1075 (1983), (can exclude some types of housing but not growth in general). This indicates (as do several Pennsylvania cases decided between the time of *National Land* and *Kyautz*) that density controls imposed for groundwater protection *may* be upheld if they are reasonably designed to control contamination and are not enacted for the purpose of excluding growth altogether. *See, e.g.*, Martin v. Township of Milcreek, 50 Pa. Commw. 249, 413 A.2d 764 (1980) (although the court ultimately determined that 10 acre minimum lot size was not shown to be necessary to prevent pollution, the court did consider the potential for pullution in assessing the validity of the ordinance where it was not exclusionary on its face).

309. In Pennsylvania, *see, e.g.*, Concord Township Appeal, 439 Pa. 466, 268 A.2d 765 (1970) (4-3 decision) (This case is commonly referred to as "Appeal of Kit-Mar Builders"). The court in *Kit-Mar* invalidated two and three-acre minimum lot size requirements, stating: "We *explicitly rejected* the argument that sewerage problems could excuse exclusionary zoning in *National Land*." *Id.* at 472, 268 A.2d at 767 (emphasis in original). One of two dissenting opinions in the case noted that Pennsylvania statutes had been amended since the *National Land* case to allow a zoning ordinance to be upheld *solely* on the grounds of sewerage considerations. *Id.* at 483-84, 268 A.2d at 773 (Jones, J., dissenting). *See also* Application of Wetherill, 45 Pa. Commw. 303, 406 A.2d 827 (1979) (court held that an ordinance which completely banned apartments and required ten acre minimum lot size for single residences was unconstitutional despite a claim by the township that sewer and water facilities were inadequate).

310. ANDERSON, *supra* note 199, at § 8.29.

311. 67 N.J. 151, 336 A.2d 713 (*Mt. Laurel I*) *appeal dismissed* and *cert. denied*, 423 U.S. 808 (1975), *modified and enforced*, 161 N.J. Super. 317, 391 A.2d 935 (Law Div. 1978), *rev'd in part and remanded*, 92 N.J. 158, 456 A.2d 390 (1983) (*Mt. Laurel II*).

could require developers to install public sewers and water supplies because the land involved in this case was amenable to the installation of such facilities. It found that the ordinance had an exclusionary effect and concluded that municipalities within the state must provide their "regional fair share" of low and moderate income housing.[312] The court emphasized, however, that land use regulations should be drafted with environmental concerns in mind and where necessary, more stringent controls on growth might be permitted.[313]

The *Mt. Laurel II* court attempted to satisfy both those concerned about the provision of housing, and those concerned about the environment by adopting the State Development Guide Plan (SDGP).[314] The SDGP is significant because it delineates which parts of the state are suitable for housing development based on the level of environmental protection required by each area. Under the SDGP, areas designated as "conservation," "agricultural" and "limited growth areas" have no regional fair share requirement.[315] Areas designated as "growth areas" by the SDGP, on the other hand, must provide their fair share of low and moderate income housing. However, the court reiterated that even in these areas, environmental concerns must be addressed.

312. *Mt. Laurel II*, 92 N.J. at 204-05, 456 A.2d at 413 (1983).

313. The *Mt. Laurel I* court found that "[l]and use regulations should take into account ecological and environmental concerns. . . . Yet the regulations adopted cannot be used to thwart growth. . . . They must be only those reasonably necessary for public protection of a vital interest." Albano v. Mayor and Township Comm. of Township of Washington, 194 N.J. Super. 265,275, 476 A.2d 852,857 (1984) citing *Mt. Laurel I*, 67 N.J. at 186-87, 336 A.2d at 731. *See also* Oakwood at Madison, Inc. v. Township of Madison, 72 N.J. 481, 371 A.2d 1192 (1977) (the court invalidated Madison's zoning as exclusionary but found that depositions regarding the environmentally sensitive nature of portions of the township were relevant in determining exactly where and how housing should be constructed (the case was remanded to allow Madison to devise a new ordinance)).

314. *Mt. Laurel II*, 92 N.J. at 246-47, 456 A.2d at 435 (1983).

315. Licata and Licata, *The Environmental Implications of Mount Laurel II*, 15 RUTGERS L. J. 627 at 633 (1984) (citing Glenview Development Corp. v. Franklin, 92 N.J. at 316-21, 456 A.2d at 471-74 (1983)) (decided as part of the *Mt. Laurel II* decision; the New Jersey Supreme Court consolidated the appeal to the *Mt. Laurel I* remand with five other cases concerning application of the fair share rule). The *Mt. Laurel II* court noted, however, that designation of a municipality as a non-growth area does not necessarily relieve it of its obligation to provide for its indigenous poor. *Id.* at 633 (citing *Franklin* at 318, 456 A.2d at 472). Where such a designation is made, a court may apparently order a municipality to grant a "builder's remedy" (a building permit) unless the municipality establishes that substantial environmental or other planning concerns make such development inappropriate. *Id.* at 633 citing *Mt. Laurel II* at 279-80, 456 A.2d at 452 (1983).

In *Caputo v. Chester*,[316] the *Mt. Laurel II* court reemphasized its strong concern for environmental protection and stated that "where a proposed low-income development, located within a growth area, would create a *substantial* environmental problem, the courts will not enforce the builder's remedy"[317] (*i.e.*, allow the proposed development to occur). Although the *Mt. Laurel II* court did not directly address the issue of large-lot zoning for the purpose of groundwater protection, it did indicate that it would not invalidate such zoning *per se* as long as (in the case of growth areas) the municipality had provided for its fair share of low income housing.[318]

Based in part upon the *Mt. Laurel II* opinion, the New Jersey Superior Court upheld a large minimum lot size requirement in an agricultural (non-growth) area based upon groundwater considerations. In *Albano v. Mayor and Township Committee of Township of Washington*,[319] the court found that the township had presented adequate testimony showing that plaintiff's land, which had a three-acre minimum lot size requirement, was more environmentally sensitive than surrounding parcels (with a one-acre minimum requirement) and that more intensive unsewered development was likely to lead to ground and surface water pollution.[320]

316. No. L-43857-74 (N.J. Super. Law Div. (Oct. 4, 1978), *aff'd in part, rev'd in part and remanded*, 92 N.J. 158, 316, 456 A.2d 390, 471 (1983) (decided as part of the *Mt. Laurel II* decision)).

317. Licata and Licata, *supra* note 315, at 635 (emphasis supplied). Licata and Licata note that the burden on a municipality to prove that development should not occur is a substantial one, but that "sound planning practices require no less." *Id.*

318. *Id.* at 636. The authors note that "[t]he court specifically stated that, 'we hold that the preservation of open spaces itself may, under proper circumstances, be sufficient justification for large lot zoning, including five acre zoning.' " *Id.*, citing *Mt. Laurel II* at 315, 456 A.2d at 471 (1983). In this regard *see also* MANDELKER, *supra* note 243, at § 7.13 citing Robert E. Kurzius, Inc. v. Incorporated Village of Upper Brookville, 51 N.Y.2d 338, 414 N.E.2d 680, 434 N.Y.S.2d 180 (1980) *cert. denied*, 450 U.S. 1042 (1981) (court upheld five acre zoning, refusing to find large-lot zoning invalid *per se*).

319. 194 N.J. Super. 265, 476 A.2d 852 (1984). Note that an earlier opinion in the case did require the township to amend its ordinance (but not with reference to plaintiff's property) to provide for the indigenous poor within the township. *Id.* at 269, 476 A.2d at 856.

320. The court noted that plaintiffs might eventually obtain a public sewer allocation (which would permit more intensive development). It concluded, however, that this was "too speculative an occurrence on which to rely to suggest that the density restriction is overly burdensome and restrictive." *Id.* at 276, 476 A.2d at 857.

Other courts have also addressed the issue of restrictions on growth due to the shortage or absence of public sewer and/or water facilities. *See, e.g.*, Pacific Blvd. Assoc. v. City of Long Beach, 48 A.D.2d 857, 368 N.Y.S.2d 867, (1975) (court upheld a zoning amendment which permitted only one- and two-family homes and two-story garden apartments based

The court in *North Shore Unitarian Universalist Society, Inc. v. Incorporated Village of Upper Brookville*[321] also upheld the validity of an ordinance requiring two- and five-acre minimum lot sizes in a village which was designated as environmentally sensitive and a primary source of drinking water.[322] It found that the ordinance served "a regional need for open space and water preservation, and that the regional need for housing is supplied by other areas in the county."[323]

The brief overview of cases within this subsection[324] indicates that reasonable density controls designed to protect groundwater quality have been upheld in several states. Other states, however,

on "overwhelming sewage disposal and water supply problems" (*Id.* at 858, 368 N.Y.S.2d at 867)). ANDERSON, *supra* note 199, at § 8.24, states that several cases from New York:

> suggest that while a [temporary] restriction on the use of land may be imposed to protect public health, a municipality defending a restriction on this ground must convince the court that an emergency situation actually exists, that it is making good faith efforts to remedy the situation, and that a solution will be forthcoming in a reasonable time. The opinions do not reflect a disposition to accept such a defense on faith, or under circumstances which would enable the zoning municipality to discourage growth.

Id. at § 8.29, citing *Pacific Blvd.*, Belle Harbor Realty Corp. v. Kerr, 35 N.Y.2d 507, 323 N.E.2d 697, 364 N.Y.S.2d 160 (1974); C. Lombardi Builder, Inc. v. Stein, 45 A.D.2d 1008, 358 N.Y.S.2d 193 (1974); and Westwood Forest Estates, Inc. v. South Nyack, 23 N.Y.2d 424, 244 N.E.2d 700, 297 N.Y.S.2d 129 (1969). *See also, e.g.*, Smoke Rise, Inc. v. Washington Suburban Sanitary Comm'n, 400 F. Supp. 1369 (D. Md. 1975) (court upheld moratoria on sewer hook-ups and construction of private sewage systems; found no taking or denial of due process since the moratoria were enacted to protect ground and surface water supplies and were reasonable in duration); Annot., 92 A.L.R.3d 1073 (1979); and Annot., 63 A.L.R.3d 1184 (1975) (discusses, *inter alia*, the somewhat unusual case of Golden v. Planning Bd. of Ramapo, 30 N.Y.2d 359, 285 N.E.2d 291, 334 N.Y.S.2d 138, *appeal dismissed*, 409 U.S. 1003 (1972) (court upheld the validity of a zoning ordinance which deferred residential development until public services were established in the area according to a comprehensive plan and an eighteen-year capital improvements program)). *See also* MANDELKER, *supra* note 243, at §§ 10.2-10.5. *Cf.* Unity Ventures v. County of Lake (631 F. Supp. 181 (N.D. Ill. 1986)) (regulation of access to sanitary sewers pursuant to statutes and comprehensive plan is a legitimate governmental concern (citing Chesapeake Bay Village, Inc. v. Costle, 502 F. Supp. 213 (D. Md. 1980), Wincamp Partnership v. Anne Arundel County, 458 F. Supp. 1009 (D. Md. 1978) and *Smoke Rise*) and Giuliano v. Town of Edgartown, 531 F. Supp. 1076 (D. Mass. 1982) (discussed *infra* note 386 and accompanying text)).

321. 110 A.D.2d 123, 493 N.Y.S.2d 564 (1985).

322. *Id.* at 127, 493 N.Y.S.2d at 567.

323. *Id.*

324. This subsection has addressed only a few aspects of exclusionary zoning, which is the subject of numerous books and articles. *See, e.g.*, M. DANIELSON, THE POLITICS OF EXCLUSION (1976); R. JOHNSON, RESIDENTIAL SEGREGATION, THE STATE AND CONSTITUTIONAL CONFLICT IN AMERICAN URBAN AREAS (1984); D. MANDELKER, ENVIRONMENT AND EQUITY (1981); Mayo, *Exclusionary Zoning, Remedies, and the Expansive Role of the Court in Public Law Litigation*, 31 SYRACUSE L. REV. 755 (1980); Payne, *Doctrine and Politics in Exclusionary Zoning*

invalidated density controls in the 1960s and 1970s because they had the effect of excluding low income and minority residents. Several of the latter courts now recognize the need to balance the demand for low cost housing with groundwater quality and other environmental concerns.

Conditional use provisions in zoning ordinances, which set special requirements for uses likely to contaminate groundwater, have had a generally favorable reception in the courts. The court in *Cosmopolitan National Bank v. County of Cook*,[325] for example, upheld the denial of a county conditional use permit to operate a sanitary landfill despite plaintiff's evidence that it was complying with the required minimum state regulatory standards. The Supreme Court of Illinois found that groundwater contamination, while not a present danger, "would inevitably occur over the years"[326] due to the clay soils, the potential for flooding in the area, and the proximity of the public water supply to the landfill. The court recognized that "[q]uestions of the contamination of ground water, the creation of foul odors, [etc.] . . . are as relevant to . . . endangerment of the public health, safety, or general welfare as they are to environmental concerns."[327] It concluded, *inter alia*, that "the threat to the water supply prevented . . . [the trial judge] from finding by clear and convincing evidence that the landfill was not detrimental to the public health, safety or general welfare"[328] (one of the six special-use standards established by the county zoning ordinance) and that the conditional use permit was therefore properly denied.

Several other courts have also upheld the requirement of conditional use permits to protect groundwater quality in wetland areas.[329] In *Goddard v. Board of Appeals of Concord*,[330] for example,

Litigation, 12 REAL ESTATE L.J. 359 (1983); and Rose, *The Mount Laurel II Decision: Is It Based on Wishful Thinking?* 12 REAL ESTATE L.J. 115 (1983).

325. 103 Ill. 2d 302, 469 N.E.2d 183 (1984).

326. *Id.* at 324, 469 N.E.2d at 193.

327. *Id.* at 321, 469 N.E.2d at 192.

328. *Id.* at 324, 469 N.E.2d at 193.

329. Wetlands tend to be groundwater discharge areas rather than recharge areas. Other things being equal, pollutants introduced in a discharge area will result in the pollution of a smaller areal extent of groundwater than if the pollutants were introduced in an aquifer recharge area. Contaminated groundwater from a nearby wetland area could, however, enter public drinking water particularly if it were located within the cone of depression of a municipal well or where the wetland discharged into surface water used as a drinking water source. Thus, it is important to protect wetlands from contamination as well.

the court upheld the board of appeal's denial of a special permit to construct a house and septic system on a lot in a wetlands conservancy district. The board found that construction on the lot would derogate from the intent of the zoning by-law which was, in part, "to maintain the quality and level of the groundwater table and water recharge areas for existing, or potential water supplies"[331] and to prevent flooding. The court found that "there was evidence that a high water table created a real hazard of septic system contamination of the groundwater,"[332] concluding that "the protection of groundwater is a valid public interest . . . [and] the means adopted by the by-law are reasonably necessary for the accomplishment of this important public function."[333]

Total prohibition of potentially contaminating land uses or activities by a local government has received a mixed reception in the courts. Due to the severity of the restriction, some courts have placed a heavier burden of proof on the community which enacted the regulation. A few states, including Pennsylvania, have totally reversed the burden; municipalities must clearly show that such a ban is justified.[334] In *Lower Southampton Township Board of Supervisors v. Schurr*,[335] for example, the Pennsylvania Commonwealth Court invalidated the township's total ban on auto salvage yards, finding that the township had not met its burden of showing a substantial relationship between the ordinance and the pub-

330. 13 Mass. App. Ct. 1001, 433 N.E.2d 98 (1982).

331. *Id.* at 1001, 433 N.E.2d at 99.

332. *Id.*

333. *Id.*, citing Lovequist v. Conservation Comm'n of Dennis, 379 Mass. 7, 393 N.E.2d 858 (1979) and Turnpike Realty Co. v. Dedham, 362 Mass. 221, 284 N.E.2d 891 (1972), *cert. denied*, 409 U.S. 1108 (1973). *See also, e.g.*, Graham v. Estuary Properties, Inc., 399 So. 2d 1374 (Fla. 1981), *cert. denied. sub nom.* Taylor v. Graham, 454 U.S. 1083, (1981) and Just v. Marinette County, 56 Wis.2d 7, 201 N.W.2d 761 (1972); these and other wetland cases are discussed *supra* notes 329 and 423 and accompanying text. *But see* MacGibbon v. Board of Appeals of Duxbury, 369 Mass. 512, 340 N.E.2d 487 (1976) (Reardon, J., dissenting).

334. In Pennsylvania, courts first determine whether the

> total prohibition is . . . *prima facie* valid due to the objectionable or illegitimate nature of the proposed use. Schuster v. Plumstead Township Zoning Hearing Board, [69] Pa. Commw. Ct. [271], 450 A.2d 799 (1982). If the use is found to be legitimate, the burden then shifts to the municipality to establish what police power interest is sought to be protected by the exclusion.

Lower Southampton Township Bd. of Supervisors v. Schurr, 72 Pa. Commw. 322, 326, 456 A.2d 704 (1983), (citations omitted).

335. 72 Pa. Commw. 322, 456 A.2d 704 (1983).

lic health, safety and general welfare.[336] Although the township presented evidence of potential ground and surface water contamination at the site of the proposed salvage yard, the court ruled that this site-specific evidence was insufficient to justify a total municipality-wide ban on salvage yards.[337] Compare the *Schurr* case with *Schuster v. Plumstead Township Zoning Hearing Board*[338], in which the court validated a municipality-wide ban of junkyards where the evidence showed that pollutants were likely to seep into the groundwater no matter where a junkyard was located.

Other courts, including the United States District Court of Massachusetts, have maintained that the burden of proof in cases involving prohibitory ordinances is on the plaintiff. In *Barre Mobile Home Park v. Town of Petersham*,[339] the court upheld the validity of township by-laws and zoning by-laws which totally excluded mobile home parks due to the threat of groundwater contamination. Courts are likely to uphold reasonable restrictions on potentially contaminating uses especially where these uses are proposed to be located in areas particularly susceptible to contamination.

3. Reasonable Basis Requirement for Classification of Uses and Lands Subject to Regulation

The use of zoning to protect groundwater was advocated as early as 1975 in a publication, *Performance Controls for Sensitive Lands*,[340] which discusses several local regulatory programs that identify recharge zones and contain special controls to avoid groundwater contamination. More recently, there have been a growing number of references to local zoning controls to achieve these purposes,[341] including a statement by the E.P.A. that:

336. *Id.* at 328, 456 A.2d at 705. The court in this case concluded that automobile wrecking yards are not generally hazardous to the public and the prohibition was therefore not *prima facie* valid. *Id.* The burden of proof thus shifted to the municipality.

337. *Id.*

338. 69 Pa. Commw. 271, 450 A.2d 799 (1982).

339. 592 F. Supp. 633 (D. Mass. 1984).

340. Thurow, Toner and Erley, *Performance Controls for Sensitive Lands*, American Planning Ass'n, Planning Advisory Service Rep. No. 307 (1975).

341. *See, e.g.*, Crystal, *supra* note 204; Horsley, *supra* note 168; Mulica and Beck, *Municipal Ground-Water Supply Protection and Management Techniques in Massachusetts*, *id.* at 291; Tanenbaum, *Hydrogeologic Zoning on Long Island*, State, County, Regional and Municipal Jurisdiction of Ground-Water Quality Symposium 57 (Sept. 22-24, 1982); Tripp and Jaffe, *supra* note 8; and URISH, OZBILGIN AND BOBROWSKI, *supra* note 204.

> [l]ocal governments can also play a major role in groundwater protection. . . Through local zoning, lot sizes have been regulated [in] a few localities to prevent intensive residential or commercial development over recharge areas . . . some communities also set restrictions on the density of septic systems.[342]

Zoning ordinances are occasionally challenged on the basis of an unreasonable classification of land uses in the zoning text. The more common equal protection challenge is that land is unreasonably classified by being placed in the wrong zoning district, *i.e.*, it is incorrectly mapped. Courts have traditionally upheld land use classifications if they have been accurately delineated and reasonably related to a legitimate public purpose.

Various courts have recognized the difficulty of drawing exact zoning boundaries and have related this exercise to the presumption of validity.[343] This presumption of validity of the location of zoning district boundaries can be an important factor in supporting land use control techniques such as overlay districts which designate special management areas based on relatively general groundwater information.

Courts may be more willing to uphold relatively severe restrictions on land use if local governments limit the application of the most stringent controls to pre-designated "special management areas." Special management areas are those locations such as aquifer recharge areas and wellhead protection areas which are particularly susceptible to contamination and are most seriously damaged by the effects of contamination. Uses which are prohibited within special management areas can be permitted under appropriate conditions in less vulnerable areas. This regulatory technique thus gives special emphasis to the site characteristics at the location of a proposed land use as well as the nature of the intended activity.

The concept of special management areas allows local governments to concentrate limited financial and other resources in key

342. EPA STRATEGY, *supra* note 1, at 23.

343. The Wisconsin Supreme Court has stated, for example, that:

> [i]t follows as a corollary to the presumption of validity and from the fact that the shaping of zoning districts for land use is primarily a legislative function that when the validity of the ordinance in this respect is fairly debatable it should be upheld and the court should not substitute its judgment for that of the municipality.

State *ex rel.* American Oil Co. v. Bessent, 27 Wis. 2d 537, 546, 135 N.W.2d 317, 323 (1965) (citations omitted).

locations and can be used as a technique to set priorities in terms of the geographic scope of programs. The hydrogeologic and other information used to identify special management areas establishes a data base upon which local governments may rely if the zoning ordinance is later challenged in court.

Courts seem to be more willing to uphold relatively stringent density regulations applied in scientifically delineated special management areas than they are to uphold zoning changes based upon little or no scientific data. In *Blodgett v. County of Santa Cruz*,[344] the Ninth Circuit Court of Appeals upheld a county's ten-acre minimum lot size requirement enacted in part to protect the primary groundwater recharge area within which the plaintiff's property was located. In *North Shore Universalist Society Inc. v. Incorp. Village of Upper Brookville*,[345] the Appellate Division of the New York Supreme Court upheld the validity of an ordinance which required two- and five-acre minimum lot sizes in part because various reports indicated that the village is located within an environmentally sensitive area which is a primary source of drinking water for two counties.[346] Preservation of finite water resources and open space and protection of groundwater were among the purposes cited by the court as legitimate goals of zoning ordinances.

In *Moviematic Industries Corp. v. Board of County Commissioners of Metropolitan Dade County*,[347] the plaintiff had owned the land at issue for over ten years when, based upon a comprehensive study, the county rezoned the land from heavy industrial use to single-family residential with a minimum lot size of five acres. In upholding the new zoning classification, the Florida District Court of Appeal stressed the fact that the rezoning was based upon scientific findings.[348] It determined that "ecological considerations are legitimate objectives of a zoning ordinance or resolution"[349] and the density controls employed by the county were particularly appropriate in this case since plaintiff's property overlay the Biscayne Aquifer, the source of virtually all drinking water in Dade

344. 698 F.2d 368 (9th Cir. 1982).

345. 110 A.D.2d 123, 493 N.Y.S.2d 564 (1985).

346. *Id.* at 127, 493 N.Y.S.2d at 567.

347. 349 So. 2d 667 (Fla. Dist. Ct. App. 1977).

348. *Id.* at 669, citing Nattin Realty, Inc. v. Ludewig, 67 Misc. 2d 828, 324 N.Y.S.2d 668 (1971) and Steel Hill Development, Inc. v. Town of Sanbornton, 469 F.2d 956 (1st Cir. 1972).

349. *Moviematic*, 349 So. 2d at 670.

County.[350] The court also recognized that due to the unique hydrology and geology of the area and the existence of inland drainage canals, a conservation area, the aquifer and other factors, the area was in need of special protection.[351] In *Albano v. Mayor and Township Committee of Township of Washington*,[352] the New Jersey Superior Court also upheld the application of density controls to property identified as particularly susceptible to water pollution.

Other courts have, however, invalidated the use of density controls in special management areas to protect groundwater quality where, for example, a municipality failed to show that the controls were necessary for protection of the resource. In *Kasparek v. Johnson County Board of Health*,[353] the Iowa Supreme Court invalidated a five-acre minimum lot size requirement imposed on land within the Lake Macbride watershed. The regulation was enacted in part to protect ground and surface water from private sewage system contamination. The court found that there was no evidence of either present or future pollution from such systems and, citing *National Land and Investment Co. v. Kohn*,[354] it ruled that there were alternative methods for dealing with the alleged sewage problem.[355]

Courts have also upheld prohibitions on various land uses in environmentally sensitive areas. In *Rollins Environmental Services, Inc. v. Township of Logan*,[356] the New Jersey Superior Court upheld the validity of a township ordinance which prohibited the location of polychlorinated biphenyls (PCBs) within areas designated by the ordinance as environmentally sensitive. Having concluded that the ordinance was not preempted by either state or federal law,[357] the court turned to the issue of the reasonableness of the ordinance. It states that: "[i]t is extremely significant that this ordinance does not attempt to place a total ban on the placement of PCBs in the township. Instead, the ordinance only prohibits the storage of PCBs in certain, well-defined environmentally sensitive

350. *Id.*

351. The court also considered whether the ordinance constituted an unconstitutional taking; this aspect of the case is discussed *infra* note 403 and accompanying text.

352. 194 N.J. Super. 265, 476 A.2d 852 (1984).

353. 288 N.W.2d 511 (Iowa 1980).

354. 419 Pa. 504, 215 A.2d 597 (1965).

355. *Kasparek*, 288 N.W.2d at 519.

356. 199 N.J. Super. 70, 488 A.2d 258 (1984).

357. *Id.* at 77-79, 488 A.2d at 259-62.

areas,"[358] eleven of which involve either surface or groundwater considerations.

In another case, an entire town was effectively considered a special management area due to its proximity to a reservoir and the unusually high groundwater level throughout the area. Based in part upon consideration of these factors, the U.S. District Court in *Barre Mobile Home Park v. Town of Petersham* [359] upheld a town zoning ordinance which totally prohibited mobile home parks. The court noted that because of the high clay content of the soil and the shallow depth to bedrock, larger than normal building lots were necessary to accommodate the individual septic systems used in the town. Permitting mobile homes in the town at the density proposed by the plaintiff would not, the court found, provide sufficient protection from contamination of the groundwater or the nearby reservoir.[360]

Similarly, the township of Plumstead was considered a special management area by the Commonwealth Court of Pennsylvania when the court upheld a zoning ordinance which prohibited all junk, salvage or automobile wrecking yards. The court in *Schuster v. Plumstead Township Zoning Hearing Board* [361] upheld the prohibition upon presentation of evidence by the township that various pollutants would inevitably leak from the yard. The pollutants, the court found, were likely to seep into the groundwater (which was the sole source of drinking water for the township) or combine with surface runoff to pose a threat to the public health, safety and welfare of the entire township.[362]

Several courts have upheld the denial of conditional use permits to protect groundwater quality in environmentally sensitive wetland areas.[363] Where the local government fails to show that groundwater quality will be adversely affected, however, courts

358. *Id.* at 79, 488 A.2d at 262-63.

359. 592 F. Supp. 633 (D. Mass. 1984).

360. *Id.* at 636.

361. 69 Pa. Commw. 271, 450 A.2d 799 (1982). *Compare* this case with Lower Southampton Township Bd. of Supervisors v. Schurr, 72 Pa. Commw. 322, 456 A.2d 702 (1983) discussed *supra* note 335 and in accompanying text. The different holdings in these cases point out the need for a municipality to relate the quality and quantity of required scientific and other information to the stringency of the regulation.

362. *Schuster*, at 275-76, 450 A.2d at 801 (1982). The court found that pollutants such as ethylene glycol (used in antifreeze), battery acid, and petroleum derivatives would inevitably leak from wrecked vehicles.

363. See this discussion *supra* note 325 and accompanying text.

will be less willing to sanction the denial of conditional use permits.

In *Dade County v. Florida Mining and Minerals Corp.*,[364] for example, the court focused on the pollution potential of the proposed mining activity. Plaintiffs challenged the county's denial of permission to mine construction aggregates because the land had been identified by the master plan as being within the "environmental sensitivity subzone," an area in which mining was prohibited because of potentially adverse impacts upon water quality.[365] The Florida District Court of Appeal ruled that the county had acted unreasonably and arbitrarily in denying the conditional use permit[366] since plaintiff had shown that its mining activities would have no significant impact on water quality in the Biscayne Aquifer which underlay plaintiff's property.[367] In addition, the court held, the county permit denial was discriminatory since the county had granted permits to mine land adjacent to plaintiff's, and there was no showing that plaintiff's land was more environmentally sensitive than that in the immediate vicinity.[368]

4. Regulatory Takings

One of the more common objections to the implementation of natural resource zoning controls, not unexpectedly, is that a zoning ordinance has effected a taking without due compensation.[369] The high incidence of taking claims is due, in part, to the restrictive nature of the regulations and to the perception that while the benefits of regulation are enjoyed by the general public, the burdens of regulation may be concentrated, limiting the develop-

364. 364 So. 2d 31 (Fla. Dist. Ct. App. 1978).

365. *Id.* at 32-33. Although the master plan prohibited mining, the court found that the plan "is not beyond being altered by the courts where. . . strict adherence. . . proves to be unreasonable, arbitrary and/or confiscatory." *Id.* at 34.

366. *Id.* at 34.

367. *Id.* at 32-33.

368. *But cf.* Town of Indialantic v. McNulty, 400 So. 2d 1227 (Fla. Dist. Ct. App. 1981) (Fifth District Florida Court of Appeals upheld denial of a variance to construct a dwelling on the coast of the Atlantic Ocean where plaintiff failed to show ordinance prohibiting such construction was invalid on its face or as applied to his property. The court found that where there is substantial harm to be prevented (in this case, destruction of wetlands, flooding and storm danger), plaintiff's burden is heavier to show such damage will not occur; here, plaintiff's hand-drawn sketch of the proposed construction did not meet this requirement).

369. *See supra* note 284.

ment options of the owners of land which overlays regulated groundwater recharge areas.

There is no single test which is universally employed by the courts to determine whether a taking has occurred, nor is one likely to be formulated given the highly fact-sensitive nature of taking cases.[370] Many courts adhere to the general principles that a mere diminution in value is insufficient to constitute a taking. If, however, the interference with the land is so substantial as to render the property worthless or useless, a taking will be found.[371] A taking can occur even though the regulation "is intended only to promote public health, safety, or morals."[372]

The United States Supreme Court has recently ruled that where the government has taken property by regulations which deny all reasonable use of the property (even for a "temporary" period), the landowner may recover damages for the period during which the regulation was in effect.[373] This decision is important to local governments since judicial remedies now include payment of due compensation in addition to the usual remedy of invalidation of the zoning regulations as they apply to the property in question. Before compensation is due, however, a taking must be found, and reasonable regulations designed to protect the public health and safety will usually be upheld.[374]

370. ANDERSON, *supra* note 199, at § 3.26.

371. *See, e.g.*, Annicelli v. Town of South Kingstown, 463 A.2d 133 (R.I. 1983) (action in inverse condemnation where landowner was deprived of all beneficial use of the property; discussed *infra*, notes 436-440 and accompanying text). It is not enough that the regulation deprives the property owner of the most profitable use of the property, (United States v. Central Eureka Mining Co., 357 U.S. 155, 168, (1958)) or that the regulation causes a severe decline in the property's value (Goldblatt v. Town of Hempstead, 369 U.S. 590, 594 (1962)). In this regard, courts often "balance" the harm to the landowner against the benefit to the public. If the harm to the landowner is minimal (or even substantial) but the public benefits outweigh the harm, a court may find the ordinance valid. Conversely, if the harm to a landowner is great and there is little public benefit, the ordinance may be invalidated.

372. Bley, *Use of the Civil Rights Act to Recover Damages for Undue Interference With the Use of Land*, SOUTHWESTERN LEGAL FOUNDATION, INSTITUTE ON PLANNING, ZONING AND EMINENT DOMAIN § 7.02 [2] (1985) (citing Devines v. Maier, 665 F.2d 138, 142 (7th Cir, 1981), *rev'd on other grounds*, 728 F.2d 876 (7th Cir. 1984)).

373. First Evangelical Lutheran Church v. County of Los Angeles, 107 S. Ct. 2378 (1987). Several state courts have also addressed this issue. *See, e.g.*, Zinn v. State, 112 Wis. 2d 417, 334 N.W.2d 67 (1983), and Petersen v. Dane County, 136 Wis. 2d 501, 402 N.W.2d 376 (Wis. Ct. App. 1987).

374. Keystone Bituminous Coal Ass'n v. DeBenedictis, 107 S. Ct. 1232 (1987).

A number of cases involving challenges to density controls have addressed the taking issue. In *Salamar Builders Corp. v. Tuttle*[375], the court found that the rezoning of plaintiff's land to require a greater minimum lot size[376] served a valid public purpose and did not constitute a taking. Regarding the taking issue, the court looked primarily at the potential pecuniary loss to plaintiffs, finding that the plaintiff had not established that the ordinance had deprived it "of any use of the property to which it is reasonably adapted, or serves to destroy the greater part of its value."[377] Although there was some question as to the amount of plaintiff's potential loss, the court found that in any event, the losses claimed fell "far short of that hardship which deprives it of any use of the property to which it is reasonably adapted"[378] and thus the ordinance would not be deemed confiscatory.

Similarly, the court in *Curtiss-Wright Corp. v. Town of East Hampton*[379] held that there was no confiscation where the town increased its minimum lot size from one-half to two acres. The court noted that "the test of constitutionality of a zoning ordinance is not whether a substantially higher value can be obtained under less restrictive regulations [citation omitted] but whether no reasonable return can be obtained from the property under the existing regulations."[380]

Several courts have found density requirements in the form of large minimum lot sizes to be excessive. In *State ex rel. Nagawicka Island Corporation v. City of Delafield*,[381] the Wisconsin Court of Appeals held that a zoning ordinance which required a three-acre minimum lot to construct a residence was unconstitutional when applied to a two-acre island. The ordinance, enacted in part to prevent sewage emissions into the lake surrounding the island, was found to be unreasonably harsh since there were other means to control emissions. The court ruled that the city could con-

375. 29 N.Y.2d 221, 275 N.E.2d 585, 325 N.Y.S.2d 933 (1971).

376. *Id.* at 221, 275 N.E.2d at 586, 325 N.Y.S.2d at 934.

377. *Id.* at 226, 275 N.E.2d at 588, 325 N.Y.S.2d at 936.

378. *Id.* at 228, 275 N.E.2d at 590, 325 N.Y.S.2d at 938.

379. 82 A.D.2d 551, 442 N.Y.S.2d 125 (1981).

380. *Id.* at 554, 442 N.Y.S.2d at 128. *See also, e.g.*, Zygmont v. Planning and Zoning Comm'n of the Town of Greenwich, 152 Conn. 550, 210 A.2d 172 (1965)(no taking where density controls imposed in part to protect groundwater supply from sewage since landowner could still build residences on the land). *Cf.* Stone v. City of Wilton, 331 N.W.2d 398 (Iowa 1983)(the court upheld the rezoning of plaintiffs' land from multifamily to single-family residential).

381. 117 Wis. 2d 23, 343 N.W.2d 816 (Wis. Ct. App. 1983).

demn or purchase the land but it could not prevent the landowner from using its land for any purpose other than as a "private park."[382]

Similarly, the court in *Kasparek v. Johnson County Board of Health*[383] invalidated an ordinance which required a five-acre minimum lot size in part because "plaintiffs and intervenors would be deprived of *any* reasonable use of their land by the regulation under attack,"[384] and other regulatory means were available.

Zoning ordinances which utilize conditional uses or special permits provide flexibility in controlling development, particularly in areas susceptible to groundwater contamination. Courts appear willing to uphold such ordinances (which often make development contingent upon the adequate provision of sewer and/or water supplies) provided they are reasonable, advance a legitimate public purpose, or are not enacted, for example, solely for the purpose of preventing growth.[385]

In *Giuliano v. Town of Edgartown*,[386] for example, the validity of a zoning ordinance which, *inter alia*, required a special permit to subdivide land in excess of ten lots in any twelve month period to reduce salt water intrusion of the groundwater was upheld. The court noted that the planning board was required to consider the "availability of public water and sewer,. . . [the] planned rate of development,"[387] and other factors to determine whether "the probable benefits to the Town outweigh the probable adverse effects resulting from granting such permit."[388] Plaintiffs alleged that denial of their permit to subdivide 59 lots in one year was a violation of their right to due process,[389] and constituted a taking. Regarding the taking claim, the court found that plaintiffs failed to prove either that the ordinance did not substantially advance legitimate state interests or that it denied economically viable use of the land.[390] It held that the ordinance did not prevent devel-

382. *Id.* at 28, 343 N.W.2d at 819.

383. 288 N.W.2d 511 (1980).

384. *Id.* at 519 (emphasis in original).

385. *See* discussion on exclusionary zoning *supra* beginning in part V of the text.

386. 531 F. Supp. 1076 (D. Mass. 1982).

387. *Id.* at 1078.

388. *Id.*

389. The court determined that there was no denial of due process since the ordinance "was reasonably related to the fulfillment of a legitimate public purpose . . . [including] the adequate provision of municipal services." *Id.* at 1081-82. It also found that the ordinance was not directed solely at limiting population. *Id.* at 1084.

390. *Id.* at 1084.

opment of the land but merely regulated the rate at which it could be developed, pointing out that "a mere diminution in the value of land does not constitute a taking, even when such diminution is extreme."[391]

Golden v. Planning Board of the Town of Ramapo[392] addressed the taking issue in the context of a challenge to a zoning ordinance which provided that subdivision plats would not be approved unless the applicant first obtained a special permit which indicated, *inter alia*, that adequate public sewers or approved substitutes were available.[393] The court found that requiring the special permit was a valid way to temporarily control growth[394] without preventing it altogether,[395] and that the regulations did not constitute a taking.[396]

Complete prohibition of development or of a particular land use to protect the public health and prevent groundwater contamination will likely be more closely scrutinized by courts than will the imposition of conditional use or other less stringent control measures.[397] The New York Court of Appeals struck down a prohibition of all multifamily dwellings in *Westwood Forest Estates, Inc. v. Village of South Nyack*.[398] The village had enacted a zoning ordinance prohibiting all such construction to prevent an increase in

391. *Id.* at 1085 (citations omitted).

392. 30 N.Y.2d 359, 285 N.E.2d 291, 334 N.Y.S.2d 138 (1972), *appeal dismissed*, 409 U.S. 1003 (1972).

393. *Id.* at 367-8, 285 N.E.2d at 295, 334 N.Y.S.2d at 142. Although the court does not specifically address the issue of groundwater contamination, lack of adequate public sewers or approved substitutes would presumably result in such contamination.

394. Expansion was linked to an 18-year capital budget. *Id.* at 382-83, 285 N.E.2d at 304-05, 334 N.Y.S.2d at 152-53.

395. *Compare* National Land and Investment Co. v. Kohn, 419 Pa. 504, 215 A.2d 597 (1965), in which the court found that the primary purpose of the zoning ordinance requiring minimum four acre lots was to "*prevent* the entrance of newcomers in order to avoid future burdens, economic and otherwise . . . . " *Id.* at 532, 215 A.2d at 612 (emphasis added).

396. ANDERSON, *supra* note 199 at § 10.09, notes that the *Ramapo* court was divided and "validated the plan only in the context of the thorough planning program which preceded it, the provision for full development of the town within a time certain, and the good faith of the town evidenced by a low cost housing program;" it is doubtful that a large number of communities will attempt such exhaustive planning. *Id.*

Other courts have validated the use of some land use controls to limit growth based on the temporary inadequacy of public facilities, but not on such a long time scale and only in the case of an "emergency" (*See, e.g.*, cases cited *supra* note 320.)

397. *See* the discussion on the burden of proof in cases involving prohibitory ordinances, beginning *supra* notes 334-339 and accompanying text.

398. 23 N.Y.2d 424, 244 N.E.2d 700, 297 N.Y.S.2d 129 (1969).

the amount of sewage effluent to the Hudson River. The court found that the ordinance constituted a taking because it "effectively prevents plaintiff from using its land for any purpose to which it is reasonably adapted"[399] and because there was a "marked discrepancy" in the value of plaintiff's land before and after the enactment of the ordinance amendment.

In addition to consideration of the diminution in value of plaintiff's land, the *Westwood* court also appears to have considered in its taking analysis the fact that the prohibition of multifamily dwellings was enacted not in response to the inadequate capacity of the sewage system,[400] but in response to the increased pollution of the river due to the inadequate treatment of sewage by the village. The court found that the problem was "general to the community and not caused by the nature of plaintiff's land . . . [and it was,] therefore, impermissible to single out this plaintiff to bear a heavy financial burden . . . ."[401] The village could impose limited restrictions on granting building permits, grant permits in stages, or even impose a moratorium on permits if reasonably limited as to time but it could not do so where the ultimate result was to effect a taking. Indeed, the New York Court of Appeals in a later case upheld a temporary moratorium on the issuance of building permits due to inadequate sewage facilities noting, however, that approval of such measures would be granted only under limited circumstances.[402]

Many of the cases which have addressed the taking issue in relation to groundwater-related zoning issues have involved municipal designation of special management areas. In *Moviematic Industries Corp. v. Board of County Commissioners of Metropolitan Dade County*,[403] the court found that the rezoning of plaintiff's land from heavy industrial use to residential use with a five-acre minimum lot size was reasonable and did not constitute a taking.[404] No evidence was presented which showed that the zoning resolution rendered plaintiff's land valueless; single family residential as well as other uses were still permitted.[405] At most, plaintiff had

399. *Id.* at 428, 244 N.E.2d at 702, 297 N.Y.S.2d at 131.
400. Only 75% of the hydraulic capacity of the system was being used. *Id.*
401. *Id.*
402. *See* Belle Harbor Realty, Inc. v. Kerr, 110 A.D.2d 123, 493 N.Y.S.2d 564 (1985).
403. 349 So.2d 667 (Fla. Dist. Ct. App. 1977).
404. *Id.* at 671.
405. *Id.*

only shown that the resolution reduced the market value of the land; that reduction, the court held, was not sufficient to constitute a taking.[406]

The requirement of ten-acre minimum lot sizes within a special management area was held not to constitute a claim in inverse condemnation in a case involving protection of a reservoir. In *D & R Pipeline Construction Co. v. Greene County*[407] the Missouri Court of Appeals ruled that the county's refusal to rezone plaintiff's property was justified since the county "had determined that denser development would be a potential threat to the water supply of Springfield."[408] Plaintiff alleged that the value of its land was reduced as a result of the county's refusal to amend the ordinance; the court found, however, that such an allegation could not serve as the basis for an action in inverse condemnation.[409]

The New Jersey Superior Court similarly found no taking had occurred in its decision in *Albano v. Mayor and Township Committee of the Township of Washington*.[410] The court ruled that the rezoning which required a three-acre minimum lot size to protect ground and surface waters did not zone "the property into idleness by restraint against all reasonable use"[411] since residential development could still occur. It found that plaintiff's alleged reduction of profits could have been attributable to a variety of reasons and did not establish that a taking had occurred. The court noted that:

> [i]f a zoning ordinance could be invalidated simply because a developer could not make a profit under its terms, then by paying an unreasonably high price he could force a municipality to adopt a zoning ordinance permitting unsound development of its property.[412]

Conversely, the use of density controls within special management areas may be found to constitute a taking. In *Kasparek v.*

406. *Id.*, (citations omitted). In this regard, *see also, e.g.*, Wilson v. Sherborn, 3 Mass. App. 237, 326 N.E.2d 922 (1975).

407. 630 S.W.2d 236 (Mo. Ct. App. 1982).

408. *Id.* at 237.

409. *Id.* at 237-238. *Cf.* Smith v. City of Clearwater, 383 So. 2d 681 (Fla. Dist. Ct. App. 1980), *reh'g denied*, 403 So. 2d 407 (Fla. 1981) (court upheld rezoning of plaintiff's land as "aquatic" [net effect of rezoning was to reduce the density of development] and held that no taking had occurred where single family homes could still be constructed and there were "serious environmental considerations" which justified the rezoning).

410. 194 N.J.Super. 265, 476 A.2d 852 (1984).

411. *Id.* at 277, 476 A.2d at 857-58.

412. *Id.*

Johnson County Board of Health,[413] for example, the Iowa Supreme Court ruled that while regulations to protect against groundwater contamination may be valid in some circumstances, the rezoning of plaintiff's land in this case was not justified and constituted a taking. The county had retroactively rezoned plaintiff's pre-platted land to require five-acre minimum lots since it was within the Lake Macbride watershed;[414] a grandfather clause made the requirement inapplicable to previously platted subdivisions outside of the Macbride watershed.[415] Plaintiffs challenged, *inter alia*, the validity of the ordinance as it applied to their property on the grounds that it was unreasonable and confiscatory.

Regarding the taking issue, the *Kasparek* court looked at the regulation in terms of "the nature of the menace against which it will protect, the availability and effectiveness of other less drastic protective steps, and the loss which appellants will suffer from the imposition of the ordinance."[416] The court found no testimony indicating present or future pollution of Lake Macbride by private sewage systems,[417] and existing health department regulations would prevent construction of septic systems if soil conditions were not favorable. It ruled that because of the manner in which the pre-platted land had already been divided and developed, the five-acre minimum lot size requirement could not be achieved on the remaining land, rendering it virtually useless.[418] The court also found that plaintiffs had acquired "vested rights" to continue their project since plaintiffs had incurred substantial expenses in reliance upon final approval of the subdivision in 1966.[419] These factors, the court concluded, constituted a taking of plaintiff's property.[420]

413. 288 N.W.2d 511 (Iowa 1980).

414. The five-acre minimum requirement was imposed "to separate out and dampen the impact of sewage recharge into the groundwater." *Id.* at 516.

415. *Id.* at 513. "The Lake Macbride watershed was not accorded the grandfather exception because it was viewed as one of 'multiple risks' both as to surface and ground water . . . ." *Id.* at 516.

416. *Id.* at 517 (citing Goldblatt v. Town of Hempstead, 369 U.S. 590 (1962) and Green v. Shama, 217 N.W.2d 547, 554 (Iowa 1974)).

417. *Kasparek*, 288 N.W.2d at 516-517.

418. *Id.* at 516.

419. *Id.* at 518. *But cf.* Stone v. City of Wilton, 331 N.W.2d 398 (Iowa 1983)(expenditures on planning and plat preparation did not constitute vested rights); and Sanderson v. Town of Greenland, 122 N.H. 1002, 453 A.2d 1285 (1982) (expenditures on rough roads and connection to public water system did not qualify as vested interest).

420. *Kasparek*, 288 N.W.2d at 520 (McCormick, J., dissenting). *Cf.* State *ex rel.* Nagawicka Island Corp. v. City of Delafield, 117 Wis. 2d 23, 343 N.W.2d 816 (Wis. Ct.

The dissenting opinion in the *Kasparek* case argued, *inter alia*, that the regulation did not foreclose development of plaintiff's land but simply required a central sewage disposal system to be used because of the significant health risks of installing private septic systems (even at a density of one system per five acres).[421] The dissent concluded that plaintiffs had not met their burden of showing the ordinance unreasonable or of showing that a taking had occurred.[422]

Although several early cases held that regulation of environmentally sensitive lands via conditional use provisions resulted in an unconstitutional taking,[423] later cases have largely rejected such claims.[424] Recent wetland regulation cases illustrate this point. In *Just v. Marinette County*,[425] plaintiffs challenged the constitutionality of a county shoreland zoning ordinance enacted pursuant to statute[426] which classified their property as "wetlands" and required them to obtain a conditional use permit to place more than 500 square feet of fill on the land. The court characterized the controversy as "a conflict between the public interest in stopping the despoilation of natural resources, . . . and land owner's asserted right to use his property as he wishes."[427]

The *Just* court stated that a taking occurs if "the restriction [on the land] practically or substantially renders the land useless for all reasonable purposes,"[428] adding that the court would also consider whether the damage to the landowner was so great "that he ought not to bear it under contemporary standards"[429] (*i.e.*, whether the regulation was "reasonable"). The court found that plaintiffs were not prevented from using their property since the ordinance provided that it could be used for "natural and indige-

App. 1983) (zoning restriction requiring minimum lot size of three acres found unconstitutional).

421. *Kasparek*, 288 N.W.2d at 521 (McCormick, J., dissenting). A witness testified that a central sewage system would actually be cheaper than individual systems. *Id.* at 522 (McCormick, J., dissenting).

422. *Id.* at 524 (McCormick, J., dissenting).

423. *See, e.g.*, MacGibbon v. Bd. of Appeals of Duxbury, 369 Mass. 512, 340 N.E.2d 487 (1976); State v. Johnson, 265 A.2d 711 (Me. 1970), and Morris County Land Improvement Co. v. Township of Parsippany-Troy Hills, 40 N.J. 539, 193 A.2d 232 (1963).

424. MANDELKER, *supra* note 243, at §§ 12.1-12.6.

425. 56 Wis. 2d 7, 201 N.W.2d 761 (1972).

426. WIS. STAT. § 144.26 (1987).

427. *Just*, 56 Wis. 2d at 15, 201 N.W.2d at 767 (1972).

428. *Id.* (citing Buhler v. Racine County, 33 Wis. 2d 137, 146 N.W.2d 403 (1966)).

429. *Id.*

nous uses"[430] and held that diminution of the value of plaintiff's land did not constitute a taking since such a claim was based not on the value of the land in its natural state, but on its value after filling and use for the location of a dwelling.[431]

Similarly, a Florida court in *Graham v. Estuary Properties, Inc.*[432] upheld the denial of a conditional use permit which would have allowed the development of approximately 6500 acres of wetlands. Citing the *Just* case, the court concluded that while the denial of the permit results in a public benefit (keeping the bays clean), the "benefit [is] in the form of maintaining the status quo"[433] and there was thus no unconstitutional taking of property. The court also found that the plaintiff had no investment-backed expectations of the use of the property, only his subjective expectation that the land could be developed as proposed.[434] Although the plaintiff had development plans prepared at consid-

430. *Id.* at 17, 201 N.W.2d at 768. Such uses included harvesting wild crops, sustained yield forestry, utilities, hunting, fishing, etc. *Id.* at note 3.

431. *Id.* at 23, 201 N.W.2d at 771. Significantly, the court characterized the regulation as preventing a public harm (destruction of the natural character of wetlands, which are recognized as playing a vital role in the preservation of all waters of the state) rather than creating a public benefit by excessively restricting a landowner's natural use of the land. The court found that:

> it seems to us that filling a swamp not otherwise commercially usable is not in and of itself an existing use, which is prevented, but rather is the preparation for some future use which is not indigenous to a swamp. Too much stress is laid on the right of an owner to change commercially valueless land when that change does damage to the rights of the public.

Id. at 22, 201 N.W.2d at 770. The court cited the case of Turnpike Realty Co. v. Town of Dedham, 362 Mass. 221, 284 N.E.2d 891 (1972) *cert. denied*, 409 U.S. 1108 (1973), as being analogous to the facts in the *Just* case. The *Turnpike* opinion upheld the validity of an ordinance establishing a flood plain district to preserve the natural condition of the land.

432. 399 So. 2d 1374 (Fla. 1981) *cert. denied sub nom.* Taylor v. Graham, 454 U.S. 1083 (1981).

433. *Id.* at 1382. The *Graham* court quoted the *Just* case for the principle that "[a]n owner of land has no absolute and unlimited right to change the essential natural character of his land so as to use it for a purpose for which it was unsuited in its natural state and which injures the rights of others." *Id.* (citing *Just*, 56 Wis. 2d at 17, 201 N.W.2d at 768 (1972)). The court also cited Goldblatt v. Town of Hempstead, 369 U.S. 590 (1962) for the idea that the owner of private property is not entitled to the highest and best use of his property if that use will create a public harm. *Graham* at 1832 (1981). *Cf.* Milardo v. Coastal Resources Management Council of Rhode Island, 434 A.2d 266 (R.I. 1981) (court held that denial of a permit for an individual septic system which would introduce effluent into a marsh and thus reach the water table in a protected coastal region was not a confiscatory taking).

434. *Graham*, 399 So. 2d at 1383.

erable expense, these did not show that development could occur without substantial harm to the environment.[435]

While the use of conditional uses to regulate environmentally sensitive areas has generally met with judicial approval, at least one ordinance which prohibited environmentally damaging uses has been construed as a taking. In *Annicelli v. Town of South Kingstown*,[436] the court held that an action in inverse condemnation existed where local regulations precluded a single family residence or any other use of the land in order to protect the barrier beaches on the property.[437]

In deciding the taking issue, the *Annicelli* court considered whether "the restriction practically or substantially renders the land useless for all reasonable purposes."[438] The court noted that it had a duty to balance the public interest in preserving barrier beaches with Annicelli's asserted right to use her property as she pleases.[439] While the court found that protection of barrier beaches is a worthy environmental goal that the town may lawfully pursue, the court concluded that in this case the ordinance constituted provision of a public benefit rather than protection of a public harm and deprived Annicelli of *all* reasonable use of her land.[440]

B. *Suggested Techniques to Avoid Constitutional Invalidity*

Analysis of the cases discussed above suggests certain regulatory techniques which may be used to avoid a judicial determination that a local groundwater ordinance is invalid on constitutional grounds. This overview of techniques is intended to provide general guidelines that may be used in drafting and administering ordinances. Zoning and subdivision ordinances[441]

435. *Id. Cf.* Town of Idialantic v. McNulty, 400 So. 2d at 1233 (1981).

436. 463 A.2d 133 (R.I. 1983).

437. *Id.* at 135.

438. *Id.* at 139 (citing Just v. Marinette County, 56 Wis. 2d 7, 15, 201 N.W.2d 761, 767 (1972) and Sundlun v. Zoning Bd. of Review of Pawtucket, 50 R.I. 108, 113, 145 A. 451, 454 (1929)).

439. *Annicelli*, 463 A.2d at 139.

440. *Id.* at 140.

441. *See supra* part V for a general discussion of zoning and subdivision regulations in Wisconsin. This discussion assumes local statutory authority to enact zoning ordinances to protect groundwater quality. In Wisconsin, local governments have been expressely authorized to zone for this purpose. *See supra* note 39 and accompanying text. In most other states, local governments are authorized to zone to protect the public health, safety and welfare, and groundwater protection certainly meets these objectives. In addition, it is

are the primary focus but many of these techniques apply to regulations enacted under other authority as well.[442]

The distinction between the various constitutional guarantees is often difficult to draw and the specific constitutional bases relied upon by the court may not be made explicit in judicial decisions:

> The distinction between substantive due process and other constitutional limitations is not always clear. Courts apply what amounts to a substantive due process test when they balance public purposes against private loss to determine whether a taking has occurred. Substantive due process also overlaps with equal protection. Equal protection doctrine demands that these classifications be legitimately related to an appropriate public purpose. The overlap with substantive due process analysis is clear.[443]

1. The Regulations Must Serve Valid Public Objectives

The general statement of purpose of the zoning ordinance, and more importantly, the specific statement of purpose and intent for each zoning district, can be a means to explain the rationale of the regulations, tying together legitimate public objectives, reasonableness of means and the special characteristics of the lands to which the regulations apply. A sample statement of purpose may read as follows: "The purpose of this district is to protect the groundwater resource and its interrelated surface waters from pollution and to prevent contamination of the drinking water supply[444] within areas delineated as susceptible to contamination because of their soils and hydrogeologic characteristics. Protection of these resources shall be accomplished by regulating land uses and substances which have been identified as having the potential to pollute groundwater."

The statement of purpose could also be made more elaborate or expanded to refer to consultant studies or other sources of information upon which the regulations were based. In those states

assumed that there is neither state nor federal preemption of the local regulatory authority.

442. *E.g.*, statutory home rule, statutes authorizing local regulation of activities and facilities which impact groundwater quality, etc. *See generally* parts III, IV and V of this article.

443. MANDELKER, *supra* note 243, at 37.

444. Protection of drinking water supplies has been recognized as a valid public purpose. *See, e.g.*, cases discussed beginning *supra* note 285 and accompanying text.

which require that zoning be based upon a separate, comprehensive plan and which require regulations to be consistent, the plan should be amended to reflect the new regulations and studies.[445] In those states which do not require zoning to be based upon a separate comprehensive plan, an expanded statement of purpose and intent can show the rational basis of the regulations.[446]

2. Reasonable Regulation to Achieve Valid Public Purposes

To help ensure that regulatory provisions contained within an ordinance constitute reasonable means of achieving the enumerated public purpose objectives of the ordinance, local governments must take care to relate the severity of the regulation chosen to the harm which is sought to be prevented.[447] An ordinance requiring two or three-acre minimum lot sizes for single family residences, for example, is more likely to be upheld if a community has documented, *inter alia*, (and preferably before an ordinance is enacted) that there is a real threat to groundwater quality if smaller lot sizes are permitted,[448] that existing laws and practices do not adequately control potential contamination from this source[449] and, in some states, that such a requirement does not have an exclusionary effect.[450]

Alternatively, if a community chooses to exclude a potentially contaminating activity throughout the entire municipality, it should be able to show that this relatively stringent measure is justified (*i.e.*, that the activity will harm groundwater resources no

445. MANDELKER, *supra* note 243, at 57-60.

446. *Id.*

447. *See generally* Blatt, *From the Groundwater Up: Local Land Use Planning and Aquifer Protection*, 2 J. LAND USE & ENVTL. L. 107, 141-43 (1986).

448. Community officials cannot simply assume a direct relationship between lot size and groundwater protection since the potential for contamination depends on the characteristics (topography, soils, hydrogeology, etc.) of the area in question. Where a community does not clearly establish the need for the specified lot size, a court may invalidate the ordinance. *See, e.g.*, Kasparek v. Johnson County Bd. of Health, 288 N.W.2d 511 (Iowa 1980), State *ex rel.* Nagawicka Island Corp. v. Delafield, 117 Wis. 2d 23, 343 N.W.2d 816 (Wis. Ct. App. 1983) and Martin v. Township of Milcreek, 50 Pa. Commw. 249, 413 A.2d 764 (1980).

449. *See, e.g.*, Kasparek v. Johnson County Bd. of Health, 288 N.W.2d 511 (Iowa 1980) and National Land and Investment Co. v. Kohn, 419 Pa. 504, 215 A.2d 597 (1965). Note, however, that even though they are statutorily authorized, many septic tank system regulatory programs may not be effectively protecting groundwater. *See* U.S. ENVIRONMENTAL PROTECTION AGENCY, SEPTIC SYSTEMS AND GROUND-WATER PROTECTION: A PROGRAM MANAGER'S GUIDE AND REFERENCE BOOK (1986).

450. *See* discussion beginning *supra* at part VI-A-1 and accompanying notes.

matter where it is located within the community).[451] This is particularly true in those states which reverse the normal burden of proof if zoning totally prohibits an activity.[452]

An alternative to total prohibition of an activity is prohibition limited to "special management areas,"[453] locations particularly susceptible to contamination. Use of special management areas, such as wellhead protection areas, allows the municipality to avoid overly broad regulations by limiting the most restrictive controls to those areas in the greatest need of protection. Delineating relatively small areas for the most stringent controls, however, raises possible constitutional challenges of improper classification under the equal protection clause and taking private property rights for a public benefit under the taking clause.

Zoning ordinances are also less likely to be successfully challenged on constitutional grounds if, instead of prohibiting certain activities, they contain reasonable conditional use provisions.[454] These ordinances achieve a desirable degree of flexibility because they allow certain uses if the standards specified within the ordinance are met and appropriate conditions attached to development permission are complied with.

Ordinances containing conditional use provisions should be as specific as possible in terms of the type of information the applicant can be required to submit. Standards by which conditional uses are to be judged and the conditions which may be required to mitigate contamination should also be as definite as possible to diminish the likelihood that courts will narrowly construe local governmental discretion to deny a conditional use permit.[455] A court may consider a listing in the ordinance of the informational requirements, the standards for evaluation and the conditions which may be attached as important safeguards providing a rational (*i.e.*, non-arbitrary) basis for discretionary decisions.[456]

451. In this regard, contrast the cases of Lower Southampton Board of Supervisors v. Schurr, in which the court invalidated a total prohibition of junkyards (*see supra* note 336 and accompanying text) and Schuster v. Plumstead Township Zoning Hearing Board (where the court upheld a total prohibition of junkyards) *see supra* note 338 and accompanying text.

452. *See* discussion beginning *supra* note 334 and accompanying text.

453. *See supra* part VI-A-3 for a more detailed description of these areas.

454. *See supra* part V-A of this text.

455. *See* MANDELKER, *supra* note 243, at §§ 6.51-6.53.

456. *See, e.g.*, State *ex rel.* Humble Oil Co. v. Wahner, 25 Wis. 2d 1, 130 N.W.2d 304 (1964), in which the court held that:

General categories of information, however, may sometimes be all that can be specified because informational needs may vary greatly from case to case.[457] It is important that applicants be provided an opportunity to conduct on-site investigations to show existing conditions differ from those mapped because the typical resource map is often too generalized to accurately depict the exact situation in the field.

3. Reasonable Basis Requirement for the Classification of Uses and Lands Subject to Regulation

Zoning ordinances are presumed valid[458] and courts have defined this presumption of validity to include the classification of uses within the text of the ordinance and the location of the district boundaries on the zoning map.[459] Nevertheless, these ordinances are often challenged on the basis that an individual has been denied equal protection because his land has been placed in the wrong zoning district, *i.e.*, incorrectly mapped.[460] For this reason, the classification of lands within an ordinance should be

> [w]here a local zoning board of appeals is given authority to exercise discretion and judgment in the administration of a zoning ordinance, some standards must be prescribed for the guidance of the board in exercising the discretion and judgment with which it is vested. Where no such definite standards are written into the ordinance the door is open to 'favoritism and discrimination'. . .

Id. at 11, 130 N.W.2d at 309 (citations omitted).

457. Generally speaking, the Wisconsin court has not required detailed standards for conditional uses. *See, e.g.*, Town of Richmond v. Murdock, 70 Wis. 2d 642, 235 N.W.2d 497 (1975). In Smith v. City of Brookfield, 272 Wis. 1, 74 N.W.2d 770 (1956), for example, the Wisconsin Supreme Court placed emphasis on the requirement for submitting information on the proposed land use location and plan of operation and the role this information played in the decision making process.

> The phrase ["location and plan of operations"] itself is very broad, and necessarily so, since the facts in one application may vary greatly from the facts in another, and obviously it would be impossible for the framers of the ordinance to anticipate all the possible details which might be enumerated therein. . .

Id. at 8, 74 N.W.2d at 774.

It can be argued that to require the landowner to provide detailed data about the proposed use and the site may be an unreasonable financial burden. This contention arose in the case of Kopetzke v. County of San Mateo Bd. of Super., 396 F. Supp. 1004 (1975) (court upheld regulations requiring technical information as a condition of obtaining a building permit).

458. *See supra* note 200.

459. *See, e.g.*, State *ex rel.* American Oil Co. v. Bessent, 27 Wis. 2d 537, 135 N.W.2d 317 (1965) (in relation to the question of location of district boundaries the court stated: "[b]oundaries of districts must be drawn somewhere if there are to be districts." *Id.* at 548, 135 N.W.2d at 322 (citation omitted)).

460. *See supra* part VI-A-3.

substantiated by information which shows why different pieces of land are treated differently and how these differences relate to the purpose of the regulation, *i.e.*, groundwater protection.

It is difficult to define the extent of prior documentation of scientific and other technical information that is required to produce a valid ordinance. If, however, the constitutionality of an ordinance is challenged, courts often give considerable weight to information in the form of expert testimony produced after regulations are in place.[461]

4. Regulatory Takings

Previous sections of this article contain discussions on the lack of a single test for determining when an unconstitutional taking has occurred. Despite the confusion and the complex nature of the law on this subject,[462] there are some general guidelines local governments may follow to help avoid this type of challenge to their ordinances.

In a broad sense, local governments should attempt to balance the benefits created by the ordinance (here, prevention of groundwater contamination) against the alleged harm to the landowner, often measured in terms of economic loss to the landowner. This may be accomplished by avoiding regulations which are so restrictive that there is no reasonable economic use of the land. Regulations should allow as many economic uses as are compatible with groundwater protection.

Courts have upheld relatively stringent regulations designed to protect wetlands as a natural resource.[463] Since the protection of groundwater as a natural resource also involves protecting the public health by safeguarding the drinking water supply, it is conceivable that courts may tolerate even more restrictive regulations to protect groundwater quality.[464] Where possible, the most

461. *See, e.g.*, Schuster v. Plumstead Township Zoning Hearing Bd., 69 Pa. Commw. 271, 450 A.2d 799 (1982), in which the court upheld a complete ban on auto wrecking yards based in part upon the testimony of an environmental expert that groundwater contamination was likely to occur.

462. There are numerous articles on this subject. C. Peterson and C. McCarthy, for example, cite 97 articles, texts, etc. on the topic in their book, HANDLING ZONING AND LAND USE LITIGATION: A PRACTICAL GUIDE (1982 and Supp. 1987).

463. *See, e.g.*, Just v. Marinette County, 56 Wis. 2d 7, 201 N.W.2d 761 (1972), a leading case upholding the constitutionality of a wetland regulation.

464. Various courts have included groundwater contamination considerations in deciding wetlands cases. *See, e.g.*, Goddard v. Board of Appeals of Concord, 13 Mass. App. Ct. 1001, 433 N.E.2d 98 (1982), discussed *supra* note 330 and accompanying text.

stringent regulations should be applied only to special management areas (*i.e.*, where there is the greatest potential for contamination) and conditional use provisions should be used elsewhere. Application of the most severe regulations to sensitive areas such as the area surrounding municipal wells could, however, provide a basis for a claim that a taking has occurred under the "enterprise" theory.[465] According to this theory, a landowner affected by such regulations might argue that the well is a public enterprise and the severe restrictions placed on land uses surrounding the well constitute a transfer of private property rights to the public that should have been purchased by the municipality.[466]

Municipalities may be able to avoid a taking claim under the enterprise theory if well protection is clearly expressed as part of a broader regulatory system that involves restrictions on the entire community through the regulation of groundwater recharge areas, the storage, handling and disposal of hazardous materials, and similar elements. Although property owners within the special management areas may still bear a somewhat greater burden than others, the benefits of the regulations are clearly enjoyed by all—an average reciprocity of advantage.[467] This is not to suggest that local governments should rely exclusively on the police power to protect groundwater quality. In some instances purchase of critical areas, use of transferable development rights or other techniques which provide compensation to landowners will be appropriate.

VII. Suggested Modifications in Wisconsin's Groundwater Protection Regulatory Program

Existing statutes should be modified to create a more comprehensive groundwater protection framework. This can be accom-

465. *See* Mandelker, *supra* note 243, at 17.

466. This approach has proven successful in challenges to severe restrictions near airport runways. *Id.*, at 31. The courts sometimes invalidate regulations in these instances because they believe a small number of property owners bear an undue burden, while under community-wide zoning there is a reciprocal benefit and burden.

467. "Average reciprocity of advantage" is illustrated by an exclusive residential zoning district in a comprehensive zoning ordinance which prohibits all incompatible uses: all the land within the district is burdened by the restriction, but all the land is also benefitted. *See* Mandelker, *supra* note 243, at § 2.10. Note that in Penn Central Transportation Co. v. New York City, 438 U.S. 104 (1978), the Court found that because New York City's landmark preservation law benefits all citizens, it did not constitute a taking because it placed a "more severe" impact on some landowners. Mandelker, *supra* note 243, at § 2.19.

plished through a limited expansion of the regulatory powers of state and local governments and a clarification of the interrelationships between their respective powers. More specifically, five program elements can be used to improve groundwater protection regulations:

> 1) Fill in gaps in the present state regulatory framework through the logical extension of existing state authority;
> 2) Clarify the respective authority of state and local government in the statutes by specifying areas of state preemption and authorizing appropriate local regulations where not preempted;
> 3) Direct state agencies to address the local regulatory role in their administrative rules and provide for state agency review of local ordinances where appropriate;
> 4) Spell out the regulatory relationship between the various local governments and specify who has the ultimate authority in case of conflict; and
> 5) Establish a system for providing state technical and financial assistance to local governments.

A. *Recommended Modifications*

1. Extend Existing State Authority to More Fully Protect Groundwater Quality

The suggestions for broadening state authority are relatively modest. They consist of extending regulatory authority from presently regulated activities to closely related but unregulated ones. Some of the suggestions[468] are in response to federal laws which mandate that certain groundwater protection measures be implemented if the state is to have regulatory primacy or which encourage state action through financial inducements.

The legislature might, for example, extend existing DNR authority over hazardous substances[469] to establish, *inter alia*, a reporting system for producers and users of hazardous substances as well as standards for the storage and handling of these substances.[470] The legislature might also authorize the state to reas-

468. For other suggested changes *see* Wisconsin Dep't of Natural Resources, Draft Report Number 6 of the Statewide Groundwater Management Plan: Assessment of Groundwater Management Programs in Wisconsin 1987.

469. Current DNR authority over hazardous substances extends primarily to labeling, transportation and employees' right to know of hazards in the workplace (*see supra* part IV-B-3 of this text and accompanying notes).

470. These and other programs are discussed more fully *infra*, part VII-B-3 of the text. Note that WIS. STAT. § 144.76(4)(a) (1987) and § 144.025(2)(d) (1987) provide the DNR

sert[471] its regulatory authority over junkyards and automobile wrecking yards which can be sources of contamination from fuel, oil, antifreeze, brake fluid and battery acid. Additional protection of municipal wells is also a likely focus of legislative action.[472] Legislation could require the DNR, for example, to establish a wellhead protection program which would specify minimum separating distances between potential pollution sources and municipal wells for state regulated activities and authorize supplementary local regulations. Additional ways in which the legislature might extend and/or modify existing state programs to more fully protect groundwater quality are suggested throughout this section.

2. Clearly Articulate the Division of Responsibility Between State and Local Government

Statutes should address the extent to which the state legislature intends to preempt local powers; *i.e.*, the law should clearly specify the subject matter the state intends as its sole responsibility. This objective has not been met with regard to all aspects of the regulation of groundwater quality. Statutes provide, for example, that the numerical standards established under the groundwater law shall be minimum standards for use by *state agencies* to protect groundwater quality.[473] The legislature did not, however, specifically prohibit local governments from establishing more stringent standards within their groundwater protection ordinances or establishing numeric standards for substances not regulated by the state.

The legislature should, in addition, clarify that local governments may adopt groundwater protection regulations which do not conflict with state law or technical standards contained in state administrative regulations. This may be accomplished by a

with the authority to regulate hazardous substance use to protect the waters of the state; this authority has not been exercized, however, except as applied to individuals with a history of hazardous spill violations (*see supra* note 181).

Note that a current legislative proposal (LRB-055412) would authorize the DNR to require a discharge prevention plan and an emergency contingency plan whether or not a discharge has occurred or is likely to occur.

471. State regulation of junkyards was discontinued in 1981, although it continues to regulate hazardous waste spills at junkyards (and other facilities) under WIS. STAT. § 144.76 (1985). *See supra* note 181.

472. Additional suggestions for the protection of municipal wells may be found *infra* part VII-B-4 of the text.

473. *See* WIS. STAT. § 160.001(5) and ch. 160 (1987), in general.

general purpose statute which provides, for example, that cities, villages, towns and counties may adopt groundwater protection regulations "which regulate substances that may contaminate groundwater which are not regulated by the state, which regulate lesser amounts of a substance than the state regulates, which require more frequent inspections or otherwise establish more stringent nontechnical requirements, or which regulate the location of an activity which may contaminate groundwater without unreasonably excluding such activity. Such local groundwater protection regulations shall be deemed not to be in conflict with state regulations unless state statutes or administrative rules expressly provide otherwise." In addition to clarifying the scope of local powers, such a provision would constitute enabling authority to enact groundwater protection ordinances for counties and towns which do not have home rule powers.

An alternative to the general approach outlined above would be for the legislature to address the respective powers of state and local governments to protect groundwater quality in terms of each state regulatory function (*e.g.*, the regulation of underground storage tanks, pesticides, well recharge areas, etc.). Under either approach, statutes should direct state agencies to address the issue of local governmental authority vis-a-vis the state within their administrative regulations.

3. Direct State Agencies to Address the Local Regulatory Role

Administrative agencies are charged with the responsibility of carrying out legislative directives; requiring agencies to specifically address the regulatory role of local governments using general guidelines supplied by the legislature is compatible with this function. The administrative agency which prepares detailed regulations on a particular subject is in the best position to spell out in its administrative regulations the types of supplementary local regulations that would be compatible with state rules.

An additional method to ensure that specific local ordinances are compatible with state regulations would be for the legislature to provide for state agency review of local ordinances in appropriate situations. State agency review could be made either a mandatory responsibility or an optional authority of the state agency depending upon legislative judgment.

Authorizing state agency determination of local regulatory authority subject to general statutory guidelines may seem to give agencies excessive power. However, granting authority does not mean that the state legislature, local governments or interested citizens will not be able to influence the agency determination. Proposed administrative rules already undergo an extensive review process including public hearing and a number of other points of access to influence the rules.[474] Review of proposed administrative rules in Wisconsin includes scrutiny by the State Legislative Council Administrative Rules Clearinghouse, public hearing by the issuing agency in most cases[475] and review by the appropriate committee of each house of the legislature which may also choose to hold a public hearing. If either committee objects to a rule,[476] it is referred to the Joint Committee for Review of Administrative Rules (JCRAR) which must also hold a public hearing. If the JCRAR agrees with the legislative committee objection, it must submit in each house of the legislature a bill to prevent the rule from being adopted; if the bill is not enacted the agency may then promulgate the rule.[477] In addition, local governments have the authority to contest rules in court on the basis

474. *See generally* WIS. STAT. ch. 227 (1987). *See also* Wisconsin Taxpayers Alliance, State Administrative Rules Vol. 53, No. 8, 4-7 (1985) and Wisconsin Legislative Council Staff, Legislative Review of State Agency Administrative Rules, (Jan. 1985, Revised April 1986). This description of the review process indicates that there are a number of points of access to influence the substance of administrative rules.

475. WIS. STAT. § 227.16 (1987) provides for exceptions to this rule, including rules which are procedural rather than substantive and rules designed solely to bring the language of the rule into conformity with a statute or judicial decision. An agency may also elect not to hold a hearing on a rule provided it follows procedural requirements and provided the agency receives no petition requesting a hearing. *Id.* at § 227.02(1)(e).

476. A legislative committee may object to a proposed rule for one or more of the following reasons:

a. An absence of statutory authority.
b. An emergency relating to public health, safety or welfare.
c. A failure to comply with legislative intent.
d. A conflict with state law.
e. A change in circumstances since enactment of the earliest law upon which the proposed rule is based.
f. Arbitrariness and capriciousness, or imposition of an undue hardship.

WIS. STAT. § 227.19(4)(d) (1987).

477. WIS. STAT. § 227.19(5)(f) (1987).

that the agency acted beyond the scope of its authority or failed to comply with statutory rulemaking procedures.[478]

The form that regulatory relationships between state and local governments might take are illustrated by the following examples of existing arrangements found within the Wisconsin statutes.

1) Total state preemption of all local regulatory authority including zoning;[479]
2) Total state preemption of all local regulatory authority except zoning;[480]
3) Total state preemption of all local regulatory authority but authorization of local governments to administer state regulations;[481]
4) State preemption of technical standards (*e.g.*, materials and construction specifications) but local governments are authorized to set nontechnical standards (*e.g.*, frequency of facility inspections);[482]
5) State preemption of local regulatory authority except in locally adopted and state approved wellhead protection areas;[483]
6) State agency review of local ordinances (via legislative directive) to ensure that they comply with administrative regulations and do not cover subject matter preempted by the state. Review of local ordinances by state agencies could be made discretionary or mandatory by the legislature. The

478. Brown County v. Department of Health and Social Services, 103 Wis. 2d 37, 44-45, 307 N.W.2d 247, 251 (1981). Note that local governments may not, however, challenge the constitutionality of administrative rules.

479. WIS. STAT. § 144.445(5)(d) (1987), for example, authorizes a state solid waste siting board to issue an arbitration award which may supercede local regulatory approval authority, including zoning.

480. WIS. STAT. § 13.48(13) (1987) exempts state buildings, structures and facilities from all local regulations except zoning.

481. *Id.* at § 59.067(2) authorizing county adoption of well construction and pump installation ordinances provides that: "Provisions of the ordinance shall be in strict conformity with ch. 162 and with rules of the department under ch. 162." Thus the county could not set different standards for well construction and pump installation for *private* wells but the county zoning power could be used to regulate land use to protect *public* wells. *See* discussion beginning *supra* part IV-B-4 of the text.

482. *See, e.g.*, the discussion of state and local regulation of the underground storage of flammable and combustible liquids, beginning *supra* part IV-B-1 of the text.

483. This would allow local ordinances to be more restrictive than the state regulations in recognition of the importance to a local government of the protection of its drinking water supply. The delineation of wellhead protection areas and the regulations which apply would be subject to state agency review. (*See* discussion of wellhead protection areas *infra* part VII-B-4 of the text).

agency determination could be made either advisory or binding upon local government.[484]

7) State regulations constitute minimum standards and local governments may enact stricter regulations.[485]

4. Clarify the Regulatory Relationships Between the Various Local Governments

State statutes can be modified to clarify the regulatory relationships between the several types of local government. The basic relationships can take a number of different forms ranging from the traditional sovereignty of incorporated municipalities within their boundaries and rural units' authority outside them to the right of a county to regulate inside city or village boundaries or the right of an incorporated municipality to regulate extra-territorially.

Existing statutory arrangements suggest approaches that may be used in allocating local responsibilities for groundwater protection. These examples illustrate the factors that must be considered in structuring local relationships such as exclusive authority, primary authority, territorial scope and resolution of conflicting regulations.

1) One particular local governmental unit may be given sole authority to the exclusion of others, *e.g.*, counties currently have exclusive authority to enact well codes which apply to cities and villages.[486]
2) A contrasting approach in terms of preemption and authority to regulate within municipal boundaries applies to county sanitary codes which "do not apply within cities, villages or towns which have adopted ordinances or codes covering the same subject matter."[487]
3) Another version of local intergovernmental regulatory relationships applies in the case of regulation of land disposal of septage. A city, village or town may adopt and enforce a

484. WIS. STAT. § 91.06 (1987), for example, provides that the state Land Conservation Board must review local exclusive agricultural zoning ordinances and certify that they meet statutory standards to qualify landowners for farmland preservation tax credits. WIS. STAT. § 30.77 (1987), on the other hand, states that "[l]ocal regulations pertaining to equipment, use or operation of boats on inland lakes shall be subject to *advisory* review by the department" (emphasis supplied).

485. Wis. Stat. § 91.75 (1987), for example, established that the standards for exclusive agricultural zoning ordinances are minimum standards.

486. WIS. STAT. § 59.067(5) (1987). Note, however, the confusion created by a section of that statute in which the language is ambiguous. *See supra* note 233.

487. WIS. STAT. § 59.07(51) (1987).

septage disposal ordinance unless and until the county adopts such an ordinance (which then applies uniformly to the entire area of the county).[488]

4) Incorporated municipalities may be given the right to regulate outside their corporate limits. In the case of subdivision regulations, a city or village may adopt regulations extending 1-½ to 3 miles beyond their corporate limits.[489] This power may be exercised concurrently with the authority of a town and county to regulate within the same area.[490] Where more than one local unit has approving authority, the most restrictive requirements apply.[491]
5) Incorporated municipalities may zone extraterritorially for up to two years on a unilateral basis but after that time, if the regulations are to remain in effect, they must receive the concurrence of the majority of a joint extraterritorial zoning committee which has equal representation from the municipality and affected town.[492]

5. Extend Technical and Financial Assistance to Local Governments

In addition to clarification of the local regulatory role and state agency review of local ordinances, the state may also assist local governments by providing technical assistance in groundwater protection activities. This can take several forms: (1) The state can provide planning guides to help local governments develop groundwater management programs best suited to a particular area;[493] (2) Model ordinances for groundwater protection which contain technically sound standards can be prepared; and (3) Where authorized by administrative rule and local ordinance, state agencies can lend their expertise in making on-site inspections and reviewing proposals for development which are likely to affect groundwater quality.[494]

488. WIS. STAT. § 146.20(5m)(b) (1987).

489. WIS. STAT. § 236.02(5) (1987). *See* the discussion on extraterritorial land use controls beginning *supra* part V-C of the text.

490. WIS. STAT. § 236.45 (1987).

491. WIS. STAT. § 236.13(4) (1987).

492. WIS. STAT. § 62.23(7a) (1987). *See* the discussion on extraterritorial land use controls beginning *supra* part V-C of the text.

493. *See, e.g.*, "A Guide to Groundwater Quality Planning and Management for Local Government," Wisconsin Geological and Natural History Survey (1987).

494. The Wisconsin DILHR, for example, provides on-site inspections of proposed unsewered locally-defined plats when requested by local governments which have included such a provision in their subdivision ordinance. WIS. ADMIN. CODE § ILHR 85.002(2) (1985).

Financial assistance may take the form of direct state assistance[495] or authorizing local governments to share in the revenues from issuing permits.[496] Water utilities may also be authorized to tap new sources of revenue to protect public wells, *e.g.*, they could be authorized to include in their service charges the costs of groundwater protection studies or acquiring fee simple or less than fee simple interest in lands.

B. *Recommendations for Modification of Selected Groundwater Protection Programs*

Suggesting the appropriate allocation of regulatory responsibility between state and local government and among the various local governments involves a substantial degree of judgment. It is therefore important that the criteria that are considered be made explicit. The first consideration deals with the need to strike a balance between uniformity of regulations across the state and adaptability to specific local conditions. Uniformity in the form of preemptive state regulations may be necessary in order to prevent local governments from totally excluding necessary uses or activities (*e.g.*, in the case of solid waste disposal sites) or because uniform standards make sense and a proliferation of differing local requirements interferes with the reasonable conduct of the enterprise (*e.g.*, a uniform state building code for the housing industry). Adaptability to local conditions, on the other hand, would ideally allow regulations to reflect specific hydrogeologic conditions, existing land use patterns and community development objectives.

A second consideration in assigning regulatory roles deals with the question of expertise to set technical standards. Typically, state government possesses greater technical and financial resources than does local government; technical groundwater protection standards are therefore best determined by state agencies in the form of administrative regulations. State agencies preparing administrative regulations can, however, establish advisory

495. WIS. STAT. § 91.65 (1987) provides state financial aid to assist counties in developing agricultural preservation plans.

496. In Wisconsin, local governments currently share in the revenues collected by DILHR for septic tank permits (WIS. STAT. § 145.19 (1987)). A similar arrangement also exists for local fire department inspections and will likely apply to inspection of underground flammable and combustible liquids storage tanks. *See* WIS. ADMIN. CODE § ILHR 69.10 (1986) and DRAFT WIS. ADMIN. CODE § 10.20 (June, 1987)).

committees to utilize the expertise available from local government, state government, universities and the private sector. Local governments can be certified to administer state regulations if the local regulatory program meets state requirements designed to ensure satisfactory local administration. The state can provide training and technical and financial assistance to these local governments.[497]

Local administration can facilitate compliance with both state and local regulations, particularly where state regulations are administratively compatible with existing local regulatory programs. Most incorporated municipalities and counties have zoning ordinances which provide an existing administrative framework of permits, inspection, administration and enforcement. Compliance with state regulations is facilitated if a local administrator can perform a state-required inspection at the same time as attending to related local government business at the site (*e.g.*, when a well location inspection is conducted at the same time as a zoning inspection).

There are a variety of additional considerations in assigning regulatory responsibilities between governmental units. The geographic scope of a problem may argue for state level or county level regulation as opposed to municipal control. Alternatively, focusing on who is most directly affected by a potential problem point toward municipalities having the primary authority on the local level to regulate land use in the vicinity of wells from which their inhabitants drink. The respective costs to state and local government of adopting and administering the various regulatory measures and the ability to pay these costs is one of the most important factors that must be considered.

These program elements are best illustrated by application to existing groundwater protection regulations.

1. Underground Flammable and Combustible Liquid Storage Tanks

Existing state statutes pertaining to the regulation of underground flammable and combustible liquid storage tanks and the administrative rules which have been drafted to implement these

497. *See, e.g.*, WIS. ADMIN. CODE ch. NR 145 (1987) which contains standards for county adoption and enforcement of private well code ordinances.

statutes[498] represent an example of a relatively integrated state and local regulatory effort. To briefly summarize this program, the state/local regulatory relationship has been addressed,[499] the state has provided technical[500] and financial assistance[501] to local governments, and existing local administrative networks may be accessed to facilitate permitting and inspections.[502] DILHR's statutory authority should be broadened to include regulation of the underground tank storage of hazardous substances[503](in addition to regulating flammable and combustible liquids). Administrative rules should provide for a minimum separating distance between an underground storage tank and a well or wellhead protection area. The rules should more specifically identify the "technical" standards which may not be the subject of local regulations and the portions of the code where stricter standards could be set at the local level (*e.g.*, more frequent inspection and testing or special provisions applicable within wellhead protection areas).

Local fire departments would be the optimal primary regulating unit on the local level because this function is compatible with their responsibilities to inspect for fire safety. Counties should be authorized to adopt regulations as well. This would allow interested counties to undertake a regulatory program for groundwater quality purposes by providing tank permitting and inspection where small rural fire departments may not be willing or able to do so. County regulations would not apply within cities, villages and towns which have adopted such regulations.

498. The state regulatory program is discussed *supra* part IV-B-1 of the text.

499. Draft administrative rules provide for local regulation as long as there is no conflict with state law. *See supra* note 103 and accompanying text.

500. The draft DILHR rules contain numerous technical standards. DRAFT WIS. ADMIN. CODE ch. ILHR 10 (June, 1987). A handbook will be prepared to assist local officials to administer the new code.

501. *See* WIS. ADMIN. CODE § Ind 69.10 (1986) on distribution of fees to local fire departments for provision of inspections.

502. Local fire departments may elect to enforce tank inspection and enforcement provisions. *See supra* note 101 and accompaning text.

503. "Hazardous Substance" as the term is used within this article is defined *supra* note 173-174 and accompanying text. Bills which provide for substantially similar programs were introduced in both the 1985-1986 and 1987-1988 Wisconsin legislative sessions.

2. Pesticides

At the state level, the DATCP would continue to regulate pesticides[504] including the bulk storage of pesticides,[505] but it should review existing rules to protect groundwater quality more comprehensively. DATCP regulation of the bulk storage of pesticides (and fertilizer) which presently apply only to manufacturers and distributors should be extended to include on-site loading, mixing and storage by end users such as farmers. A minimum separating distance should be specified between bulk pesticide storage facilities and planned or existing municipal wells or wellhead protection areas. DATCP should review its administrative code and specify the conditions under which local governments could regulate pesticide application as well as other activities and facilities.

Local governments could be authorized to supervise the application of certain pesticides designated by DATCP and to adopt additional regulations as indicated in the administrative code. Local regulation to avoid wind drift and to control pesticide application in wellhead protection areas are examples of such regulations. Local ordinances would be subject to DATCP review and approval. Local regulation of pesticide application would be by the county in unincorporated areas but authorized at the town level if there are no county regulations; cities and villages should be authorized to adopt their own regulations. All local governments should clearly be authorized to use their zoning powers to regulate the location of commercial and noncommercial bulk storage facilities.

3. Hazardous Substances

A system has been initiated to require reporting by distributors and users of hazardous substances.[506] This information will be available to state regulatory agencies and local governments. Statutes should direct DNR to develop technical standards for the storage and handling of hazardous substances and should authorize DNR review of emergency contingency plans as they relate to groundwater protection.

504. State regulation of pesticides in Wisconsin is discussed *supra* part IV-B-2 of the text.

505. *See* WIS. ADMIN. CODE ch. Ag. 163 (1985).

506. This is discussed *supra* note 171.

Assuming a state regulatory program and administrative agency promulgation of technical standards, the local government role should be similar to that described for underground storage tanks[507] (*i.e.*, to provide for inspection of facilities and to regulate relatively small amounts of hazardous substances). Local governments should also be authorized to enact ordinances which do not conflict with state law.

Absent state regulation of hazardous substance storage and handling and collection of information regarding these substances, cities and villages in Wisconsin, for example, are clearly authorized to adopt ordinances on these matters;[508] the authority of counties and towns to carry out these programs is less clear.[509] Counties should be authorized to regulate the handling and storage of hazardous substances but the regulations should not apply within cities, villages or towns which have adopted their own regulations. The state should provide technical and financial assistance to local governments which choose to regulate these materials.

4. Wellhead Protection

The steps that state and local governments take to protect public drinking water are likely to be influenced by the Safe Drinking Water Act Amendments of 1986.[510] These amendments contain, *inter alia*, a new Wellhead Protection Program[511] which provides for the establishment of state[512] programs to delineate and protect wellhead protection areas[513] (WPAs) "from contaminants

507. *See supra* part VII-B-1 of the text.

508. *See* discussion beginning *supra* part III-C of the text.

509. *See supra* part III-A to III-C.

510. 42 U.S.C. §§ 1427 and 1428 (Supp. IV 1986).

511. 42 U.S.C. § 1428 (Supp. IV 1986). The amendments also contain programs for the delineation of sole source aquifers (SSA) and for a SSA demonstration program (42 U.S.C. §§ 1424(e) and 1427 (Supp. IV 1986), respectively).

512. Although the amendments are significant because they represent the first federal statutory program for the protection of groundwater resources (rather than for the control of specific contaminants or sources of contamination), the EPA has maintained its policy of having state and local governments take the lead role in developing and implementing groundwater protection programs (*see* discussion beginning *supra* part II of the text). OFFICE OF GROUNDWATER PROTECTION, ENVIRONMENTAL PROTECTION AGENCY, PROGRAM DEVELOPMENT PLAN FOR THE SWDA AMENDMENTS OF 1986 1 (July 31, 1986) (hereafter cited as "SWDA Program Plan"). Note that the legislation does not require states to develop these programs; the only penalty for not doing so is loss of related funds. *Id.* at 6.

513. "Wellhead protection areas" under the SWDA Amendments are defined as the surface and subsurface area surrounding a water well or wellfield, supplying a public water

which may have any adverse effect on the health of persons."[514] Once the EPA has approved a state wellhead protection plan,[515] the EPA shall make a grant to the state to cover not less than fifty percent nor more than ninety percent of the costs of developing and implementing the plan.[516]

The federal WPA legislation requires that states be allowed maximum flexibility in designing WPA plans; the EPA may disapprove a state plan only if it determines that the plan "is not adequate to protect public water systems . . . ."[517] It would therefore be reasonable for Wisconsin to develop a WPA plan which primarily reflects state and local needs and concerns (and also meets the minimum program requirements specified by the federal legislation).[518]

DNR should develop standards for the delineation of WPAs (using EPA guidelines where appropriate), which take into account that the standards will be applied to differing hydrogeologic conditions across the state. The statutes should clearly articulate the respective regulatory responsibility of various state and local governmental units to delineate and protect WPAs. The legislature should require local governments to protect new and existing sources of public drinking water[519] through zoning, special purpose regulations, fee simple purchase or purchase of development rights (see discussion, below).

The legislature should also direct relevant state agencies (and/or local governments, where appropriate) to develop regulatory programs for activities and facilities not currently regulated which could have an adverse impact on public drinking water supplies.[520] Agencies should, at a minimum, be required to specify

system, through which contaminants are likely to move toward and reach such water well or wellfield. The precise delineation of the area is not specified in the law, but is a site-specific determination made by individual states. The EPA is required to issue technical guidelines which states may use in determining the extent of a protection area. EPA Fact Sheet, Ground-water Provisions of the SWDA Amendments of 1986, (June, 1986).

514. 42 U.S.C. § 1428(a) (Supp. IV 1986).

515. States must submit plans by June, 1989. *Id.*

516. 42 U.S.C. § 1428(k). Congress has appropriated $20 million for fiscal years 1987 and 1988 and $35 million for each fiscal year 1989-1991 for the WPA program. *Id.*

517. 42 U.S.C. § 1428(c) (Supp. IV 1986).

518. The applicability of the wellhead protection concept in a variety of hydrogeologic settings in Wisconsin is discussed in WELLHEAD PROTECTION IN WISCONSIN, *supra* note 232.

519. The federal WPA legislation applies to all sources of public drinking water. The state of Wisconsin applies different regulations to water supply systems based upon ownership and persons served by the system (*see, e.g., supra* note 208).

520. *See, e.g.*, discussion beginning *supra* part IV-B-4 of the text.

minimum separating distances between public wells and the potential sources of contamination currently subject to state regulation.[521] An interagency committee should be established to review existing separating distances for consistency and completeness. A state wellhead protection program should address the issues of (1) establishing priorities for delineating WPAs, (2) different standards for different wells,[522] (3) varying hydrogeologic settings and (4) proposed well locations as compared with existing well sites. It is also important to consider how to deal with existing sources of potential contamination which are in close proximity to well sites.[523]

All local governments should be empowered to regulate sources of pollution within designated WPAs based upon state-developed minimum standards. Cities and villages should be required to delineate and regulate WPAs within their boundaries with counties being responsible for WPAs in unincorporated areas unless a town adopts more stringent regulations. Local governments can be authorized to contract with the state or consultants for actual WPA delineation. All local governments can be explicitly authorized to protect WPAs through the use of zoning, special purpose regulations and fee simple purchase or purchase of development rights.

While zoning is useful to set broad categories of land use compatible with wellhead protection and to control density of development, it controls only future land uses. The lawful use of a building or premises existing at the time of the adoption or amendment of a zoning ordinance may be continued as a nonconforming use although it does not conform with the provisions of the ordinance.[524] Special purpose regulations, on the other hand, could control existing land uses and activities conducted in conjunction with them (*e.g.*, the storage and handling of hazardous substances).[525] Authorizing local governments to purchase fee simple or development rights in land identified as a WPA would

521. Existing regulations pertaining to potential contaminants should also be reviewed to ensure that they meet the new WPA program criteria.

522. *E.g.*, municipal and non-municipal wells.

523. *See* discussion below.

524. WIS. STAT. §§ 59.97(10) (1987) (counties); 60.61(5) (towns); and 62.23(7)(h) (cities). Generally, *see* ANDERSON, *supra* note 199, at §§ 6.01-6.79.

525. *See supra* part VII-B-3 of the text and accompanying notes. *See also* discussion beginning *supra* part IV-B-3 of the text and the other hypothetical ordinances discussed within section IV.

permit these entities to more completely restrict the uses conducted on the land than would be possible under regulations. This may be, however, an expensive alternative in some cases. The cost of WPA delineation and the purchase of fee simple or development rights in land to protect WPAs could be funded by allowing or requiring water utilities to levy a charge for these purposes.

VIII. CONCLUSION

The protection of groundwater quality is primarily the responsibility of state and local governments under the present regulatory structure. Wisconsin established one of the leading state protection programs when its legislature enacted 1983 Wisconsin Act 410. Under this strengthened statutory framework the state has primary responsibility to set numeric groundwater quality standards, to conduct a monitoring program and to regulate many pollution sources. Local government has the explicit authority to use its zoning power to protect groundwater resources. In addition, it may use other regulatory authorities to supplement state regulations, and can administer several sets of state regulations to protect groundwater quality. A groundwater protection program that includes active participation by both state and local government may prove to be the preferred model for many states.

Although the Wisconsin law created a *de facto* state-local groundwater quality regulatory program, the statutes are silent on a number of points concerning intergovernmental relations. A review of case law concerning state preemption and an analysis of likely judicial reaction to typical state-local regulatory programs suggests the need to address these issues. Statutory clarification of the respective governmental roles and review of local regulations by state administrative agencies are measures which can clarify the question of state preemption and can facilitate intergovernmental cooperation.

Analysis of a number of cases involving local regulations designed to protect groundwater quality indicates that courts will generally uphold local regulations which classify uses on the basis of their threat to groundwater quality, focus on the susceptibility of various lands to groundwater contamination and strike a reasonable balance between the stringency of the regulations and the threat to the public health. A sound factual underpinning and the use of flexible regulatory techniques such as overlay districts and

conditional uses can help ensure the validity of local regulations. Local governments can perform an important function in groundwater quality protection with the strongest programs usually resulting where legislation is specifically designed for state and local governments to play complementary roles.