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THEORIES OF WATER POLLUTION LITIGATION†

PETER N. DAVIS*

The common law has traditionally provided the rules that govern relationships among landowners in their use of watercourses. These rules are embodied in the eastern United States in the doctrine of riparian rights, which addresses itself both to water quantity, and to water quality. Persons complaining of pollution of waters abutting their lands have, in addition to redress by complaint to the state pollution control agency, redress by lawsuit against the alleged polluter. This common law supplements the body of statutory law regulating the waters of the state for the benefit of the people.

I. PRIVATE NUISANCE V. RIPARIAN RIGHTS

The American common law concerning pollution of watercourses is by no means clear or unconfused. The cases constitute a morass of conflicting doctrines, and represent efforts to deal with individual situations rather than to provide clarity in defining legal rights. This article will attempt to shed light on the scope of the confusion and will suggest a way of approaching the problem of water pollution.

Water pollution cases contain a fundamental source of confusion: which legal theory is to be followed—natural flow, reasonable use or private nuisance? Unfortunately, American decisions do not distinguish clearly among these disparate concepts. As a result, the cases frequently bear no relationship to each other in doctrine or in result.

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A. Definitions of Riparian Rights and Nuisance

The question basic to water pollution litigation is whether a landowner has a right to discharge wastes into a stream, and, it is, perhaps, the most confusing question of all, because the cases discuss two basic concepts, riparian rights and nuisance, without clearly delineating which controls the decision or without even recognizing that the two are distinct doctrines. The confusion is illustrated by cases which state that violation of riparian rights constitutes a nuisance,¹ and those which state that a nuisance condition constitutes a violation of riparian rights.² While a particular pollution situation may constitute both a violation of riparian rights and a nuisance, the equivalence does not exist in every situation. For courts to equate the two can only muddy the legal analysis required for arriving at future decisions.

1. RIPARIAN RIGHTS

The riparian rights doctrine has been accepted in 31 eastern states as the prevailing rule controlling rights to use water in watercourses.³ It was first clearly formulated in 1827 in the landmark case, *Tyler v. Wilkinson*.⁴ Each proprietor of land abutting on a watercourse has a co-equal right to use water in that watercourse. However, the statement of that correlative right has always contained two inconsistent concepts: under the natural flow concept, each riparian proprietor is entitled to have the water in the watercourse come down to him unchanged in quantity or quality; but, following the reasonable use doctrine, each riparian proprietor has a co-equal right to make reasonable uses of that water even if some alteration in quantity, quality, or flow pattern occurs. The interpretation of riparianism followed in each state is determined by which of these two concepts is emphasized by its courts. Most states have adopted the "reasonable use" concept of riparian rights.

While some early stream diversion and obstruction cases in Wis-

1. *Alabama Consol. Coal & Iron Co. v. Turner*, 145 Ala. 639, 649-50, 39 So. 603, 605 (1905); *Peterson v. City of Santa Rosa*, 119 Cal. 387, 392, 51 P. 557, 559 (1897); *City of Kewanee v. Otley*, 204 Ill. 402, 409, 68 N.E. 388, 390-91 (1903); *Neubauer v. Overlea Realty Co.*, 142 Md. 87, 98, 120 A. 69, 73 (1923); *Southland Co. v. Aaron*, 221 Miss. 59, 72-73, 72 So. 2d 161, 165-66 (1954); *Holsman v. Boiling Spring Bleaching Co.*, 14 N.J. Eq. 335, 342-43 (Ch. 1862); *City of Mansfield v. Balliett*, 65 Ohio St. 451, 466-67, 63 N.E. 86, 90-91 (1902).

2. *Platt Bros. & Co. v. Waterbury*, 72 Conn. 531, 547, 45 A. 154, 161 (1900); *Barton v. Union Cattle Co.*, 28 Neb. 350, 356-57, 44 N.W. 454, 455-56 (1899); *Trevett v. Prison Ass'n*, 98 Va. 332, 336-37, 36 S.E. 373, 374 (1900).

3. In the western states the rule of prior appropriation is followed. Because it is so different in concept from riparianism, the rules concerning water pollution are also different. This article will not discuss those western rules.

4. 24 F. Cas. 472 (No. 14,312) (C.C.D.R.I. 1827). See 3 J. KENT, COMMENTARIES 353-55 (1st ed. 1828).

consin spoke in terms of natural flow, the court in those cases followed the reasonable use interpretation of the riparian doctrine,⁵ and in a parallel line of cases adopted reasonable use language from the beginning to control diversion and obstruction situations.⁶

Under the reasonable use concept of riparianism, the reasonableness of each use is measured by its relation to uses made by others on the same watercourse. The amount of water each proprietor may use is not fixed in volume and may vary with time. If there is not enough water for all demands, all uses must be reduced until each is again reasonable with respect to the others.

2. NUISANCE

The tort of nuisance involves injury to land resulting from certain kinds of proscribed activities. Any person damaged as a result of the proscribed activity may obtain relief under the doctrine.⁷ There are two kinds of nuisance: private nuisance concerns interferences with the use and enjoyment of land; public nuisance relates to interferences with rights common to everyone.

a. *Private nuisance*

Liability for private nuisance does not turn upon tortious conduct, but upon interference with private property interests. Prosser has defined a private nuisance as:

an unreasonable interference with the interest in the use and enjoyment of land. . . . It is distinguished from trespass in that the interference is with use or enjoyment, rather with the interest in exclusive possession.⁸

Private nuisances have included interferences with the physical condition of land; disturbance of the comfort, convenience or health of the occupant; disturbance of his peace of mind, or threat of future injury; and activities causing flooding, raising the water table, polluting a stream, and creating unpleasant odors, smoke, or gas.⁹

5. See, e.g. *McEvoy v. Gallagher*, 107 Wis. 331, 83 N.W. 633 (1900); *Kimberly & Clark Co. v. Hewitt*, 75 Wis. 371, 44 N.W. 303 (1890); *A.C. Conn Co. v. Little Suamico Lumber Mfg. Co.*, 74 Wis. 652, 43 N.W. 660 (1889); *Mohr v. Gault*, 10 Wis. 455 (1860).

6. See, e.g. *Apfelbacher v. State*, 167 Wis. 233, 167 N.W. 244 (1918); *Town of Lawrence v. American Writing Paper Co.*, 144 Wis. 556, 128 N.W. 440 (1911); *Falls Mfg. Co. v. Oconto River Imp. Co.*, 87 Wis. 134, 58 N.W. 257 (1894); *Fox River Flour & Paper Co. v. Kelley*, 70 Wis. 287, 35 N.W. 744 (1887); *Coldwell v. Sanderson*, 69 Wis. 52, 28 N.W. 232, 33 N.W. 591 (1887); *Lawson v. Mowry*, 52 Wis. 219, 9 N.W. 280 (1881); *Timm v. Bear*, 29 Wis. 254 (1871); *Mabie v. Matteson*, 17 Wis. 1 (1863).

7. Note, *Private Remedies for Water Pollution*, 70 COLUM. L. REV. 738-744 (1970).

8. W. PROSSER, TORTS 405 (2d ed. 1955).

9. *Id.* at 406.

In general, the reasonableness of the interference is determined by balancing the harm to plaintiff against the utility of the defendant's undertaking. In water pollution cases, however, many states have rejected this balancing test, making special damage and threat of substantial harm the primary determinants of reasonableness.

b. *Public nuisance*

Prosser has defined a public nuisance as: "an act or omission which obstructs or causes inconvenience or damage to the public in the exercise of rights common to all."¹⁰ This definition of public nuisance comprehends a miscellaneous and diversified collection of minor crimes and interferences with the public health, public safety, public morals, public peace, public comfort and public convenience. It includes, for example, the maintenance of a hogpen or malarial pond, creation of bad odors, smoke and dust, and obstruction of a navigable stream.¹¹ Usually, public nuisance actions must be brought by the state, unless a private individual has suffered special damage differing in degree and kind from that suffered by the public at large, in which case he may bring the action himself.¹²

B. *Conceptual Confusion*

As legal theories, riparian rights and nuisance overlap. Riparian rights are usufructuary; that is, a landowner has a right to the use and enjoyment of water flowing in a watercourse abutting his land, but he has no right to exclusive possession of the water.¹³ Thus, a defendant who has infringed a riparian right may have also engaged in a nuisance, an unreasonable interference with a riparian's interest in the use and enjoyment of his land.

Violations of riparian rights and creation of nuisances may also overlap factually. Water pollution affecting the water supply used by a farmer for domestic, household, and stockwatering purposes may be both. If he is not able to use the water as he did before, the polluting activity is unreasonable with respect to his own use of water and constitutes a violation of riparian rights. Because the pollution disturbs the comfort, convenience, or health of his habitation, it constitutes an interference with the use and enjoyment of his own land and is a private nuisance.

The congruity of the riparian rights and nuisance violations in the majority of water pollution situations is a major cause of confusion

10. *Id.* at 401.

11. *Id.* at 401-2.

12. *Id.* at 403-5.

13. See, e.g., *Munninghoff v. Wisconsin Conservation Comm'n*, 255 Wis. 252, 259, 38 N.W.2d 712, 715 (1949); *Tyler v. Wilkinson*, 24 F. Cas. 472, 474 (No. 14,312) (C.C.D.R.I. 1827); *Evans v. Merriweather*, 4 Ill. 492, 494 (1842).

in the cases: since most cases can be decided on an amalgam of the two theories, courts are unprepared to handle the unusual case where only one theory applies. The usual water pollution case concerns domestic, farm, or municipal pollution and includes the creation of nuisance conditions. In the less usual case, often involving industrial pollution, nuisance conditions may not exist. Discharge of industrial wastes for example does not always create odors. If fouling of a riparian's domestic or livestock water supply is not an element of the case, the industrial pollution will not constitute a nuisance. But it might nonetheless constitute a violation of riparian rights if it deprives a riparian of the opportunity to make a reasonable use of water.

C. *Riparian Rights and Nuisance Distinguished*

It is the hypothesis of this article that distinguishing between nuisance and riparian rights should have important consequences in water pollution litigation. Nuisance doctrine ought to apply only to traditional nuisance fact situations, such as severe degradation of domestic or livestock water supplies, interference with habitation by noxious odors rising from polluted water, or degradation of the utility of land. The riparian rights doctrine should control in all other situations. Under the reasonable use concept, a riparian has a right to discharge wastes to a reasonable extent with respect to other riparian users, even if that discharge causes pollution of the watercourse. The cases recognize such a riparian right whenever traditional nuisance conditions do not exist.¹⁴

1. ANALYSIS OF WATER POLLUTION CASES

An examination of all water pollution cases which could be found in jurisdictions following riparian law reveals 445 American cases which can be categorized as riparian rights or as nuisance.¹⁵ All of them were classified for this study on the basis of either the plaintiff's allegations or the court's announced controlling doctrine. If plaintiff's theory of action was not stated or was unclear and there was ambiguity in the *ratio decidendi*—courts often spoke of both riparian rights and nuisance without stating which controlled—the case was classified according to the fact situation. If traditional nuisance conditions were involved, the case was classified as a nuisance case. If no traditional nuisance condition was involved, the case was classified as a riparian rights case. That analysis yielded 137

14. This analysis of water pollution litigation involves rights among riparian landowners only. In no way does it reflect the rights of members of the public to use water for fishing, swimming, boating, etc., or the power of the states or federal government to regulate use of watercourses under their police power.

15. See Appendix A.

riparian rights cases in 32 jurisdictions,¹⁶ 233 private nuisance cases in 39 jurisdictions,¹⁷ and 75 public nuisance cases in 26 jurisdictions.¹⁸

Courts are by no means unanimously clear in distinguishing between the riparian rights and private nuisance theories of action. Where confusion exists, it often involves a mixing of the natural flow concept of riparian rights and of private nuisance doctrine. The Wisconsin court fell into that confusion in *Middlestadt v. Waupaca Starch & Potato Co.*, where it said:¹⁹

[A] riparian owner of property is entitled to have the water of a stream flow to and through or by his land in its *natural purity* and . . . anything done which so pollutes such water as to impair its value for the purposes for which it is ordinarily used by persons so circumstanced, causing offensive odors to arise therefrom and *injuriously affecting the beneficial enjoyment of adjoining property*, may be restrained at the suit of the injured party [emphasis added]

Citing a Scottish starch factory case,²⁰ the court denominated offensive odors cases as actionable nuisances.²¹

The Wisconsin court is not alone in mixing natural flow and private nuisance language. A classic statement of the confusion is contained in *City of Kewanee v. Otley*:²²

Every owner of land through which a stream of water flows is entitled to the use and enjoyment of the water, and to have the same flow in its natural and accustomed course, without obstruction, diversion or corruption. The right extends to the quality as well as the quantity of the water. The court of chancery has a concurrent jurisdiction with courts of law, by injunction, equally clear and well established in cases of private nuisances, and it is a familiar exercise of the power of the court to prevent, by injunction, injuries to water-courses by obstruction or diversion. . . . A disturbance or deprivation of that right [to the use and enjoyment of the water in its natural state] is an irreparable injury, for which an injunction will issue. . . . Where the nuisance operates to destroy health or to diminish the comfort of a dwelling, an action at law furnishes

16. *Id.*

17. See Appendix B. Of these, 14 cases with ambiguous ratio decidendi and 43 cases not stating a theory of decision, are classified as private nuisance cases on the basis of fact situations. Cases with ambiguous court language are noted. Cases in which no theory of decision was expressed are designated "by implication."

18. See Appendix C.

19. 93 Wis. 1, 4, 66 N.W. 713, 714 (1896).

20. *Robertson v. Stewart*, [1872] 11 Sess. Cas. (3d ser.) 189 (Scot.).

21. *Middlestadt v. Waupaca Starch & Potato Co.*, 93 Wis. 1, 5, 66 N.W. 713, 714 (1896).

22. 204 Ill. 402, 409, 68 N.E. 388, 390-91 (1903), quoting *Holsman v. Boiling Spring Bleaching Co.*, 14 N.J. Eq. 335, 342-43 (Ch. 1862).

no adequate remedy and the party injured is entitled to protection by injunction. . . .

Other courts, as well, have confused the natural flow theory of riparian rights with private nuisance ideas.²³ The reasonable use concept of riparian rights and private nuisance doctrine are confused almost as frequently. The Alabama court, for example, said in *Alabama Consol. Coal & Iron Co. v. Turner*:²⁴

[E]very riparian proprietor has an equal right to have the stream flow through his land in its natural state, without material diminution in quantity, or alteration in quality. . . . Any diversion or obstruction of the water which substantially diminishes the volume of the stream, so that it does not flow *ut currere solebat*, or which defiles and corrupts it to such a degree as essentially to impair its purity and prevent the use of it for any of the reasonable and proper purposes to which running water is usually applied, such as irrigation, the propulsion of machinery, or consumption for domestic use, is an infringement of the rights of the owner of the land through which a water course runs, and creates a *nuisance* for which those thereby injured are entitled to a recovery.²⁵ [emphasis added]

A few courts have compounded the confusion by mixing up all three concepts, natural flow, reasonable use, and private nuisance, without indicating which determined the decision.²⁶

23. For example, in *Peterson v. City of Santa Rosa*, 119 Cal. 387, 392, 51 P. 557, 559 (1897), the court said:

Her right as a riparian owner was, not only to have the water of the stream flow over her land in its usual volume, but to have it flow in its natural purity, and such pollution of the stream by the defendant as substantially impaired its value for the ordinary purposes of life, and render it measurably unfit for domestic purposes, is an actionable nuisance, . . . [sic.]

See also *Vickers v. City of Fitzgerald*, 216 Ga. 476, 480-81, 117 S.E.2d 316, 319 (1960); *Hodges v. Pine Prod. Co.*, 135 Ga. 134, 136-37, 68 S.E. 1107, 1108 (1910); *Coretti v. Broring Building Co.*, 150 Md. 198, 205-06, 132 A. 619, 622 (1926); *Neubauer v. Overlea Realty Co.*, 142 Md. 87, 98, 120 A. 69, 73 (1923); *Barton v. Union Cattle Co.*, 28 Neb. 350, 356-57, 44 N.W. 454, 455-56 (1889); *City of Mansfield v. Balliett*, 65 Ohio St. 451, 466-67, 63 N.E. 86, 90-91 (1902); *Sussex Land & Livestock Co. v. Midwest Ref. Co.*, 294 F. 597, 603-04 (8th Cir. 1923); *Haigh v. Deudraeth Rural Dist. Council*, [1945] 2 All E.R. 661, 662 (Ch.).

24. 145 Ala. 639, 649-50, 39 So. 603, 605 (1905). Note that the first sentence of this quotation is an example of a statement of natural flow language in a reasonable use case.

25. See also *Platt Bros. & Co. v. City of Waterbury*, 72 Conn. 531, 547, 45 A. 154, 161 (1900); *Muncie Pulp Co. v. Koontz*, 33 Ind. App. 532, 536-38, 70 N.E. 999, 1004 (1904); *Carhart v. Auburn Gas Light Co.*, 22 Barb. 297, 311-12 (N.Y. Sup. Ct. 1856); *Butler v. Village of White Plains*, 59 App. Div. 30, 33-34, 69 N.Y.S. 193, 195-96 (1901).

26. See *Baltimore v. Warren Mfg. Co.*, 59 Md. 96, 106-09 (1882); *Southland Co. v. Aaron*, 221 Miss. 59, 72-73, 72 So. 2d 161, 165-66 (1954); *Trevett v. Prison Ass'n*, 98 Va. 332, 336-37, 36 S.E. 373, 374 (1900); *Hazeltine v. Case*, 46 Wis. 391, 394, 1 N.W. 66 (1879).

When the fact situations of the cases are divided into traditional nuisance and non-nuisance categories, it can be seen that both natural flow and reasonable use concepts are employed in traditional nuisance and non-nuisance situations. By contrast, nuisance law is predominantly used for traditional nuisance situations, although it is used for a significant number of traditional non-nuisance situations as well.²⁷

2. THE ELEMENTS OF THE NATURAL FLOW, REASONABLE USE AND NUISANCE CONCEPTS

A defendant who has discharged waste into rivers ought to be held to different standards of conduct depending upon whether the litigation is framed as a riparian rights or a nuisance action. To understand why different standards should be applied, one must distinguish the elements of the various concepts and the types of fact situations to which each should apply.

a. *Natural flow concept*

Strict natural flow and reasonable use definitions of riparian rights are incompatible. The former insists upon no adulteration of water quality and upon absolute maintenance of natural purity. The latter allows a reasonable use of water, even if some lessening of quality occurs. Unfortunately, none of the water pollution cases examined give a rationale for adopting the natural flow concept. Instead, they repeat the traditional language of natural purity

27.	Traditional nuisance situations	
	Riparian rights law	66
	Private nuisance law	199
	Total	<u>265</u>
	Non-nuisance situations	
	Riparian rights law	71
	Private nuisance law	34
	Total	<u>105</u>
	Natural flow decisions	
	Traditional nuisance situations	21
	Non-nuisance situations	14
	Total	<u>35</u>
	Reasonable use decisions	
	Traditional nuisance situations	45
	Non-nuisance situations	57
	Total	<u>102</u>
	Private nuisance decisions	
	Traditional nuisance situations	199
	Non-nuisance situations	34
	Total	<u>233</u>

without further illumination. The language in *City of Richmond v. Test* is typical:²⁸

The principle is well settled, that in the absence of grant, license, or prescription limiting his rights, a riparian proprietor has the right to have the waters of a natural water course flow along or through his premises as it would naturally flow, without change of quantity or quality.

In other words, a riparian has no right to discharge wastes if doing so lessens the quality of the water.

Richmond v. Test is one of only 14 American cases in which the fact situation does not involve elements of traditional nuisance, and in which the decision is grounded upon natural flow.²⁹ The existence of such cases clearly indicates that natural flow is a distinct concept, albeit not a very popular one. The opinions were not concerned with the kinds of considerations present when a man is likely to be driven from his home or prevented from farming his land. In these cases, the polluter and the polluted were on much the same footing, often engaged in the same type of business, and the natural flow rationale apparently was chosen because it reflected the courts' feelings about the relative rights of similar riparian owners. In those circumstances, the rationale could not be chosen merely to disguise a decision based on nuisance considerations.

The choice between natural flow and reasonable use, if the choice is a conscious one, will affect the opportunities to open new industries downstream from old ones or to maintain old industries in the face of new ones established upstream. Natural flow perforce must favor the downstream user and prevent any polluting use upstream, regardless of the age of the industry. Reasonable use, on the other hand, favors the upstream user to the extent that it allows any reasonable use to be established at any location on a river, and requires all users to accommodate it.

b. *Reasonable use concept*

Apparently, many courts have favored the reasonable use concept over natural flow because it favors economic and industrial growth.³⁰

[The riparian right] is not an absolute right, but a natural one, qualified and limited, like all natural rights, by the existence of like rights in others. It is incident merely to his ownership of land through which the stream has its course.

As such owner he has the right to enjoy the continued flow of the stream, to use its force, and to make limited and tem-

28. 18 Ind. App. 482, 493, 48 N.E. 610, 614 (1897). See also *H.B. Bowling Coal Co. v. Ruffner*, 117 Tenn. 180, 189-90, 100 S.W. 116, 119 (1906).

29. See Appendix A(1).

30. *Merrifield v. City of Worcester*, 110 Mass. 216, 219 (1872).

porary appropriation of its waters. These rights are held in common with all others having lands bordering upon the same stream; but his enjoyment must necessarily be according to his opportunity, prior to those below him, subsequent to those above. It follows that all such rights are liable to be modified and abridged in the enjoyment, by the exercise by others of their own rights The only limit that can be set to this abridgment through the exercise by others of their natural rights, is in the standard or measure of reasonable use. . . .

So the natural right . . . to have the water descend to [a riparian] in its pure state, fit to be used for the various purposes to which he may have occasion to apply it, must yield to the equal right in those who happen to be above him. Their use of the stream for mill purposes, for irrigation, watering cattle, and the manifold purposes for which they may lawfully use it, will tend to render the water more or less impure. Cultivating and fertilizing the lands bordering on the stream, and in which are its sources, their occupation by farm-houses and other erections, will unavoidably cause impurities to be carried into the stream. As the lands are subdivided and their occupation and use become multifarious, these causes will be rendered more operative, and their effects more perceptible. The water may thus be rendered unfit for many uses for which it had before been suitable; but so far as that condition results only from reasonable use of the stream in accordance with the common right, the lower riparian proprietor has no remedy.³¹

The reasonable use approach, as first formulated in *Tyler v. Wilkinson*,³² emphasizes each riparian proprietor's co-equal right to use the water. Thus, the definition of reasonable use depends upon the characteristics of the watercourse, the uses to which all riparians intend to put it, and the extent to which use by one landowner interferes with that of others.

An unreasonable discharge of wastes has been defined as one causing an appreciable or substantial injury upon other riparians, not merely a slight inconvenience or occasional annoyance.³³ In

31. See also *Tennessee Coal, Iron & R.R. Co. v. Hamilton*, 100 Ala. 252, 258-60, 14 So. 167, 169-70 (1893); *Lockwood v. Lawrence*, 77 Me. 297, 316-17 (1885); *Parker v. American Woolen Co.*, 195 Mass. 591, 598-99, 81 N.E. 468 (1907); *Snow v. Parsons*, 28 Vt. 459, 461-63 (1856).

32. 24 F. Cas. 472 (No. 14,312) (C.C.D.R.I. 1827).

33. *Tennessee Coal, Iron & R.R. Co. v. Hamilton*, 100 Ala. 252, 260, 14 So. 167, 170 (1893); *Tetherington v. Donk Bros. Coal & Coke Co.*, 232 Ill. 522, 525, 83 N.E. 1048, 1049 (1908); *Voss v. Chicago Sandoval Coal Co.*, 165 Ill. App. 565, 570 (1911); *Muncie Pulp Co. v. Koontz*, 33 Ind. App. 532, 537, 70 N.E. 999, 1004 (1904); *Kennedy v. Moog Servocontrols, Inc.*, 48 Misc. 2d 107, 264 N.Y.S.2d 606, 613-14 (Sup. Ct. 1965), *modified*, 26 App. Div. 2d 768, 271 N.Y.S.2d 928 (1966), *aff'd mem.*, 21 N.Y.2d 966, 237 N.E.2d 356, 290 N.Y.S.2d 193 (1968); *Snow v. Parsons*, 28 Vt. 459, 462 (1856).

determining what is reasonable, the court or jury may consider all factors which seem pertinent:

The decision of this question depend[s] not alone upon the extent and nature of the impurities projected into [the] stream, but upon the location of plaintiff's land, the use to which it [is] devoted, the effect upon it of any impurities in the stream, and the extent to which the pollution of the waters may [be] attributable to other sources and causes than those charged in the complaint. Surrounding circumstances, such as the size and velocity of the stream, the usage of the country, the extent of the injury, convenience in doing business, and the indispensable public necessity of cities and villages for drainage, are also taken into consideration, so that a use which under certain circumstances is held reasonable under different circumstances would be held unreasonable.³⁴

Unlike the natural flow concept, reasonable use allows a riparian to discharge some wastes into a watercourse, provided that the amount or toxicity of the discharge is not deemed unreasonable. The defendant's need to discharge wastes must be balanced against the needs of other riparians.

A right to discharge wastes has been sustained in 30 cases, grounded upon reasonable use concepts.³⁵ The right to discharge wastes was recognized expressly in five of those decisions.³⁶ Only one case rejected the notion,³⁷ and that one, perforce, runs contrary to the reasonable use doctrine it expressly affirms. The language of two of the cases is illustrative. In an Iowa case where sugar beet refuse polluted a livestock water supply, the court found for the waste discharger, saying, "The upper owner may, as a rule, use the stream in a reasonable manner, for reasonable purposes, even as a means of carrying off waste matter."³⁸ In a Maine case where sawmill debris plugged up millwheels, the court held for the defendant and commented, "The defendant had a right to the use of the water above

34. *Reese v. City of Johnstown*, 45 Misc. 432, 92 N.Y.S. 728, 729 (Sup. Ct. 1904), quoting *Townsend v. Bell*, 167 N.Y. 462, 471, 60 N.E. 757, 760 (1901); and *Strobel v. Kerr Salt Co.*, 164 N.Y. 303, 321, 58 N.E. 142, 147 (1900). See also *Red River Roller Mills v. Wright*, 30 Minn. 249, 253-54, 15 N.W. 167, 168-69 (1883); *Hayes v. Waldron*, 44 N.H. 580, 584-85 (1863).

35. See cases in Appendix A(3)-(5).

36. *Donnelly Brick Co. v. City of New Britain*, 106 Conn. 167, 175, 137 A. 745, 748 (1927) (stated negatively); *Ferguson v. Firmenich Mfg. Co.*, 77 Iowa 576, 578, 42 N.W. 448, 449 (1889); *Dwinel v. Veazie*, 44 Me. 167, 175 (1857); *Hayes v. Waldron*, 44 N.H. 580, 585 (1863); *George v. Village of Chester*, 59 Misc. 553, 111 N.Y.S. 722, 724 (Sup. Ct. 1908), *aff'd mem.*, 137 App. Div. 889, 121 N.Y.S. 1131 (1910), *modified*, 202 N.Y. 398, 400-01, 95 N.E. 767, 768 (1911).

37. *Auger & Simon Silk Dyeing Co. v. East Jersey Water Co.*, 88 N.J.L. 273, 274-75, 96 A. 60, 61 (1915) (where plaintiff sought to enjoin a non-riparian public water supply diversion so it could discharge wastes).

38. *Ferguson v. Firmenich Mfg. Co.*, 77 Iowa 576, 578, 42 N.W. 448, 449 (1889).

his mills, to float logs to them, and also to the use of the water below them, to float rafts and lumber to market, and also to float away the waste stuff from his mills, so far as such use was reasonable and conformable to the usages and wants of the community."³⁹

c. *Private nuisance concept*

Private nuisance is the doctrine followed in the majority of water pollution cases.⁴⁰ A private nuisance is any non-trespassory act which impairs the fitness of land for "the ordinary uses of life,"⁴¹ or any act which produces "a condition actually destructive of physical comfort or health, or a tangible, visible injury to property."⁴² The most comprehensive definition of a private nuisance as it relates to water pollution is provided by *Trevett v. Prison Association*:

[S]uch impurities as substantially impair [the water's] value for the ordinary purposes of life, and render it measurably unfit for domestic purposes; or such as causes unwholesome or offensive vapors or odors to arise from the water, and thus impairs the comfortable or beneficial enjoyment of property in its vicinity, or such as, while producing no actual sensible effect upon the water, are yet of a character calculated to disgust the senses, such as the deposit of the carcasses of dead animals therein, or the erection of privies over a stream, or any other use calculated to produce nausea or disgust in those using the water for the ordinary purposes of life. . . .⁴³

39. *Dwinel v. Veazie*, 44 Me. 167, 175 (1857). Whether the right to discharge wastes under the reasonable use doctrine creates a property right which must be compensated for when curtailed by public regulation is beyond the scope of this article. The situation could be as complex constitutionally as the conflicting doctrine concerning the power of the state to prohibit swimming in natural watercourses that are used as sources of public water supplies. Compare cases holding that statutes or ordinances prohibiting bathing by riparians are unconstitutional: *City of Battle Creek v. Goguc Resort Ass'n*, 181 Mich. 241, 148 N.W. 441 (1914); *People v. Hulbert*, 131 Mich. 156, 91 N.W. 211 (1902); *George v. Village of Chester*, 59 Misc. 553, 111 N.Y.S. 722 (Sup. Ct. 1908), *aff'd mem.*, 137 App. Div. 889, 121 N.Y.S. 1131 (1910), *modified*, 202 N.Y. 398, 95 N.E. 767 (1911); *Bino v. City of Hurley*, 273 Wis. 10, 76 N.W.2d 571 (1956); with those holding that such statutes are constitutional: *Harvey Realty Co. v. Borough of Wallingford*, 111 Conn. 352, 150 A. 60 (1930); *State v. Heller*, 123 Conn. 492, 196 A. 337 (1937); *State v. Morse*, 84 Vt. 387, 80 A. 194 (1911).

40. There were 233 private nuisance cases, 137 riparian rights cases, and 75 public nuisance cases. Of those 233 cases, 188 expressly followed private nuisance theory, while 45 used it by implication from the facts. See Appendix D.

41. *Baltimore v. Warren Mfg. Co.*, 59 Md. 96, 110 (1882). See also *Nolan v. City of New Britain*, 69 Conn. 668, 678, 38 A. 703, 706 (1897).

42. *Bowman v. Humphrey*, 124 Iowa 744, 746, 100 N.W. 854, 855 (1904). See also *Perry v. Howe Co-op. Creamery Co.*, 125 Iowa 415, 418, 101 N.W. 150, 151 (1904).

43. 98 Va. 332, 336, 36 S.E. 373, 374 (1900), quoting 1 H. Wood, *Nur-*

An analysis of the fact situations of water pollution cases supports this definition. The degradation of water quality is actionable not in itself but because it impairs the use of land, primarily by making it less habitable.

Whether a case can be decided according to private nuisance concepts rather than riparian rights ought to depend upon the fact situation.⁴⁴ Water pollution that interferes with habitation, with occupation of buildings,⁴⁵ or with non-irrigated farming is considered a nuisance. Interference with industrial users of water, however, does not fall within nuisance categories. While half the cases involving interference with irrigation have been classified in each category, it ought to be considered a non-nuisance situation because it, like manufacturing, is an "artificial" or "extraordinary" use of water under the common law.⁴⁶

The relationship of private nuisance law to the riparian rights doctrine has been discussed in very few cases, although the concepts have often been used simultaneously.⁴⁷ Three cases have indicated that riparian rights law operates in all water pollution situations and that nuisance is a limitation, applicable in certain fact situations, on the riparian's right to make reasonable use of water, including the discharge of wastes.⁴⁸

d. Public nuisance

The common law recognizes rights in the public to be free from certain forms of interference with the public safety, public health, public morals, public peace, public comfort, and public convenience. These are comprehended collectively as public nuisance law.

Public nuisance law has been applied in 75 water pollution

SANCES § 427 (3d ed. 1893). See also *Muncie Pulp Co. v. Martin*, 23 Ind. App. 558, 559-60, 55 N.E. 796, 796-97 (1899), *aff'd* 164 Ind. 30, 72 N.E. 882 (1904); *Jeakins v. City of El Dorado*, 143 Kan. 206, 209-10, 53 P.2d 798, 800 (1936).

44. For an indication of the number of cases classified by the courts according to their fact situation as private nuisance and as riparian rights, see list of codings on p. 321, *infra*, coded in Appendices A and B, using the numbers on the list.

45. One case restricts nuisance to interferences with habitation and excludes interferences with occupation of other buildings. See *Edwards v. Allouez Mining Co.*, 38 Mich. 46, 50-51 (1878). In view of the 4 cases of interference with factories and businesses which the courts have decided on private nuisance doctrine, that assertion must be incorrect. Only one such case was decided under riparian rights law.

46. *Smith v. Corbit*, 116 Cal. 587, 48 P. 725 (1897); *Evans v. Merriweather*, 4 Ill. 492 (1842) (dictum); *Frizwell v. Bindley*, 144 Kan. 84, 58 P.2d 95 (1936) (by implication). See 2 H. FARNHAM, LAW OF WATERS AND WATER RIGHTS 1580-82 (1904); 3 H. FARNHAM, LAW OF WATERS AND WATER RIGHTS 1898-1900 (1904).

47. See note 26 *supra*, and accompanying text.

48. *Lawton v. Herrick*, 83 Conn. 417, 424, 76 A. 986, 989 (1910); *O'Riley*

cases,⁴⁹ but, because of the potpourri character and quasi-criminal origins of public nuisance law, no single definition exists. Many of the water pollution cases involve odors in residential areas, pollution of public, domestic, or livestock water supplies, and undifferentiated stream pollution.⁵⁰

Under the common law, actions to abate a public nuisance can be brought either by the state or, in certain situations, by a private individual. For an individual to bring an action to abate a public nuisance, he must suffer injury which is different in kind and degree from that suffered by the public at large.⁵¹

The common law rules concerning who may bring an action to abate a public nuisance have been modified substantially by statute in Wisconsin.⁵² Section 280.02 empowers (1) private individuals and counties to bring actions to abate public nuisances upon leave of the court, (2) the attorney general to bring actions on his own information, and (3) cities, villages and towns to bring them in their own names without leave of the court. This section has been interpreted to mean that a private individual may bring an action to abate a public nuisance without a showing of special damage.⁵³

Certain acts have been declared public nuisances by statute, in-

v. McChesney, 3 Lans. 278, 282 (Supp. Ct. 1870), *aff'd mem.* 49 N.Y. 672 (1872); Squaw Island Freight Terminal Co. v. City of Buffalo, 273 N.Y. 119, 128, 7 N.E.2d 10, 13 (1937).

49. See Appendix D. In addition, there are 12 public nuisance cases in England, Wales, and Ireland.

50. Totalling 57 cases. See Appendix D.

51. Nolan v. City of New Britain, 69 Conn. 668, 38 A. 703 (1897); Bair v. Central & So. Fla. Flood Control Dist., 144 So. 2d 818 (Fla. 1962). An individual must suffer special damage which is different in kind and degree from that suffered by the public in order to be able to bring an action to abate a public nuisance. Wis. STAT. § 280.01 (1969); Costas v. City of Fond du Lac, 24 Wis. 2d 409, 413-14, 129 N.W.2d 217, 219-20 (1963); Otherwise the action must be brought by the state. Wis. STAT. § 280.02 (1969); Meiners v. Frederick Miller Brewing Co., 78 Wis. 364, 366, 47 N.W. 430 (1890); Greene v. Nunnemacher, 36 Wis. 50, 55, 58 (1874). The courts have recognized substantial interference with an individual's use of his land (that is, an injury creating a cause of action for a private nuisance), personal injuries, prevention of performance of a contract, deprivation of business customers, as sufficient to confer standing to sue for abatement of or damages from a public nuisance. See W. PROSSER, TORTS, 401, 404-5 (2d ed. 1955), and Note, *Private Remedies for Water Pollution*, 70 COL. L. REV. 735, 740 (1970).

52. Wis. STAT. § 280.02 (1969). The statute was enacted in 1905 to allow private individuals to bring actions with leave of the court to abate public nuisances without showing special damage. Ch. 145, § 1, [1905] Wis. Laws 217. Cities, villages and towns were empowered to bring actions with leave of the court by ch. 423, § 2, [1939] Wis. Laws 673. Those units of government were empowered to bring actions in their own names without leave of the court in 1943, and in the same year, counties were empowered to bring them with leave. Ch. 66, § 16, [1943] Wis. Laws 78.

53. State *ex rel.* Cowie v. La Crosse Theater Co., 232 Wis. 153, 286 N.W. 707 (1939).

cluding maintenance of improper sewage disposal facilities,⁵⁴ obstructions in navigable waters,⁵⁵ and discharge of noxious matter onto highways or into surface waters.⁵⁶ Under section 280.02, a private individual may bring an action to abate them without showing special damages.

Section 144.536, which declares noncompliance with pollution abatement orders a public nuisance,⁵⁷ may not fall within the purview of section 280.02, however.⁵⁸ The section's language appears to give the attorney general exclusive jurisdiction to enforce pollution abatement orders; noncompliance is made a public nuisance by this statute solely for the purpose of enforcement proceedings brought by him.⁵⁹ Thus, an individual may have to show special damages if he wishes to bring suit using this statute.

3. SUMMARY OF CONCEPTUAL DIFFERENCES

The outcome of a water pollution case may vary, depending upon whether riparian rights or nuisance law has been followed, because the concepts involve different fact situations and different bases for determining allowable waste discharge. First, whereas riparian rights is concerned with the use of water in a watercourse, private nuisance involves interferences with the use and enjoyment of land.

Second, private nuisance law ought to apply only to traditional

54. WIS. STAT. § 146.14(1) (1969).

55. WIS. STAT. §§ 31.23-.25 (1969).

56. WIS. STAT. § 146.13 (1969).

57. WIS. STAT. § 144.536 (1969) reads:

All orders of the [Natural Resources] department shall be enforced by the attorney general. The circuit court of Dane county or any other county where violation of such an order has occurred in whole or in part shall have jurisdiction to enforce the order by injunctive and other relief appropriate to the enforcement of the order. For purposes of such proceeding where the order prohibits in whole or in part any pollution, a violation thereof shall be deemed a public nuisance. . . .

58. Carmichael took this view. D. CARMICHAEL, *Forty Years of Water Pollution Control in Wisconsin: A Case Study*, 1967 WIS. L. REV. 350, 390-91.

59. The statement in the section deeming noncompliance a public nuisance is not superfluous. Unless it gives the attorney general no benefit, the language should not be construed to create jurisdiction to enforce orders in persons other than the attorney general. In fact, declaring noncompliance a public nuisance shortens from 30 days to 5 days the period in which the stay of judgment can be obtained pending a decision whether to appeal the circuit court judgment. WIS. STAT. § 280.02 (1969). The five-day rule assures speedy abatement of nuisances and that the appeal procedure will not be used to delay compliance. This rule established by statute appears to be the only benefit the attorney general receives by the declaration that noncompliance with a pollution abatement order is a public nuisance. It is a sufficient benefit, however, to construe the statement as being nonsuperfluous. Therefore the language giving the attorney general authority to enforce such orders may be construed as being exclusive and not subject to section 280.02.

nuisance fact situations. The courts ought to ground their decisions upon riparian rights law, except where a nuisance has been created. The courts have defined severe degradation of livestock or domestic water supplies, noxious odors, and interference with the utility of land as nuisance situations. In a few cases, fact situations within these private nuisance categories have been classified as riparian rights. In cases whose fact situations are clearly outside nuisance categories, 53 were classified by the courts as riparian rights and only 10 as private nuisance.

Third, the natural flow concept of riparian rights is a distinctly minority interpretation; of 137 riparian rights decisions, only 35 are grounded upon natural flow.⁶⁰ Thus, in most jurisdictions, a riparian owner shares equally with other riparians on the watercourse the right to discharge wastes into the river. The right is limited by the uses of the river made by other riparians, by the stricture against creating a private nuisance, by common law and statutory definitions of public nuisance, and by the police power of the state to regulate waste discharge by statute and administrative regulation.

II. RIPARIAN RIGHTS AND THE DISCHARGE OF WASTES

Whether the riparian's right to use river water extends to waste disposal ought to depend upon whether a court follows the reasonable use or natural flow test. Under the reasonable use test, waste discharge should be permitted, so long as it is reasonable in relation to uses of the water by other riparians. Under the natural flow concept, however, no alteration of a stream's purity should be allowed.

Wisconsin cases are not clear on this question, and highlight the doctrinal confusion existing in many riparian states. Although one Wisconsin case strongly suggested that the reasonable use concept should be applied to pollution situations,⁶¹ two others, one earlier⁶² and one later, expressly rejected that concept in pollution cases. Further, although several cases recognize that industrialization and urbanization must inevitably cause a degradation of water quality,⁶³ none of those cases held the polluter to a less than natural purity

60. See Appendix D.

61. In *Hazeltine v. Case*, 46 Wis. 391, 394, 1 N.W. 66 (1879), involving pollution from a hopyard, the court said:

[E]ach riparian proprietor was entitled to the use and enjoyment of the stream in its natural flow, subject to its reasonable use by other proprietors; . . . each proprietor had an equal right to the use of the stream for the ordinary purposes of his house and farm, and for the purpose of watering his stock, even though such use might, in some degree, lessen the volume of the stream or affect the purity of the water

62. *Greene v. Nunnemacher*, 36 Wis. 50, 56 (1874).

63. *Winchell v. City of Waukesha*, 110 Wis. 101, 107-08, 85 N.W. 668, 670 (1901); *Tiede v. Schneidt*, 105 Wis. 470, 479-80, 81 N.W. 826, 829 (1900).

standard.⁶⁴ In fact, the court has held that only the legislature can change the rule in view of the paramount property rights involved.⁶⁵

In order to understand the extent of riparian rights, it is necessary to define riparian land and the circumstances under which riparians and non-riparians may discard wastes into river water.

A. *Rights of Riparians*

1. DEFINITION OF RIPARIAN LAND

Riparians are landowners, or their lessees, whose land abuts on a watercourse.⁶⁶ How much of the abutting land is riparian has never been settled in Wisconsin.⁶⁷ Two rules have been followed in the United States. The "source of title" rule includes as riparian only that which borders on a lake or stream and has been in the same ownership in an uninterrupted chain of title from the original government patent. While it is generally considered to be the majority rule, the only cases supporting the "source of title" rule are in west-

64. *Briggson v. City of Viroqua*, 264 Wis. 47, 52-54, 58 N.W.2d 546, 549 (1953); *Mitchell Realty Co. v. City of West Allis*, 184 Wis. 352, 362, 199 N.W. 390, 393 (1924); *Winchell v. City of Waukesha*, 110 Wis. 101, 107-08, 85 N.W. 668, 670 (1901).

65. In *Winchell v. City of Waukesha*, 110 Wis. 101, 107-08, 85 N.W. 668, 670 (1901), the court held:

We cannot but recognize that, as the density of our population increases, as our citizens engage in new and greater industries, and as the municipal aggregations of population multiply and expand, the original purity of the streams and water basins cannot be wholly preserved. They are the natural and unavoidable courses and receptacles of drainage, through and into which must flow the refuse of human habitation and industry. How far these changing conditions must bring about a yielding of the private rights of continued purity of those lakes and streams to the necessity of use thereof for the public and general health and convenience, and upon what terms such yielding shall come, are primarily questions of policy for the legislature, within the limits of its power over private rights defined by the constitution. When, if ever, the legislature shall enact that streams generally or any streams shall be so used as sewers without liability to the owners of the soil through which they run, the question of constitutional protection to [sic] private rights may be forced upon the courts for decision. Until such enactment is made, however, in clear and unambiguous terms, we shall be slow to hold by inference or implication that it has been made at all. The right of the riparian owner to the natural flow of water substantially unimpaired in volume and purity is one of great value, and which the law nowhere has more persistently recognized and jealously protected than in Wisconsin.

66. *Colson v. Salzman*, 272 Wis. 397, 75 N.W.2d 421 (1956); *Hermansen v. City of Lake Geneva*, 272 Wis. 293, 75 N.W.2d 439 (1956); *Diedrich v. Northwestern Union Ry. Co.*, 42 Wis. 248 (1877).

67. OAKLEY, PUBLIC SERVICE COMMISSION ACTIVITIES UNDER THE PRESENT WATER LAW 2-3 (Report to Subcommittee on Water Use Legislation, mimeo, April 1957). See generally, OSTERHOUDT, AN ECONOMIC ANALYSIS OF WISCONSIN'S DIVERSION PERMIT SYSTEM FOR AGRICULTURAL IRRIGATION 94-128 (Water Resources Center, University of Wisconsin, Report No. WRC 65-006, 1967).

ern states⁶⁸ where prior appropriation is the dominant law of water allocation. Perhaps the "source of title" rule is used to limit the amount of water subject to residual riparian rights in order to free it for appropriation.

The "unity of title" rule includes as riparian all parcels held in common ownership contiguous to the abutting parcel. Although it is considered the minority rule, all eastern states to consider the question have adopted the "unity of title" rule, as have some western states.⁶⁹

Ownership of riparian land encompasses two concomitant rights: the right to use water in the river, and, in certain circumstances, the right to stop others from using the water.

2. RIGHT OF RIPARIAN TO USE WATER ON NONRIPARIAN LAND

Wisconsin has not ruled on whether a riparian can use water on nonriparian land. Although a majority of states considering the question have decided that riparian rights may be exercised only on riparian land,⁷⁰ there is considerable authority for the contrary rule. Most of the states following the minority rule allow such nonriparian use of water only if lower riparians are not damaged.⁷¹ But two states allow it if the use is reasonable,⁷² even though lower riparians are damaged. However, there appears to be no case discussing a riparian's right to discharge wastes into a watercourse as a result of activities on his nonriparian land.⁷³

The problem of defining riparian land may be largely academic so

68. Cases supporting this view include: *Anaheim Union Water Co. v. Fuller*, 150 Cal. 327, 88 P. 978 (1907); *Boehmer v. Big Rock Creek Irrigation Dist.*, 117 Cal. 19, 48 P. 908 (1897); *Watkins Land Co. v. Clements*, 98 Tex. 578, 86 S.W. 733 (1905); *Yearsley v. Cater*, 149 Wash. 285, 270 P. 804 (1928).

69. *Clark v. Allaman*, 71 Kan. 206, 80 P. 571 (1905); *Elliot v. Fitchburg R.R.*, 64 Mass. (10 Cush.) 191 (1852); *Wasserburger v. Coffee*, 180 Neb. 149, 141 N.W.2d 738 (1966) (overruling a previous line of "source of title" cases); *Jones v. Conn*, 39 Ore. 30, 64 P. 855 (1901); *Consolidated Water Supply Co. v. State Hosp.*, 66 Pa. Super. 610 (1917), *aff'd* 267 Pa. 29, 110 A. 281 (1920); *Slack v. Marsh*, 11 Phila. 543 (Pa. County Ct. 1875). Cf. *McCartney v. Londonderry & L.S. Ry.*, [1904] A.C. 501 (Ir.).

70. See, e.g., *Anaheim Union Water Co. v. Fuller*, 150 Cal. 327, 88 P. 978 (1907); *Williams v. Wadsworth*, 51 Conn. 277 (1884); *Hendrix v. Roberts Marble Co.*, 175 Ga. 389, 165 S.E. 223 (1932); *Crawford Co. v. Hathaway*, 67 Neb. 325, 93 N.W. 781 (1903); *McCarter v. Hudson County Water Co.*, 70 N.J. Eq. 695, 65 A. 489 (1906), *aff'd* 209 U.S. 349 (1908); *Scranton Gas & Water Co. v. Delaware, L. & W.R.R.*, 240 Pa. 604, 88 A. 24 (1913); *Town of Gordonsville v. Zinn*, 129 Va. 542, 106 S.E. 508 (1921); *Roberts v. Martin*, 72 W. Va. 92, 77 S.E. 535 (1913).

71. See, e.g., *Stratton v. Mt. Herman Boys' School*, 216 Mass. 83, 103 N.E. 87 (1913); *Smith v. Stanolind Oil & Gas Co.*, 197 Okla. 499, 172 P.2d 1002 (1946); *Texas Co. v. Burkett*, 117 Tex. 16, 296 S.W. 273 (1927).

72. *Gillis v. Chase*, 67 N.H. 161, 31 A. 18 (1892); *Lawrie v. Silsby*, 82 Vt. 505, 74 A. 94 (1909).

73. One case does hold that a riparian may not obtain relief for damage

far as industrial or agricultural waste dischargers are concerned, but it poses a very real question for municipalities. Seven municipal diversion cases have held that riparian rights do not extend to the entire municipality, but only to city-owned land on the water-course.⁷⁴ Thus, a municipality must acquire its water rights by purchase or eminent domain.⁷⁵

However, for the purpose of discharging wastes, a municipality may not need to acquire riparian land. The only two cases to discuss this question held that the municipality is a riparian for purposes of discharging wastes.⁷⁶

B. Rights of Nonriparians

Wisconsin has not decided whether riparian rights can be severed from the lands to which they are attached and conveyed to nonriparians. Several states have ruled such severance and conveyance is possible, whether by grant or reservation,⁷⁷ by lease,⁷⁸ or by license.⁷⁹ Some courts will enforce the rights conveyed to nonriparians against nonconsenting riparians,⁸⁰ but a few will not.⁸¹

caused by pollution on his contiguous nonriparian land because he has no right to use water on that land. *Sun Co. v. Gibson*, 295 F. 118 (5th Cir. 1923).

74. *Wallace v. City of Winfield*, 96 Kan. 35, 149 P. 693 (1915); *Sparks Mfg. Co. v. Town of Newton*, 60 N.J. Eq. 399, 45 A. 596 (1900); *Smith v. City of Brooklyn*, 160 N.Y. 357, 54 N.E. 787 (1899); *Fischer v. Clifton Springs*, 121 N.Y.S. 163 (Sup. Ct. 1909), *aff'd mem.* 140 App. Div. 918, 125 N.Y.S. 1119 (1910); *Smith v. Town of Morganton*, 187 N.C. 801, 123 S.E. 88 (1924); *Pernell v. City of Henderson*, 220 N.C. 79, 16 S.E.2d 449 (1941); *Town of Purcellville v. Potts*, 179 Va. 514, 19 S.E.2d 700 (1942).

75. Three cases hold *contra*: *City of Canton v. Shock*, 66 Ohio St. 19, 63 N.E. 600 (1902); *Mayor v. Commissioners*, 7 Pa. 348 (1848); *City of Philadelphia v. Collins*, 68 Pa. 106 (1871).

76. *City of Valparaiso v. Hagen*, 153 Ind. 337, 54 N.E. 1062 (1899); *City of Cape Girardeau v. Hunze*, 314 Mo. 438, 284 S.W. 471 (1926).

77. *Miller & Lux, Inc. v. J.G. James Co.*, 179 Cal. 689, 178 P. 716 (1919); *Batavia Mfg. Co. v. Newton Wagon Co.*, 91 Ill. 230 (1878); *Mandeville v. Comstock*, 9 Mich. 536 (1862); *Lawrie v. Silsby*, 82 Vt. 505, 74 A. 94 (1909); *Hite v. Town of Luray*, 175 Va. 218, 8 S.E.2d 369 (1940).

78. *Smith v. Stanolind Oil & Gas Co.*, 197 Okla. 499, 172 P.2d 1002 (1946); *Texas Co. v. Burkett*, 117 Tex. 16, 296 S.W. 273 (1927); *Bergeron v. Forger*, 125 Vt. 207, 214 A.2d 85 (1965).

79. *Goodrich v. Burbank*, 94 Mass. (12 Allen) 459 (1866); *Rerick v. Kern*, 14 S. & R. 267 (Pa. 1826).

80. *Spring Valley Water Co. v. County of Alameda*, 88 Cal. App. 157, 263 P. 318 (1927); *Gillis v. Chase*, 67 N.H. 161, 31 A. 18 (1892); *Smith v. Stanolind Oil & Gas Co.*, 197 Okla. 499, 172 P.2d 1002 (1946); *Lawrie v. Silsby*, 76 Vt. 240, 56 A. 1106 (1904), 82 Vt. 505, 74 A.94 (1909).

The appurtenant water right may be granted simultaneously with the conveyance of a severed back tract and be enforced against nonconsenting riparians. *Miller & Lux, Inc. v. J. G. James Co.*, 179 Cal. 689, 178 P. 716 (1919); *Frazee v. Railroad Comm'n*, 185 Cal. 690, 201 P. 921 (1921) (partition); *St. Anthony Falls Water Power Co. v. City of Minneapolis*, 41 Minn. 270, 43 N.W. 56 (1889).

81. *Heilbron v. Fowler Switch Canal Co.*, 75 Cal. 426, 17 P. 535 (1888);

Very few cases discuss the corollary questions of whether a non-riparian can purchase a riparian's right to divert water from a watercourse and whether he can bring an action to abate pollution of a watercourse because it interferes with his use of its water. It seems apparent that a nonriparian has no riparian rights in a watercourse (unless he has purchased or otherwise legally acquired them), and he cannot bring an action for violation of those rights.⁸² If, however, a nonriparian has purchased riparian rights, or otherwise has a right to receive water from a watercourse, then, in the view of one court at least, he has a right to seek relief from pollution of that watercourse.⁸³ Other courts will not enforce the acquired rights of nonriparians against nonconsenting riparian polluters.⁸⁴ A nonriparian may bring an action for private nuisance, if he is affected by odors from a polluted watercourse.⁸⁵

The case law on whether a nonriparian can acquire a right to discharge wastes into a watercourse is even more sparse. A few cases suggest that he cannot.⁸⁶ Apparently, a nonriparian can discharge raw wastes into a city sewer system, and if the city fails to adequately treat the wastes the city, rather than the nonriparian, will be liable for the injury.⁸⁷ In this fashion a nonriparian can

Stockport Waterworks Co. v. Potter, 3 H. & C. 300, 159 Eng. Rep. 545 (Ex. 1864).

82. Masonite Corp. v. Burnham, 164 Miss. 840, 146 So. 292 (1933); Young v. City of Asheville, 241 N.C. 618, 86 S.E.2d 408 (1955).

Nor does a nonriparian have a right to complain of a private nuisance because of pollution of water as such. Topeka Water Supply Co. v. City of Potwin Place, 43 Kan. 404, 23 P. 578 (1889); Masonite Corp. v. Burnham, 164 Miss. 840, 146 So. 292 (1933).

83. In Boyle v. Pure Oil Co., 16 S.W.2d 146 (Tex. Civ. App. 1929), a nonriparian received water from a city water supply. An upstream riparian polluted the stream with salt water, rendering water supplied through the city water system unfit for the nonriparian's ice plant. The court granted damages on the grounds of negligence by the upstream riparian and proximate cause.

Cf. Prairie Pipe Line Co. v. Dalton, 243 S.W. 619 (Tex. Civ. App. 1922).

84. Doremus v. City of Paterson, 65 N.J. Eq. 711, 55 A. 304 (1903), reversing 63 N.J. Eq. 605, 52 A. 1107 (Ch. 1902) (grantees of a riparian water company do not have an enforceable right against upstream riparians for unpolluted water); Egyptian Lacquer Mfg. Co. v. Chemical Co. of Am., 93 N.J.L. 305, 108 A. 249 (Sup. Ct. 1919), *aff'd mem.* 94 N.J.L. 557, 111 A. 926 (1920) (plaintiff had a water supply contract with a city, whose water supply became polluted); Stockport Water Works Co. v. Potter, 3 H. & C. 300, 159 Eng. Rep. 545 (Ex. 1864).

85. Masonite Corp. v. Burnham, 164 Miss. 840, 146 So. 292 (1933).

86. Harvey Realty Co. v. Borough of Wallingford, 111 Conn. 352, 150 A. 60 (1930); Stanton v. St. Joseph's College, 254 A.2d 597 (Me. 1969); Sterling Iron & Zinc Co. v. Sparks Mfg. Co., 55 N.J. Eq. 824, 38 A. 426 (1897), *aff'g sub nom.* Beach v. Sterling Iron & Zinc Co., 54 N.J. Eq. 65, 33 A. 286 (Ch. 1895); McKinney v. Deneen, 231 N.C. 540, 58 S.E.2d 107 (1950).

87. Kraver v. Smith, 164 Ky. 674, 177 S.W. 286 (1915); Grey *ex rel.* Simmons v. City of Paterson, 58 N.J. Eq. 1, 42 A. 749 (Ch. 1899), *rev'd on*

acquire a right to pollute without liability. He would, of course, be subject to sewer use regulations,⁸⁸ and may be countersued by the municipality.

C. *Limits on the Riparian's Right to Stop Discharges*

1. PRESCRIPTION

Prescription, more commonly known as adverse possession, involves incidents to land not the right to possession itself.⁸⁹ A prescriptive property right, adverse and superior to the right of the property owner, can be acquired by open, notorious, uninterrupted, and adverse use or occupation under claim of right for the entire period prescribed by the statute of limitations.⁹⁰

Like other rights acquired by prescription, the right to pollute the river must be open and notorious for the entire statutory period. It must be visible enough that the riparian against whom the statute of limitations is running either knows, or should know, that his rights have been invaded.⁹¹ Thus, if the amount of pollution is so small as to be inconsiderable, there will not be a "strong act of exclusive possession" constituting notice of an adverse claim of right,⁹² because it is concealed.

A prescriptive right can be acquired either to interfere with riparian rights or to create a private nuisance. Although Wisconsin has not decided this question,⁹³ other states have recognized that an upstream riparian can acquire a prescriptive right to pollute against

other grounds 60 N.J. Eq. 385, 45 A. 995 (1900); *Hampton v. Town of Spindale*, 210 N.C. 546, 187 S.E. 775 (1936); *Clinard v. Town of Kernersville*, 215 N.C. 745, 3 S.E.2d 267 (1939); *Johnson v. Kraft-Phenix Cheese Corp.*, 19 Tenn. App. 648, 94 S.W.2d 54 (1935).

88. *Kraver v. Smith*, 164 Ky. 674, 177 S.W. 286 (1915).

89. BLACK'S LAW DICTIONARY 1346 (4th ed. 1951).

90. *Barakis v. American Cyanamid Co.*, 161 F. Supp. 25 (N.D. Tex. 1958); *Stouts Mtn. Coal & Coke Co. v. Ballard*, 195 Ala. 283, 70 So. 172 (1915); *Vickers v. City of Fitzgerald*, 216 Ga. 476, 117 S.E.2d 316 (1960) (dictum); *Anneberg v. Kurtz*, 197 Ga. 188, 28 S.E.2d 769 (1944); *Lockwood Co. v. Lawrence*, 77 Me. 297 (1885); *Crosby v. Bessey*, 49 Me. 539 (1860); *Satren v. Hader Co-op. Cheese Factory*, 202 Minn. 553, 279 N.W. 361 (1938) (dictum); *Riggs v. City of Springfield*, 344 Mo. 420, 126 S.W.2d 1144 (1939) (dictum); *Smith v. City of Sedalia*, 152 Mo. 283, 53 S.W. 907 (1899); *Fansler v. City of Sedalia*, 189 Mo. App. 454, 176 S.W. 1102 (1915); *City of Chillicothe v. Bryan*, 103 Mo. App. 409, 77 S.W. 465 (1903); *Holsman v. Boiling Spring Bleaching Co.*, 14 N.J. Eq. 335 (Ch. 1862); *Prentice v. Geiger*, 74 N.Y. 341 (1878), *aff'g* 9 Hun 350 (Sup. Ct. 1876); *Williams v. Haile Gold Mining Co.*, 85 S.C. 1, 66 S.E. 117 (1909).

91. *Stouts Mtn. Coal & Coke Co. v. Ballard*, 195 Ala. 283, 70 So. 172 (1915); *Pioneer Wood Pulp Co. v. Chandos*, 78 Wis. 526, 47 N.W. 661 (1891).

92. See *Green Bay & Miss. Canal Co. v. Kaukauna Water Power Co.*, 90 Wis. 370, 401-02, 61 N.W. 1121, 1125 (1895).

93. See *Behnisch v. Cedarburg Dairy Co.*, 180 Wis. 34, 37-38, 192 N.W. 447, 448 (1923).

downstream riparians, either in abrogation of riparian rights⁹⁴ or to maintain a nuisance.⁹⁵

However, no prescriptive right can be acquired to create a public nuisance,⁹⁶ although a private individual can lose by prescription his right to recover special damages resulting from the maintenance of a public nuisance.⁹⁷ Presumably, a private individual's right to bring an action to abate a public nuisance under Wisconsin Statutes section 280.02 would not be affected.

94. A right to pollute water may be obtained contrary to riparian rights by prescription. *Anneberg v. Kurtz*, 197 Ga. 188, 28 S.E.2d 769 (1944); *City of Richmond v. Test*, 18 Ind. App. 482, 48 N.E. 610 (1897) (dictum); *Parker v. American Woolen Co.*, 195 Mass. 591, 81 N.E. 468 (1907); *Western N.Y. Water Co. v. City of Niagara Falls*, 91 Misc. 73, 154 N.Y.S. 1046 (Sup. Ct. 1915), *aff'd mem.* 176 App. Div. 944, 162 N.Y.S. 1149 (1917), *aff'd mem.* 226 N.Y. 671, 123 N.E. 894 (1919) (dictum); *McCallum v. Germantown Water Co.*, 54 Pa. 40 (1867); *Barakis v. American Cyanamid Co.*, 161 F. Supp. 25 (N.D. Tex. 1958).

95. A right to create and maintain a private nuisance by means of water pollution can be obtained by prescription. *Stouts Mtn. Coal & Coke Co. v. Ballard*, 195 Ala. 283, 70 So. 172 (1915); *Anneberg v. Kurtz*, 197 Ga. 188, 28 S.E.2d 769 (1944); *Watkins v. Pepperton Cotton Mills*, 162 Ga. 371, 134 S.E. 69 (1926); *W.G. Duncan Coal Co. v. Jones*, 254 S.W.2d 720 (Ky. 1953); *Fansler v. City of Sedalia*, 189 Mo. App. 454, 176 S.W. 1102 (1915) (dictum); *City of Chillicothe v. Bryan*, 103 Mo. App. 409, 77 S.W. 465 (1903) (dictum); *Smith v. City of Sedalia*, 152 Mo. 283, 53 S.W. 907 (1899); *Jones v. Breyer Ice Cream Co.*, 1 App. Div. 2d 253, 149 N.Y.S.2d 426 (1956); *Conestee Mills v. City of Greenville*, 160 S.C. 10, 158 S.E. 113 (1931); *Williams v. Haile Gold Mining Co.*, 85 S.C. 1, 66 S.E. 117 (1909).

Contra, *Lawton v. Herrick*, 83 Conn. 417, 76 A. 986 (1910); *Aubele v. A.B. Galetovich, Inc.*, 83 Ohio L. Abs. 200, 165 N.E.2d 683 (Ct. App. 1960) (dictum).

96. A waste discharger cannot acquire a right to create and maintain a public nuisance by prescription. *Birmingham v. Land*, 137 Ala. 538, 34 So. 613 (1903); *Smallpage v. Turlock Irrigation Dist.*, 26 Cal. App. 2d 538, 79 P.2d 752 (1938) (dictum); *Nolan v. City of New Britain*, 69 Conn. 668, 38 A. 703 (1897); *Gardenhire v. Sinclair-Prairie Oil Co.*, 141 Kan. 865, 44 P.2d 280 (1935); *W.G. Duncan Coal Co. v. Jones*, 254 S.W.2d 720 (Ky. 1953) (dictum); *Attorney-General ex rel. Township of Wyoming v. City of Grand Rapids*, 175 Mich. 503, 141 N.W. 890 (1913); *Weeks-Thorn Paper Co. v. Glenside Woolen Mills*, 64 Misc. 205, 118 N.Y.S. 1027 (Sup. Ct. 1909), *aff'd mem.* 140 App. Div. 878, 124 N.Y.S. 2 (1910), *aff'd mem.* 204 N.Y. 563, 97 N.E. 1118 (1912), *reh. denied* 204 N.Y. 639, 98 N.E. 1136 (1912); *Fonda v. Village of Sharon Springs*, 70 Misc. 101, 128 N.Y.S. 147 (Sup. Ct. 1910); *Town of Shelby v. Cleveland Mill & Power Co.*, 155 N.C. 196, 71 S.E. 218 (1911); *Commonwealth v. Yost*, 11 Pa. Super. 323 (1899), *rev'd on facts* 197 Pa. 171, 46 A. 845 (1900); *Commonwealth ex rel. Shumaker v. New York & Pa. Co.*, 367 Pa. 40, 79 A.2d 439 (1951); *City of Corsicana v. King*, 3 S.W.2d 857 (Tex. Civ. App. 1928); *Bales v. City of Tacoma*, 172 Wash. 494, 20 P.2d 860 (1933); *Meiners v. Frederick Miller Brewing Co.*, 78 Wis. 364, 47 N.W. 430 (1890); *Douglass v. State*, 4 Wis. 387, 392 (1855).

Contra, *Haigh v. Deudraeth Rural Dist. Council*, [1945] 2 All E.R. 661 (Ch.) (dictum).

97. *Green Bay & Miss. Canal Co. v. Telulah Paper Co.*, 140 Wis. 417, 122 N.W. 1062 (1909); *Charnley v. Shawano Water Power & River Imp. Co.*, 109 Wis. 563, 85 N.W. 507 (1901).

Contra, *Woodruff v. North Bloomfield Gravel Mining Co.*, 18 F. 753

2. STATUTE OF LIMITATIONS

Since no Wisconsin water pollution cases deal with the statute of limitations question, its discussion must be based on analogies to other water law cases. Actions to recover damages for injuries sustained as a result of a single occurrence of pollution must be brought within 6 years. When damages are sought in situations of continuous pollution, only those damages sustained during the 6 years prior to commencement of the action may be recovered.⁹⁸

The right of action to abate a nuisance will not be barred by the 10 year statute, since the nuisance is continual.⁹⁹ If an action is brought to enjoin pollution as a violation of riparian rights, the 20 year statute will apply. After 20 years, the polluter will have acquired a prescriptive right to continue the pollution, but only if the pollution levels were unchanging throughout the period.

Under the reasonable use concept followed in Wisconsin,¹⁰⁰ the statute of limitations should begin to run when a waste discharge becomes unreasonable with respect to uses of the water made by the plaintiff.¹⁰¹ The date is determined by the facts and may present problems of proof. In a nuisance action, the statute begins to run when the nuisance first occurs. Since continuous pollution constitutes a recurring or continual trespass of riparian rights or nuisance, a new cause of action will accrue each day until the right of action is extinguished by prescription under the 20 year statute of limitations.¹⁰²

In other states, the effect of the statute of limitations depends upon whether the pollution is abatable. Where it is not, some cases hold that the cause of action accrues when the waste discharge first occurs.¹⁰³ The more popular view, however, is that the cause of action accrues later, when the injury becomes apparent¹⁰⁴ or when it

(C.C.D. Cal. 1884); *Bowen v. Wendt*, 103 Cal. 236, 37 P. 149 (1894); *Nolan v. City of New Britain*, 69 Conn. 668, 38 A. 703 (1897).

98. The right of action itself is not barred by the statute. *Ramsdale v. Foote*, 55 Wis. 557, 13 N.W. 557 (1882).

99. *Cedar Lake Hotel Co. v. Cedar Lake Hydraulic Co.*, 79 Wis. 297, 48 N.W. 371 (1891); *Ramsdale v. Foote*, 55 Wis. 557, 13 N.W. 557 (1882).

100. See discussion of the reasonable use concept as it applies to pollution, *supra*.

101. The question of when a cause of action accrues under the reasonable use concept has never been decided in Wisconsin.

102. WIS. STAT. §§ 893.02, 893.08 (1969).

103. *Fulmer v. Skelly Oil Co.*, 143 Kan. 55, 53 P.2d 825 (1936); *McDaniel v. City of Cherryvale*, 91 Kan. 40, 136 P. 899 (1913); *Henryetta v. Runyan*, 370 P.2d 565 (Okla. 1962); *Carter Oil Co. v. Jackson*, 194 Okla. 621, 153 P.2d 1013 (1944) (dictum).

104. *Hill v. Empire State-Idaho Mining & Dev. Co.*, 158 F. 881 (D.C. Idaho 1908); *City of Clanton v. Johnson*, 245 Ala. 470, 17 So. 2d 669 (1944); *Vickers v. City of Fitzgerald*, 216 Ga. 476, 117 S.E.2d 316 (1960) (dictum); *Gardenhire v. Sinclair-Prairie Oil Co.*, 141 Kan. 865, 44 P.2d 280 (1935); *Mosby v. Manhattan Oil Co.*, 134 Kan. 732, 8 P.2d 325 (1932); *Lackey v.*

should have become known.¹⁰⁵ In such cases of permanent injury, the statute of limitations begins to run when the cause of action accrues, and all recovery is denied after the period of limitations has ended.¹⁰⁶

Cases involving temporary injuries, those in which pollution is abatable, hold that successive causes of action are created so long as the pollution continues.¹⁰⁷ The causes of action accrue when the injuries are or should have been discovered.¹⁰⁸ Because the causes of action are successive, the statute of limitations bars recovery of damages only for those for which the period of limitations has ended, but recovery of damages for more recent claims is not barred.¹⁰⁹

Prairie Oil & Gas Co., 132 Kan. 754, 297 P. 679 (1931); *Young v. International Paper Co.*, 179 La. 803, 155 So. 231 (1934); *Rhodes v. International Paper Co.*, 174 La. 49, 139 So. 755 (1932); *Spyker v. International Paper Co.*, 173 La. 580, 138 So. 109 (1931); *Lewis v. City of Potosi*, 317 S.W.2d 623 (Mo. App. 1958), 348 S.W.2d 577 (Mo. App. 1961); *Newman v. City of El Dorado Springs*, 292 S.W.2d 314 (Mo. App. 1956); *Stewart v. City of Springfield*, 350 Mo. 234, 165 S.W.2d 626 (1942); *Thompson v. City of Springfield*, 134 S.W.2d 1082 (Mo. App. 1939); *King v. City of Rolla*, 234 Mo. App. 16, 130 S.W.2d 697 (1939); *Riggs v. City of Springfield*, 344 Mo. 420, 126 S.W.2d 1144 (1939); *Person v. City of Independence*, 114 S.W.2d 175 (Mo. App. 1938); *Skelly Oil Co. v. Humphrey*, 195 Okla. 384, 158 P.2d 175 (1945); *H.F. Wilcox Oil & Gas Co. v. Johnson*, 184 Okla. 198, 86 P.2d 51 (1937); *H.F. Wilcox Oil & Gas Co. v. Allen*, 184 Okla. 196, 89 P.2d 55 (1937); *Richards v. Flight*, 97 Okla. 9, 222 P. 564 (1924); *Barakis v. American Cyanamid Co.*, 161 F. Supp. 25 (N.D. Tex. 1958); *Vann v. Bowie Sewerage Co.*, 127 Tex. 97, 90 S.W.2d 561 (1936); *McKinney v. Emory & Henry College*, 117 Va. 763, 86 S.E. 115 (1915); *Virginia Hot Springs Co. v. McCray*, 106 Va. 461, 56 S.E. 216 (1907); *Day v. Louisville Coal & Coke Co.*, 60 W. Va. 27, 53 S.E. 776 (1906).

105. *Young v. International Paper Co.*, 179 La. 803, 155 So. 231 (1934); *Rhodes v. International Paper Co.*, 174 La. 49, 139 So. 755 (1932); *Spyker v. International Paper Co.*, 173 La. 580, 138 So. 109 (1931).

106. *H.F. Wilcox Oil & Gas Co. v. Juedeman*, 187 Okla. 382, 101 P.2d 1050 (1940); *H.F. Wilcox Oil & Gas Co. v. Murphy*, 186 Okla. 188, 97 P.2d 84 (1939). But one case holds that continuing damages occurring from permanent pollution are not barred by the statute of limitations if the period of limitations has not terminated. *Pine v. Duncan*, 179 Okla. 336, 65 P.2d 492 (1937).

107. *Jones v. Sewer Imp. Dist.*, 119 Ark. 166, 177 S.W. 888 (1915); *Vickers v. City of Fitzgerald*, 216 Ga. 476, 117 S.E.2d 316 (1960); *West Ky. Coal Co. v. Rudd*, 328 S.W.2d 156 (Ky. 1959); *Hillhouse v. City of Aurora*, 316 S.W.2d 883 (Mo. App. 1958); *City of Mansfield v. Hunt*, 19 Ohio C.C.R. 488, 10 Ohio C. Dec. 567 (1900); *City of Henryetta v. Runyan*, 203 Okla. 153, 219 P.2d 220 (1950), 207 Okla. 300, 249 P.2d 425 (1952); *Carter Oil Co. v. Jackson*, 194 Okla. 621, 153 P.2d 1013 (1944) (dictum); *Oklahoma City v. West*, 155 Okla. 63, 7 P.2d 888 (1931); *City of Magnum v. Sun Set Field*, 73 Okla. 11, 174 P. 501 (1918) (dictum); *Conestee Mills v. City of Greenville*, 160 S.C. 10, 158 S.E. 113 (1931).

108. *City of Bethany v. Municipal Securities Co.*, 274 P.2d 363 (Okla. 953); *Shell Oil Co. v. Vanderslice*, 192 Okla. 690, 138 P.2d 841 (1943) (dictum).

109. *Howell v. City of Dothan*, 234 Ala. 158, 174 So. 624 (1937); *Parsons v. Tennessee Coal, Iron & R.R. Co.*, 186 Ala. 84, 64 So. 591 (1914); *Tutwiler*

In cases involving a single instance of pollution, the cause of action accrues at once,¹¹⁰ and all recovery is barred after the period of limitations has run. Where there have been incremental increases in pollution, the situation is treated as successive pollution, and damages may be recovered for that increment which has not continued for the entire period of limitations.¹¹¹ Recovery for injuries caused by increased pollution is not barred merely because the statute of limitations bars recovery for the earlier levels of pollution.¹¹²

3. COMPARATIVE CONVENIENCE

Even under a reasonable flow test, riparian rights litigation would seriously curtail the activities of industries and municipal waste treatment plants, whenever it could be shown that degradation of water was great enough to interfere substantially with use of the watercourse by downstream riparians. Because the economic impact on municipalities and major industries of an injunction ordering pollution abatement may be highly out of proportion to the social cost of the pollution on downstream riparians, courts have created the comparative convenience doctrine. The doctrine allows economic factors to be included in a determination of what constitutes reasonable use. Thus, in pollution cases, the courts balance the social and economic utility of the activities carried on by both parties, the cost of abating the pollution, and the nature and gravity of the harm suffered by plaintiff. Numerous courts have called the process comparative convenience or balancing the equities.¹¹³ Others, including Wisconsin, have rejected the terms.¹¹⁴ But, with rare exception, most pollution cases involve a balancing process, whatever name is given it.

Frequently, courts state they are using the balancing test when they believe the defendant's polluting activity should be allowed,

Coal, Coke & Iron Co. v. Nichols, 146 Ala. 364, 39 So. 762 (1905); Bennett v. City of Marion, 119 Iowa 473, 93 N.W. 558 (1903); Young v. International Paper Co., 179 La. 803, 155 So. 231 (1934); Rhodes v. International Paper Co., 174 La. 49, 139 So. 755 (1932); Spyker v. International Paper Co., 173 La. 580, 138 So. 109 (1931); Driscoll v. American Hide & Leather Co., 102 Misc. 612, 170 N.Y.S. 121 (Sup. Ct. 1918), *aff'd mem.* 184 App. Div. 916, 170 N.Y.S. 1076 (1918); Fonda v. Village of Sharon Springs, 70 Misc. 101, 128 N.Y.S. 147 (Sup. Ct. 1910); H.F. Wilcox Oil & Gas Co. v. Allen, 184 Okla. 196, 89 P.2d 55 (1937); Conestee Mills v. City of Greenville, 160 S.C. 10, 158 S.E. 113 (1931); Harrington (Earl) v. Derby Corp. [1905] 1 Ch. 205 (1904).

110. Gulf Ref. Co. v. Nabers, 134 S.W.2d 843 (Tex. Civ. App. 1939).

111. Sloss-Sheffield Steel & Iron Co. v. Morgan, 181 Ala. 587, 61 So. 283 (1913); Smith v. City of Sedalia, 152 Mo. 283, 53 S.W. 907 (1899); Commercial Drilling Co. v. Kennedy, 172 Okla. 475, 45 P.2d 534 (1935).

112. Riggs v. City of Springfield, 344 Mo. 420, 126 S.W.2d 1144 (1939); H.F. Wilcox Oil & Gas Co. v. Murphy, 186 Okla. 188, 97 P.2d 84 (1939); H.F. Wilcox Oil & Gas Co. v. Juedeman, 187 Okla. 382, 101 P.2d 1050 (1940).

113. See cases listed in Appendices E(1) and E(3), *infra*.

114. See cases listed in Appendices E(2) and E(4), *infra*.

but reject the doctrine when they believe his conduct should not continue. In both situations, of course, the courts are actually using the comparative convenience doctrine. Thus, on the facts, injunctions have been refused in the following situations: where the complainant's investment was small compared with the polluter's, but where significant damage was suffered by the complainant,¹¹⁵ where the injury to the complainant was inconsequential,¹¹⁶ or where the invasion of his right was merely technical.¹¹⁷ In a great many cases, injunctive relief was denied where the court believed money damages would provide adequate relief.¹¹⁸ However, injunc-

115. Comparative convenience was accepted and relief was denied in a few cases where the defendant's investment was much greater than the plaintiff's but where the plaintiff suffered significant damage. *Barnard v. Sherley*, 135 Ind. 547, 34 N.E. 600, 35 N.E. 117 (1893) (artesian bathing water from an asylum for syphilis patients polluted a farm livestock water supply); *Pennsylvania Coal Co. v. Sanderson*, 113 Pa. 126, 6 A. 453 (1886) (acid mine drainage corroded an ornamental garden fountain, polluted a domestic water supply, and killed fish in an ornamental pond); *Hogue v. City of Bowie*, 209 S.W.2d 807 (Tex. Civ. App. 1948) (a defective city sewage plant caused odors and made water unfit to drink by cattle).

116. Comparative convenience language has been accepted and relief denied where the defendant's investment was much greater than the plaintiff's and where the latter's injuries were inconsequential. *Clifton Iron Co. v. Dye*, 87 Ala. 468, 6 So. 192 (1888) (iron ore washings created a sediment deposit in a stream but did not affect a hog water supply); *Clark v. Lindsay Light & Chem. Co.*, 341 Ill. App. 316, 93 N.E.2d 441 (1950) (chemical refuse made a stream, usually dry but for the added waste discharge, unfit to drink by cattle); *Young v. International Paper Co.*, 179 La. 803, 155 So. 231 (1934) (paper mill wastes killed cypress trees in a swamp); *Wood v. Sutcliffe*, 2 Sim. (n.s.) 163, 61 Eng. Rep. 303 (V.C. 1851) (dye wastes affected water used by a wool washing factory).

117. Comparative convenience language was accepted and relief denied where the defendant's investment was greater than the plaintiff's and where the invasion of the plaintiff's rights was merely technical. *Michelsen v. Leskowitz*, 55 N.Y.S.2d 831 (Sup. Ct. 1945), *aff'd mem.* 270 App. Div. 1042, 63 N.Y.S.2d 191 (1946) (duck farm debris reduced the value of unused marshland which was not suitable for residential purposes); *Lillywhite v. Trimmer*, 36 L.J. Ch. 525, 16 L.T.R. (n.s.) 318 (V.C. 1867) (city sewage killed fish, made water unfit to drink and filled a millpond with scum).

118. Comparative convenience language has been accepted in several cases where damages were considered adequate relief in view of the economic effect which would be caused if an injunction were granted. *Drake v. Lady Ensley Coal, Iron & Ry. Co.*, 102 Ala. 501, 14 So. 749 (1893) (mine tailings and clay made water unfit to drink by cattle and deposited sediment on a farm); *Arizona Copper Co. v. Gillespie*, 230 U.S. 46 (1913) (dictum) (copper ore tailings poisoned irrigated farmland); *Wright v. Best*, 19 Cal. 2d 368, 121 P.2d 702 (1942) (mine tailings fouled an irrigation water supply); *City of Lakeland v. State ex rel. Harris*, 143 Fla. 761, 197 So. 470 (1940) (sewage plant effluent polluted a stream); *McCarthy v. Bunker Hill & Sullivan Mining & Concentrating Co.*, 164 F. 927 (9th Cir. 1908) (mine tailings polluted a livestock water supply and killed vegetation); *Young v. International Paper Co.*, 179 La. 803, 155 So. 231 (1934) (paper mill wastes killed cypress trees in a swamp); *Busby v. International Paper Co.*, 95 F. Supp. 596 (W.D. La. 1951) (paper mill wastes overflowing from a stream made a small piece of land uncultivable); *Edwards v. Allouez Mining Co.*, 38 Mich. 46 (1878) (land speculator's land covered

tive relief was granted where the acts complained of could have been remedied at little expense,¹¹⁹ where both parties had substantial investments and the damage to the complainant was great¹²⁰ or the acts of the polluters were unreasonable,¹²¹ where a public water

by sand from a stamping mill); *Monroe Carp Pond Co. v. River Raisin Paper Co.*, 240 Mich. 279, 215 N.W. 325 (1927) (paper mill wastes killed fish in a commercial fish hatchery); *Smith v. City of Sedalia*, 244 Mo. 107, 149 S.W. 597 (1912) (city sewer polluted a stream at a farm); *City of Harrisonville v. W.S. Dickey Clay Mfg. Co.*, 289 U.S. 334 (1933), *rev'g* 61 F.2d 210 (8th Cir. 1932) (inadequately treated sewage damaged a pasture); *Grey ex rel. Simmons v. City of Paterson*, 60 N.J. Eq. 385, 45 A. 995 (1900), *rev'g* 58 N.J. Eq. 1, 42 A. 749 (Ch. 1899) (raw sewage created a public and private nuisance); *Salem Iron Co. v. Hyland*, 74 Ohio St. 160, 77 N.E. 751 (1906) (oil well brine made water unfit for boilers); *Straight v. Hover*, 79 Ohio St. 263, 87 N.E. 174 (1909) (oil well brine made water unfit to drink by cattle); *Elder v. Lykens Valley Coal Co.*, 157 Pa. 490, 27 A. 545 (1893) (dictum) (mine tailings covered a farm during an extraordinary flood); *Parsons v. City of Sioux Falls*, 65 S.D. 145, 272 N.W. 288 (1937) (untreated city sewage killed vegetation, and made water unfit to drink by cattle; the water's vapors discolored paint and caused odors); *Thomas v. Village of Clear Lake*, 270 Wis. 630, 72 N.W.2d 541 (1955) (treated sewage discharged into a dry run affected a pasture); *Sussex Land & Livestock Co. v. Midwest Ref. Co.*, 294 F. 597 (8th Cir. 1923) (unavoidable oil leaks poisoned a creek used for natural irrigation and for livestock watering).

119. Comparative convenience language was rejected and injunctive relief was granted where the expense of abating the pollution would be relatively slight. *Meriwether Sand & Gravel Co. v. State ex rel. Attorney General*, 181 Ark. 216, 26 S.W.2d 57 (1930) (gravel washings were deposited on a farm, and killed fish in a stream; comparative convenience was accepted but relief was granted on the facts because the act constituted a public and private nuisance); *Parker v. American Woolen Co.*, 195 Mass. 591, 81 N.E. 468 (1907) (wool washing wastes affected a paper mill water supply).

120. Comparative convenience language was rejected and injunctive relief was granted in cases where both parties had made a substantial investment and where the plaintiff's damages were great. *Morgan v. City of Danbury*, 67 Conn. 484, 35 A. 499 (1896) (raw sewage made water unfit to drink by cattle and to wash cider barrels and clothes at commercial establishments); *Parker v. American Woolen Co.*, 195 Mass. 591, 81 N.E. 468 (1907) (wool wastes so polluted a stream that a paper mill was forced to close down); *Beach v. Sterling Iron & Zinc Co.*, 54 N.J. Eq. 65, 33 A. 286 (Ch. 1895), *aff'd sub nom. Sterling Iron & Zinc Co. v. Sparks Mfg. Co.*, 55 N.J. Eq. 824, 38 A. 426 (1897) (ore tailings discolored a paper mill water supply); *Squaw Island Freight Terminal Co. v. City of Buffalo*, 246 App. Div. 472, 284 N.Y.S. 598 (1936), *modified* 273 N.Y. 119, 7 N.E.2d 10 (1937) (untreated city sewage polluted and destroyed a sand and gravel deposit); *Pennington v. Brinsop Hall Coal Co.*, 5 Ch. D. 769 (1877) (acid mine drainage corroded boilers); *John Young & Co. v. Bankier Distillery Co.*, [1893] A.C. 691 (Scot.) (acid mine drainage altered the chemical characteristics of water used to distill whiskey).

121. Comparative convenience language was rejected and injunctive relief was granted in cases where the defendant's acts were considered to be unreasonable. *Platt Bros. & Co. v. City of Waterbury*, 72 Conn. 531, 45 A. 154 (1900) (city sewage made water unfit as industrial process water); *Attorney General ex rel. Township of Wyoming v. City of Grand Rapids*, 175 Mich. 503, 141 N.W. 890 (1913) (untreated city sewage created odors

supply was affected,¹²² where a public nuisance¹²³ or private nuisance was created by municipal or industrial polluters¹²⁴ or where

in a downstream village); *Squaw Island Freight Terminal Co. v. City of Buffalo*, 246 App. Div. 472, 284 N.Y.S. 598 (1936), *modified* 273 N.Y. 119, 7 N.E.2d 10 (1937) (untreated city sewage polluted and destroyed a sand and gravel deposit); *Kennedy v. Moog, Servocontrols, Inc.*, 48 Misc. 2d 107, 264 N.Y.S.2d 606 (Sup. Ct. 1965), *modified* 26 App. Div. 2d 768, 271 N.Y.S.2d 928 (1966), *aff'd* 21 N.Y.2d 966, 237 N.E.2d 356 (1968) (treated domestic sewage from an industrial plant made water unfit to drink by cattle and filled a ditch).

122. Comparative convenience language was rejected and injunctive relief was granted where pollution affected a public water supply. *Indianapolis Water Co. v. American Strawboard Co.*, 53 F. 970, 57 F. 1000 (C.C.D. Ind. 1893) (paper mill wastes); *Commonwealth ex rel. McCormick v. Russell*, 172 Pa. 506, 33 A. 709 (1896) (by implication) (oil well brine); *Pennsylvania R.R. v. Sagamore Coal Co.*, 281 Pa. 233, 126 A. 386 (1924) (acid mine drainage); *Stockport Waterworks Co. v. Potter*, 7 H. & N. 160, 158 Eng. Rep. 433 (Ex. 1861) (calico dye wastes, including arsenic).

123. Comparative convenience language was rejected and injunctive relief was granted in cases where pollution created public nuisances. *Woodruff v. North Bloomfield Gravel Mining Co.*, 18 F. 753 (C.C.D. Cal. 1884) (hydraulic mine tailings filled a stream channel and made water cloudy); *Attorney General ex rel. Town of Wyoming v. City of Grand Rapids*, 175 Mich. 503, 141 N.W. 890 (1913) (untreated city sewage created odors in a downstream village); *Commonwealth ex rel. McCormick v. Russell*, 172 Pa. 506, 33 A. 709 (1896) (by implication) (oil well brine made water in a city reservoir unpotable); *Attorney General v. Colney Hatch Lunatic Asylum, L.R. 4 Ch. 145* (1868) (raw sewage polluted a stream); *Attorney-General v. Hackney Local Bd.*, L.R. 20 Eq. 626 (V.C. 1875) (raw sewage polluted a stream and caused odors).

Comparative convenience language was accepted in one such case, but was held to be inapplicable on the facts. *Meriwether Sand & Gravel Co. v. State ex rel. Attorney General*, 181 Ark. 216, 26 S.W.2d 57 (1930) (gravel washings killed fish and were deposited on a farm).

Contra: comparative convenience language was accepted to deny injunctive relief in public nuisance cases. *City of Lakeland v. State ex rel. Harris*, 143 Fla. 761, 197 So. 470 (1940) (discussed with respect to injunctions); *Grey ex rel. Simmons v. City of Paterson*, 60 N.J. Eq. 385, 45 A. 995 (1900), *rev'g* 58 N.J. Eq. 1, 42 A. 749 (Ch. 1899) (damages awarded); *Attorney General v. Dorking Union*, 20 Ch. D. 595 (C.A. 1882).

124. Comparative convenience language was rejected and injunctive relief was granted in cases where industries created private nuisances. *Hill v. Standard Mining Co.*, 12 Idaho 223, 85 P. 907 (1906) (mine tailings filled a streambed, were deposited on a ranch, and poisoned a nearby well); *Weston Paper Co. v. Pope*, 155 Ind. 394, 57 N.E. 719 (1900) (paper mill wastes polluted a stream); *Bowman v. Humphrey*, 132 Iowa 234, 109 N.W. 714 (1906) (creamery wastes caused odors on a farm); *Satren v. Hader Co-op Cheese Factory*, 202 Minn. 553, 279 N.W. 361 (1938) (whey polluted a stream and caused odors to pervade a farmhouse); *Strobel v. Kerr Salt Co.*, 164 N.Y. 303, 58 N.E. 142 (1900) (salt mine drainage corroded mill machinery, killed fish and made water undrinkable by cattle); *Whalen v. Union Bag & Paper Co.*, 208 N.Y. 1, 101 N.E. 805 (1913) (paper mill wastes damaged a farm); *Williams v. Haile Gold Mining Co.*, 85 S.C. 1, 66 S.E. 117 (1909) (gold mine treated washings created acid and completely destroyed the productive capacity of a farm); *H.B. Bowling Coal Co. v. Ruffner*, 117 Tenn. 180, 100 S.W. 116 (1906) (acid mill wastes corroded a boiler and made water unfit for domestic or livestock use); *Shoffner v. Sutherland*, 111 Va. 298, 68 S.E. 996 (1910) (sawdust made a stream unfit

the polluted water entered the stream from a nonriparian source.¹²⁵

Reasons stated for adopting the comparative convenience doctrine include preference for industrial development as a matter of public interest,¹²⁶ and classification of mining as a natural use of land like farming.¹²⁷ By contrast, the doctrine has been rejected because industry was considered an artificial use of land,¹²⁸ or because pumping out mine drainage was likewise considered an artificial use of land.¹²⁹ Five cases denied relief because enjoining the pollution would have created a great financial burden on the public,¹³⁰ and

for domestic purposes and caused odors); *Day v. Louisville Coal & Coke Co.*, 60 W. Va. 27, 53 S.E. 776 (1906) (cinders, slag and mine tailings were deposited on a farm and rendered a stream unfit for domestic or agricultural purposes); *Middlestadt v. Waupaca Starch & Potato Co.*, 93 Wis. 1, 66 N.W. 713 (1896) (starch refuse made water unusable for domestic purposes); *Tiede v. Schneidt*, 105 Wis. 470, 81 N.W. 826 (1900) (rendering plant effluent made water unfit for domestic or livestock purposes and caused odors).

In one case, comparative convenience was accepted, but relief was granted on the facts. *Meriwether Sand & Gravel Co. v. State ex rel. Attorney General*, 181 Ark. 216, 26 S.W.2d 57 (1930) (gravel washings killed fish and were deposited on a farm).

Contra: comparative convenience language was accepted and injunctive relief was denied in cases where industries created private nuisances. *Sussex Land & Livestock Co. v. Midwest Ref. Co.*, 294 F. 597 (8th Cir. 1923) (damages awarded) (unavoidable oil leaks polluted a stream used for natural irrigation and watering cattle); *Straight v. Hover*, 79 Ohio St. 263, 87 N.E. 174 (1909) (damages awarded) (oil well brine made water unfit to drink by cattle); *Salem Iron Co. v. Hyland*, 74 Ohio St. 160, 77 N.E. 751 (1906) (damages awarded) (oil well brine made water unsuitable for boilers); *Windfohr v. Johnson's Estate*, 57 S.W.2d 215 (Tex. Civ. App. 1932) (oil well brine killed pecan trees).

125. *Getting v. Union Imp. Co.*, 7 Luz. L. Reg. R. 493 (Pa. County Ct. 1895); *Williams v. Union Imp. Co.*, 1 Pa. Dist. 288, 6 Luz. L. Reg. R. 417 (Pa. County Ct. 1892).

126. *McCarthy v. Bunker Hill & Sullivan Mining & Concentrating Co.*, 164 F. 927 (9th Cir. 1908); *Pennsylvania Coal Co. v. Sanderson*, 113 Pa. 126, 6 A. 453 (1886).

127. *Weston Paper Co. v. Pope*, 155 Ind. 394, 57 N.E. 719 (1900) (dictum); *Pennsylvania Coal Co. v. Sanderson*, 113 Pa. 126, 6 A. 453 (1886) (limited by the *Hindson* and *McCune* cases, notes 128-29, *infra*, to gravity mine drainage).

128. *Weston Paper Co. v. Pope*, 155 Ind. 394, 57 N.E. 719 (1900); *Latonia Ref. Corp. v. Dusing*, 246 Ky. 328, 55 S.W.2d 23 (1932); *Mississippi Mills Co. v. Smith*, 69 Miss. 299, 11 So. 26 (1892); *Townsend v. Bell*, 62 Hun. 306, 17 N.Y.S. 210 (Sup. Ct. 1891); *Hindson v. Markle*, 171 Pa. 138, 33 A. 74 (1895).

129. *Beach v. Sterling Iron & Zinc Co.*, 54 N.J. Eq. 65, 33 A. 286 (Ch. 1895); *aff'd sub nom. Sterling Iron & Zinc Co. v. Sparks Mfg. Co.*, 55 N.J. Eq. 824, 38 A. 426 (1897); *McCune v. Pittsburgh & Baltimore Coal Co.*, 238 Pa. 83, 85 A. 1102 (1913); *H.B. Bowling Coal Co. v. Ruffner*, 117 Tenn. 180, 100 S.W. 116 (1906).

130. Relief has been denied in cases involving municipal defendants because abatement would place too great a financial burden on the public. *Morgan v. City of Danbury*, 67 Conn. 484, 35 A. 499 (1896); *City of Valparaiso v. Hagen*, 153 Ind. 337, 54 N.E. 1062 (1899); *City of Harrisonville v. W.S. Dickey Clay Mfg. Co.*, 289 U.S. 334 (1933), *rev'g* 61 F.2d 210 (8th Cir.

three cases have rejected that argument.¹³¹ The courts consider the value of the polluter's activity to society and to the local economy, both in determining whether the activity constitutes a reasonable use of the water, and, if it does not, whether it should be enjoined or whether money damages would suffice as a remedy. Language concerning natural purity and use of one's land without injuring the use of another's land is found only in those cases where the pollution is so gross as to constitute a public or private nuisance.

If the acceptance or rejection of "comparative convenience" as a doctrine were the basis of decision in these cases, one would expect to find more than a handful of the cases turning on that ground alone. But, only two cases rejected "comparative convenience" out of hand and gave injunctive relief to small complainants who had suffered minor injuries as a result of the activities of major industries; both of these cases involve private nuisances.¹³² In other cases where injunctive relief was granted, there was good reason to grant relief even if the "comparative convenience" doctrine had been adopted.¹³³

All Wisconsin pollution cases involve public or private nuisance situations. None were decided on the reasonable use concept of the riparian doctrine. As elsewhere in the United States, those cases involving nuisance situations rejected the "comparative convenience" doctrine.¹³⁴ And like cases in other jurisdictions, injunctive

1932); *Sammons v. City of Gloversville*, 34 Misc. 459, 70 N.Y.S. 284 (Sup. Ct. 1901), *aff'd mem.* 67 App. Div. 628, 74 N.Y.S. 1145 (1901), *aff'd* 175 N.Y. 346, 67 N.E. 622 (1903); *Warren v. City of Gloversville*, 81 App. Div. 291, 80 N.Y.S. 912 (1903).

131. The argument that relief should be denied because abatement of pollution would place too great a burden on the public has been rejected in a few cases involving municipal defendants. *State ex rel. Harris v. City of Lakeland*, 141 Fla. 795, 193 So. 826 (1940); *North Dade Water Co. v. Adken Land Co.*, 130 So. 2d 894 (Fla. Dist. Ct. App. 1961).

132. Comparative convenience language was rejected and injunctive relief was granted in certain cases even though the plaintiff's damages were small. *Hunter v. Taylor Coal Co.*, 16 Ky. L.R. 190 (1894) (acid mine wastes poisoned a farm water supply and killed vegetation when the creek overflowed); *Satren v. Hader Co-op Cheese Factory*, 202 Minn. 553, 279 N.W. 361 (1938) (whey polluted water and caused odors to pervade a farmhouse; annual damages were \$63); *Townsend v. Bell*, 62 Hun. 306, 17 N.Y.S. 210 (Sup. Ct. 1891) (dye wastes discolored a stream flowing past unused land); *Whalen v. Union Bag & Paper Co.*, 208 N.Y. 1, 101 N.E. 805 (1913) (paper mill wastes affected a farm; annual damages were \$100); *Kennedy v. Moog, Servocontrols, Inc.*, 48 Misc. 2d 107, 264 N.Y.S.2d 606 (Sup. Ct. 1965), *modified* 26 App. Div. 2nd 768, 271 N.Y.S.2d 928 (1966), *aff'd* 21 N.Y.2d 966, 237 N.E.2d 356, 290 N.Y.S.2d 193 (1968) (treated domestic sewage made water unfit to drink by cattle and filled a ditch); *McCune v. Pittsburgh & Baltimore Coal Co.*, 238 Pa. 83, 85 A. 1102 (1913) (acid mine drainage pumped from a mine polluted a farm water supply); *Spokes v. Banbury Bd. of Health*, L.R. 1 Eq. 42 (V.C. 1865) (city sewage killed fish and made water unfit to drink).

133. See notes 119-125, *supra* and accompanying text.

134. *Briggson v. City of Viroqua*, 264 Wis. 47, 52-54, 58 N.W.2d 546, 549

relief was granted,¹³⁵ except in one situation, when a municipal polluter had done all it could reasonably be expected to do to abate pollution according to the current state of the art.¹³⁶ Only one case suggests the Wisconsin court would refuse to grant an injunction against a municipal polluter if it would cause a disproportionate hardship, and in that case an injunction had already been issued.¹³⁷

4. JURISDICTION OF REGULATORY AGENCIES

The existence of an agency regulating water pollution makes possible four defenses to a common law pollution abatement action. They are: (a) exclusive jurisdiction of the administrative agency, precluding a court from hearing a common law action, (b) compliance with an administrative pollution abatement order, (c) failure to exhaust administrative remedies, and (d) primary jurisdiction, both of which postpone a common law action until the administrative process has been concluded.

Carmichael, in his article on the former Wisconsin State Committee on Water Pollution, has described the dimensions of the problem.

[P]rivate parties [have a right] to bring actions against polluters for damages and injunctions to compel the abatement of private nuisances. Suit may evidently be brought not only during the process of administrative regulation of the polluter, but also after such regulation has resulted in order compliance, for it is settled doctrine that legislative authorization to operate a sewerage system or sewerage treatment plant does not imply authorization to create a private nuisance and does not foreclose judicial determination of the existence of a private nuisance and the awarding of appropriate relief.¹³⁸ This doctrine might be extended to provide that such legislative authorization does not autho-

(1953); *Hasslinger v. Village of Hartland*, 234 Wis. 201, 208, 290 N.W. 647, 650 (1940); *Mitchell Realty Co. v. West Allis*, 184 Wis. 352, 362, 199 N.W. 390, 393 (1924); *Winchell v. City of Waukesha*, 110 Wis. 101, 107-09, 85 N.W. 668, 670 (1901); *Tiede v. Schneidt*, 105 Wis. 470, 479-80, 81 N.W. 826, 829 (1900); *Middlestadt v. Waupaca Starch & Potato Co.*, 93 Wis. 1, 4, 66 N.W. 713, 714 (1896).

135. All cases cited in note 134, *supra*, except *Hasslinger*, where only money damages were requested.

136. *Costas v. City of Fond du Lac*, 24 Wis. 2d 409, 419, 129 N.W.2d 217, 222 (1964) (dictum).

137. *Thomas v. Village of Clear Lake*, 270 Wis. 630, 635-36, 72 N.W.2d 541, 543-44 (1955). In that case, the issue was whether permanent damages could be awarded in addition to a permanent injunction. The court held they could be awarded in that situation. See *Hasslinger v. Village of Hartland*, 234 Wis. 201, 212, 290 N.W. 647, 652 (1940) (dictum), a case in which only damages were sought in a situation where a private nuisance could not be abated by any means known within the state of the art.

138. Citing *Costas v. City of Fond du Lac*, 24 Wis. 2d 409, 415-16, 129 N.W.2d 217, 220-21 (1964); *Briggson v. City of Viroqua*, 264 Wis. 47, 58 N.W.2d 546 (1953); Annot., 40 A.L.R.2d 1177, 1182 (1955). See *Hasslinger v. Village of Hartland*, 234 Wis. 201, 207-08, 290 N.W. 647, 649-50 (1940).

rize the usurpation of the rights of fellow riparians and that the courts could declare and protect such rights¹³⁹ despite a polluter's compliance with an order.¹⁴⁰ Thus, private parties might interject themselves and their claims into the midst of the administrative regulatory process by means of private litigation or they might attack the pollution abatement results of the regulatory process after its conclusion, in either case with disruptive results. A lower riparian might successfully assert that he had not been heard concerning the department's approval of a treatment plant and that his rights were invaded despite such approval. The polluter might then be required by the court to make costly plant alterations or additions beyond those ordered and approved by the department.¹⁴¹

Since riparian rights law, as well as private nuisance law,¹⁴² govern the respective rights of waste dischargers and other riparian water users, Carmichael's discussion clearly applies to both, compounding the possibility that the regulatory process could be subject to disruption by private lawsuits.

a. *Exclusive jurisdiction of state pollution control agency*

The Wisconsin Supreme Court long ago held that private nuisance suits would not be precluded merely because the nuisance resulted from the performance of a governmental function by a municipality unless specific legislation so provided.¹⁴³ In a later case, the court rejected the contention that assumption of jurisdiction over a municipal sewage disposal plant by the State Board of Health ousted the courts of all jurisdiction over resulting private nuisances.¹⁴⁴

139. *Winchell v. City of Waukesha*, 110 Wis. 101, 107-08, 85 N.W. 668, 670 (1901), supports this view.

140. Citing Annot., 46 A.L.R. 8, 54-56 (1927).

141. Carmichael, *Forty Years of Water Pollution Control in Wisconsin: A Case Study*, 1967 Wis. L. Rev. 350, 379-83. Since the Wisconsin statutes do not provide for meaningful nonpolluter participation in the regulatory process, *id.* at 378-79, Carmichael suggests that the process be revised to include such participation and to foreclose private actions other than judicial review of a pollution abatement order at the conclusion of the regulatory process. *Id.* at 380-83.

142. See notes 28-48 *supra*, and accompanying text.

143. *Winchell v. City of Waukesha*, 110 Wis. 101, 107-08, 85 N.W. 668, 670 (1901); *Mitchell Realty Co. v. City of West Allis*, 184 Wis. 352, 362, 199 N.W. 390, 393-94 (1924).

144. 234 Wis. 201, 207-08, 290 N.W. 647, 649-50 (1940). The court said: [I]t is claimed that a sewage disposal plant which follows approved specifications cannot be held a nuisance. This contention is inapplicable to the present situation. It may be that if the claim of the adjoining landowner is that the manner of operation is such as to constitute a nuisance, the fact that the plant was built according to specifications of the state board of health and is being operated in accordance with their orders and regulations may conclusively establish that there is no nuisance arising out of design or operation of the plant. Where, however, the claim is that the plant is a nuisance, not by reason of improper operation or planning, but because of its lo-

And dictum in that case, to the effect that Board of Health approval of design or operation of a plant may preclude nuisance actions,¹⁴⁵ was specifically rejected in a recent case, *Costas v. City of Fond du Lac*.¹⁴⁶

Private nuisance actions, and presumably riparian rights actions, may be brought in Wisconsin to abate pollution even when the state has asserted regulatory jurisdiction. Only if the legislature specifically bars such actions by appropriate legislation will that right be foreclosed. No such legislation exists.¹⁴⁷

cation, the owner is not concluded by the orders or approval of the state board of health. . . .

. . . [T]he board of health did not require the village to build the sewage disposal plant or to build it in its present location. All it did was to approve the plans and specifications for the plant. While plans included the location of the . . . plant, and the latter may have been within the scope of the board's approval, it was not within the competency of the board to foreclose a judicial determination whether by reason of location the plant would be a nuisance *per se*.

145. *Hasslinger v. Village of Hartland*, 234 Wis. 201, 207-08, 290 N.W. 647, 649-50 (1940).

146. *Costas v. City of Fond du Lac*, 24 Wis. 2d 409, 415-16, 129 N.W.2d 217, 220-21 (1964).

147. Prior to 1966 there was a section in the statutes (§ 144.535) which might have been construed as creating exclusive jurisdiction in the State Committee on Water Pollution or the State Board of Health if it assumed jurisdiction of a case. However, this language was repealed by ch. 614, § 47, [1965] Wis. Laws 1109, and the question of the effect of that section is now moot.

Very few states have held that the existence of a state pollution regulatory agency precludes jurisdiction of a court to hear a private pollution abatement action. Most states have adopted the contrary rule, that the existence of state regulation does not imply abrogation of common law rights and remedies, that they are preserved and that the administrative remedies are cumulative. Many states have done this by statute. ARIZ. REV. STAT. § 36-1866 (Supp. 1969); ARK. STAT. ANN. § 82-1943 (Supp. 1967); CALIF. WATER CODE ANN., § 13001 (West Supp. 1968); COLO. REV. STAT. § 66-28-17 (Supp. 1966-67); FLA. STAT. ANN. § 403.191 (Supp. 1969); GA. CODE ANN., tit. 17, § 517 (Supp. 1968); MO. ANN. STAT. § 204.160 (Vernon 1962); N.M. STAT. ANN. § 75-39-12 (1968); N.Y. PUB. HEALTH LAW § 1260 (McKinney Supp. 1968); OHIO REV. CODE ANN. § 6111.08 (Page 0000); OKLA. STAT. ANN., tit. 82, § 913 (Supp. 1968); PA. STAT. ANN., tit. 35, § 691.701 (Purdon 1964); S.C. CODE § 70-137 (1962); TEX. STAT. ANN., art. 7621d-1, § 20 (Vernon Supp. 1968); UTAH CODE ANN. § 73-14-13 (1968); Ch. 13, § 25, [1967] Wash. Laws 54.

Several states have not adopted preservation of rights statutes but have nonetheless held that common law rights are preserved. *Ruth v. Aurora Sanitary Dist.*, 17 Ill. 2d 11, 158 N.E.2d 601 (1959); *Dunlop Lake Property Owners Ass'n v. City of Edwardsville*, 22 Ill. App. 2d 95, 159 N.E.2d 4 (1959); *Reeder v. Rooks County*, 193 Kan. 182, 392 P.2d 888 (1964); *Texas Co. v. Montgomery*, 73 F. Supp. 527 (E.D. La. 1947); *Stanton v. St. Joseph's College*, 233 A.2d 718 (Me. 1967); *Satren v. Hader Co-op. Cheese Factory*, 202 Minn. 553, 279 N.W. 361 (1938); *Massey v. Masonite Corp.*, 219 F.2d 586 (5th Cir. 1955); *Urie v. Franconia Paper Corp.*, 107 N.H. 131, 218 A.2d 360 (1966); *Borough of Westville v. Whitney Home Builders, Inc.*, 40 N.J. Super. 62, 122 A.2d 233 (1956). See also *Wallace v. McCartan*,

B. Compliance with agency orders

The cases mentioned above also dispose of the defense of compliance with the orders of a state agency.¹⁴⁸

C. Exhaustion of administrative remedies and primary jurisdiction

No Wisconsin case has considered whether a pollution abatement action should be heard by the administrative agency before the court. Language in the Wisconsin cases indicates that a private action may be brought at any time, but that language is not conclusive since in none of the matters in those cases was the controversy before the agency at the time the lawsuit was begun. Furthermore, all cases after 1949 were brought subsequent to the agency's proceedings.

The United States Supreme Court has explained the purposes of and differences between exhaustion and primary jurisdiction:

The doctrine of primary jurisdiction, like the rule requiring exhaustion of administrative remedies, is concerned with promoting proper relationships between the courts and administrative agencies charged with particular regulatory duties. 'Exhaustion' applies where a claim is cognizable in the first instance by an administrative agency alone; judicial interference is withheld until the administrative process has run its course. 'Primary jurisdiction', on the other hand, applies where a claim is originally cognizable in the courts, and comes into play whenever enforcement of the claim requires the resolution of issues which, under a regulatory scheme, have been placed within the special competence of an administrative body; in such a case the judicial process is suspended pending referral of such issues to the administrative body for its views.¹⁴⁹

Apparently, both doctrines have been accepted in Wisconsin, al-

[1917] 1 Ir. R. 377(Ch.); *Bright v. Niagara Racing Ass'n.*, 20 Ont. W.N. 46 (1921).

148. One state has enacted a provision specifically rejecting as a defense compliance with a state pollution abatement order. VA. CODE § 62.1-36 (1968). The courts in a few states have adopted the same rule. *Barrington Hills Country Club v. Village of Barrington*, 357 Ill. 11, 191 N.E. 239 (1934); *People v. City of Reedley*, 66 Cal. App. 409, 226 P. 408 (1924); *Stanton v. St. Joseph's College*, 233 A.2d 718 (Me. 1967); *Southland Co. v. McDonald*, 225 Miss. 19, 82 So. 2d 448 (1955); *Donnell v. City of Greensboro*, 164 N.C. 330, 80 S.E. 377 (1913); *Cook v. Town of Mebane*, 191 N.C. 1, 131 S.E. 407 (1926).

Furthermore, state approval of plans is not a defense. *Borough of Westville v. Whitney Home Builders, Inc.*, 40 N.J. Super. 62, 122 A.2d 233 (1956); *Kennedy v. Moog, Servocontrol, Inc.*, 48 Misc. 2d 107, 264 N.Y.S.2d 606 (Sup. Ct. 1965), *modified* 26 App. Div. 2d 768, 271 N.Y.S.2d 928 (1966), *aff'd mem.*, 21 N.Y.2d 966, 237 N.E.2d 356, 290 N.Y.S.2d 193 (1968).

149. *United States v. Western Pac. R.R.*, 352 U.S. 59, 63-64 (1956).

though the extent of their application is by no means clear. These rules, as they have been discussed by the Wisconsin Supreme Court, do not involve loss of subject matter jurisdiction by the courts.¹⁵⁰ Rather they involve deferral by the courts because, at the particular stage of the proceedings, a more proper forum for hearing the controversy is the administrative agency with special competence in the field.¹⁵¹

The question of exhaustion of administrative remedies arises either when a court action is brought in the midst of an administrative proceeding before an agency with special competence in the field or before such proceedings have been initiated where the agency has been given jurisdiction over the matter in controversy.¹⁵² The question of primary jurisdiction arises when a court action is initiated over a matter in which an administrative agency

150. *Wisconsin Collectors Ass'n v. Thorp Fin. Corp.*, 32 Wis. 2d 36, 44, 145 N.W.2d 33, 36-38 (1966). On the question of primary jurisdiction, *Wisconsin Collectors Association* is the only case in point. Cf. *Commonwealth Tel. Co. v. Carley*, 192 Wis. 464, 213 N.W. 469 (1927). On the question of exhaustion of administrative remedies, several earlier cases discussed the rule, but none of them held that failure to exhaust administrative remedies resulted in the court's loss of subject matter jurisdiction. *Green v. Jones*, 23 Wis. 2d 551, 128 N.W.2d 1 (1964); *Village of Cobb v. Public Serv. Comm'n*, 12 Wis. 2d 441, 107 N.W.2d 595 (1961); *James Conroy Family Co. v. City of Milwaukee*, 246 Wis. 258, 16 N.W.2d 814 (1944).

151. In the only case discussing the "primary jurisdiction" and "exhaustion of administrative remedies" rules at length, the court said:

We fully recognize that administrative agencies are designed to provide uniformity and consistency in the fields of their specialized knowledge. The expertise that comes with experience and also the fact-finding facility that comes with a more flexible procedure enable the agencies to perform a valuable public function. When an issue arises which fits squarely within the very area for which the agency was created, it would be logical to require prior administrative recourse before a court entertains jurisdiction. . . .

Nonetheless, we believe it improper to couch such priority in terms of power or jurisdiction. The standard in our opinion, should not be power but comity. The court must consider which course would best serve the ends of justice. If the issue presented to the court involves exclusively factual issues within the peculiar expertise of the [agency], the obviously better course would be to decline jurisdiction and to refer the matter to the agency. On the other hand, if statutory interpretation or issues of law are significant, the court may properly choose in its discretion to entertain the proceedings. The trial court should exercise its discretion with an understanding that the legislature has created the agency in order to afford a systematic method of fact-finding and policymaking and that the agency's jurisdiction should be given priority in the absence of a valid reason for judicial intervention.

Wisconsin Collectors Ass'n v. Thorp Fin. Co., 32 Wis. 2d 36, 44-45, 145 N.W.2d 33, 36-37 (1966).

152. The "exhaustion of administrative remedies" rule has been followed in three private water pollution abatement actions in two other states. *Commerce Oil Ref. Co. v. Miner*, 170 F. Supp. 396 (D.R.I. 1959), *rev'd on other grounds*, 281 F.2d 465 (1st Cir. 1960), *cert. denied* 364 U.S. 910 (1960); *Commonwealth v. Glen Alden Corp.*, 418 Pa. 57, 210 A.2d 256 (1965); *Borough of Collegeville v. Philadelphia Suburban Water Co.*, 377 Pa. 636, 105 A.2d 722 (1954).

has special competence but not necessarily particular jurisdiction. In determining whether it will exercise its own jurisdiction, the court must decide both whether the matter falls within the agency's special fact-finding competence, and whether the agency has jurisdiction to hear the matter.¹⁵³

Thus, an early question in fashioning water pollution litigation is whether the Wisconsin water pollution control agency has jurisdiction.¹⁵⁴ The Department of Natural Resources does not have specific statutory jurisdiction to hear such cases, although it deals with such matters as part of its general jurisdiction over the quality of the waters of the state. The water quality control jurisdiction of the Department may be invoked in two ways. On the basis of its own investigations,¹⁵⁵ or as a result of informal complaints lodged with it, the Department may on its own initiative begin proceedings¹⁵⁶ to abate pollution by means of setting water quality standards,¹⁵⁷ and issuing general orders,¹⁵⁸ special orders,¹⁵⁹ or temporary emergency orders.¹⁶⁰ Since jurisdiction is discretionary,¹⁶¹ the Depart-

153. Davis is of the opinion that the "primary jurisdiction" rule should be followed even if the administrative agency does not have power to grant relief.

Because of the purpose of the doctrine—to assure that the agency will not be by-passed on what is especially committed to it—and because resort to the courts is still open after the agency has acted, the doctrine applies even if the agency has no jurisdiction to grant the relief sought.

That the agency has no power to grant the relief sought is not a reason for refusing to require prior resort to the agency, if the case involves a question within the agency's special competence.

3 K. DAVIS, *ADMINISTRATIVE LAW* § 19.07, at 39-40 (2d ed. 1960). The federal courts generally follow this approach, as do some state courts, but the quotation in the text from *Wisconsin Collectors Ass'n* makes it clear that the Wisconsin courts probably will not. See notes 149-50 *supra*, and accompanying text.

154. The "primary jurisdiction" rule has been applied to private pollution abatement actions in one other state. *Ellison v. Rayonier, Inc.*, 156 F. Supp. 214 (W.D. Wash. 1957); *Olympia Oyster Co. v. Rayonier, Inc.*, 229 F. Supp. 214 (W.D. Wash. 1964). These cases may have been legislatively overruled in 1967 by Ch. 13, § 25, [1967] Wash. Laws 54. See Comment, *Water Pollution Control in Washington*, 43 WASH. L. REV. 425, 451 (1967).

Cases which reject use of the "primary jurisdiction" rule in water pollution matters are: *Urie v. Franconia Paper Corp.*, 107 N.H. 131, 218 A.2d 360 (1966); *Stanton v. Trustees of St. Joseph's College*, 233 A.2d 718 (Me. 1967). Cf. *Tevis v. McCrary*, 72 N.M. 134, 381 P.2d 208 (1963), concerning underground water rights adjudication under prior appropriation rules.

155. The Department has power to make investigations and inspections, and to enter industrial establishments for collecting information. Wis. STAT. §§ 144.025(2)(f), (g), 144.09 (1969).

156. For a lengthy description of the stages of procedure of the Department, see D. CARMICHAEL, *supra* note 58, at 359-73.

157. WIS. STAT. § 144.025(2)(b) (1969).

158. WIS. STAT. § 144.025(2)(c) (1969).

159. WIS. STAT. § 144.025(2)(d)(1) (1969).

160. WIS. STAT. § 144.025(2)(d)(2) (1969).

161. A person must file a formal petition with the Department under

ment, which has staff and budgetary limitations, might be unwilling to hear any individual complaint; it would more likely consolidate the matter with others in its river basin surveys and hearings held every seventh year. The Department must hold a public hearing and issue findings of fact, conclusions of law and orders when six or more citizens file a formal complaint concerning alleged or potential environmental pollution.¹⁶² This provision does not necessarily help an individual who wants pollution abated, however.

The primary jurisdiction and exhaustion of administrative remedies rules are not particularly appropriate to private actions brought to abate pollution. While the Department of Natural Resources has special competence in the water quality field, it has no specific authority to hear individual civil actions, and its procedures are not well adapted to a fact-finding role in such cases. It seems unlikely that the courts would insist on a plaintiff pursuing an administrative remedy when the agency can give at best indirect relief as a by-product of a general regulatory scheme, if it chooses to hear the complaint at all.

Further, the mandate of the Department of Natural Resources is to set standards of quality in order to protect the public interest:

. . . which include[s] the protection of the public health and welfare and the present and prospective future use of [the waters of the state] for public and private water supplies, propagation of fish and aquatic life and wildlife, domestic and recreational purposes and agricultural, commercial, industrial and other legitimate uses. In all cases where the potential uses of water are in conflict, water quality standards shall be interpreted to protect the general public interest.¹⁶³

Orders by the Department requiring a polluter to treat his wastes may be well grounded in the public interest without being sufficiently stringent to prevent damage to individual water users downstream. Finally, the Department can issue orders requiring waste dischargers to abate pollution. It cannot grant specific relief to complainants—either injunctions prohibiting any pollution that affects the complainant or money damages. Since the regulatory process does not afford sufficient relief to private interests, there is still need for the private lawsuit to supplement the administrative process.¹⁶⁴

Thus, it is likely that a Wisconsin court would not invoke the “pri-

the procedure for declaratory rulings provided by WIS. STAT. § 227.06 (1969). This procedure might be used to bring to the attention of the Department violations of water quality standards, general orders, and, perhaps, special orders.

162. WIS. STAT. § 144.537 (1969).

163. WIS. STAT. § 144.025(2)(b) (1969).

164. One case in another state refused to apply the primary jurisdiction rule because a lawsuit involves private rights, and the statutory scheme

mary jurisdiction" or "exhaustion of administrative remedies" rules in private pollution abatement actions.

III. LACK OF PRIVATE LITIGATION

While there have been a few cases in recent years involving pollution of groundwater,¹⁶⁵ pollution of diffused surface water,¹⁶⁶ and air pollution,¹⁶⁷ no common law case involving pollution of a watercourse has reached the Wisconsin Supreme Court since 1924.¹⁶⁸ Throughout the country there has been a decline in common-law water pollution abatement actions after a post-World War II spurt. In the 1960's, only 17 cases reached any state supreme court; in the 1950's there were 40 such cases, and in the 1940's there were 28.¹⁶⁹ In the states immediately surrounding Wisconsin the trend is even more pronounced. Indiana and Michigan have had no water pollution cases whatsoever since 1940; Minnesota had two in the 1940's, Iowa had three in the 1940's and 50's, and Illinois had three in the 1950's and one in the 1960's.¹⁷⁰

A. State Enforcement

The dearth of reported common law water pollution cases throughout the nation in the 1960's leads one to ask whether the same trend is evident at the trial court level. Two studies on trial court activity in the water pollution field have been made, one in Wisconsin and one in Illinois. The Illinois study, made in the late 1950's,¹⁷¹ found two common law water pollution actions in local courts in that state between 1940 and 1959 which were not appealed to higher courts.¹⁷² In Wisconsin, DeBraul examined court records

allows for regulation of water quality only to promote the public interest. *Stanton v. Trustees of St. Joseph's College*, 233 A.2d 718 (Me. 1967). See *Urie v. Franconia Paper Corp.*, 107 N.H. 131, 218 A.2d 360 (1966).

165. *Enders v. Sinclair Ref. Co.*, 220 Wis. 254, 263 N.W. 568, *rehearing denied*, 265 N.W. 67 (1936).

166. *Thomas v. Village of Clear Lake*, 270 Wis. 630, 72 N.W.2d 541 (1955); *Briggson v. City of Viroqua*, 264 Wis. 47, 58 N.W.2d 546 (1953).

167. *Costas v. City of Fond du Lac*, 24 Wis. 2d 409, 129 N.W.2d 217 (1964); *Hasslinger v. Village of Hartland*, 234 Wis. 201, 290 N.W. 647 (1940).

168. *Mitchell Realty Co. v. City of West Allis*, 184 Wis. 352, 199 N.W. 390 (1924).

169. From a count of cases in Appendices A, B, and C, plus cases in the author's unpublished research notes involving deposit of mine tailings in streams, inverse condemnation, negligence, and no theory of action indicated.

170. *Id.*

171. F. L. MANN, H. H. ELLIS & N. G. P. KRAUSZ, *WATER-USE LAW IN ILLINOIS*, 228-29, 288-89 (1964).

172. The list of cases was obtained by mailing questionnaires to the county and circuit court clerks in each county in Illinois. There was a 75 percent return of questionnaires. Personal interviews were made with each clerk who indicated there had been litigation in his court. Six water pollution cases were found altogether, but four of them had been brought

in the five central Wisconsin counties (Marathon, Wood, Portage, Adams, and Juneau) and corresponded with the clerks of court in two counties traversed by the lower Fox River (Brown and Outagamie).¹⁷³ DeBraul found only one common law water pollution case in the five central Wisconsin counties between 1947 and 1967. In the same period there were four common law water pollution cases in the two Fox River counties. De Braal suggests that reliance by citizens on official state action may explain the paucity of private plaintiffs:

It would appear to be fairly accurate to conclude that the citizens of [the seven counties], and probably of the entire State, are not interested in exercising their rights, but instead are content to let the State act for them. Marathon County is a case in point. In this county, no common law water rights cases have been discovered. However, a search through the files of the Conservation Warden, for the years 1954 through 1965, reveals a total of 44 water pollution cases alone, brought under the various statutes. It is interesting to note that some of these, particularly those dealing with the discharge of whey by dairies, could have been brought by private citizens as common law actions.¹⁷⁴

Other information substantiates DeBraul's conclusion, to an extent. While not directly corresponding to the number of complaints

by the attorney general, three on behalf of the Sanitary Water Board. The two common law cases were 3 *Burt v. City of Flora*, Gen. No. 56-1028 (Clay County Cir. Ct. 1956) (Complaint for injunction and damages to farm resulting from pollution of creek by city sewer system. Injunction denied on ground that city had complied with recommendations of Sanitary Water Board to eliminate the pollution. Complaint for damages was dismissed pursuant to stipulation by parties.); 5 *Clem v. City of Paxton*, C. L. original No. 9595 (Ford County Cir. Ct., 1940) (Complaint for injunction and damages to farm caused by discharge of sewage into stream. Damages of \$2,750 awarded. Injunction issued and complied with.).

According to F. L. MANN, H. H. ELLIS, & N. G. P. KRAUSZ *supra* note 171:

The completeness of reporting of local court cases by the responding clerks of the circuit and county courts is not known. None of them reported any of the three cases which were appealed and appear as reported decisions. However, it is also not known whether those reported cases were appealed from local courts whose clerks had responded to the questionnaires. Those three reported cases are: *Clark v. Lindsay Light & Chem. Co.*, 341 Ill. App. 2d 316, 93 N.E.2d 441 (1950); *Ruth v. Aurora Sanitary Dist.*, 17 Ill. 2d 11, 148 N.E.2d 601 (1959); *Dunlop Lake Property Owners' Ass'n v. City of Edwardsville*, 22 Ill. App. 2d 95, 159 N.E.2d 4 (1959). See also a federal court decision reported in the same period: *Gargac v. Smith Rowland Co.*, 170 F.2d 177 (7th Cir. 1948).

173. J. DeBraul, *Legal Tools for Combating Water Pollution in Wisconsin: Does the Common Law Continue as a Significant Force at the Local Level of Government?* Spring 1967, at 22-24 (unpublished paper for the River Basin Planning Seminar, University of Wisconsin). DeBraul is a General Attorney with the U.S. Department of Agriculture, at the Law School, University of Wisconsin, Madison, Wisconsin.

174. J. DeBraul, *id.* at 23-24.

by the public, the level of state enforcement activity contrasts sharply with the dearth of common law water pollution actions. For example, between August 1, 1966, and October 31, 1968, the Division of Environmental Protection and its predecessors issued 709 pollution abatement orders and referred 113 cases to the Attorney General for enforcement.¹⁷⁵ Between January 1960 and May 1967, the conservation wardens in the 24 Wisconsin River basin counties made 238 arrests for violations of pollution statutes.¹⁷⁶ Of these, 82 were arrests involving commercial ventures such as cheese factories and canneries. Clearly, availability of state enforcement procedures and active use of them by the state may be a major reason why common law remedies are so rarely used. However, there is also evidence that people are still dissatisfied with the degraded quality of many streams in the state, especially those affected by paper mill waste discharges.¹⁷⁷

B. Control of Shorelines by Industries

The pattern of ownership of riparian land may also explain the lack of private water pollution actions in the Wisconsin River basin. Because there are so many paper mills along the central portion of the Wisconsin River, especially around Wisconsin Rapids, the mills might own most of the land downstream from the waste discharge outfalls, which are the reaches most affected by the resultant pollution. Such ownership would keep pollution abatement lawsuits from arising.

County and city plat maps for the central portion of the Wisconsin River from Merrill to Wisconsin Dells were examined to determine whether such a pattern of riparian ownership exists.¹⁷⁸ A comparison was made between land ownership, the locations of water discharge outfalls,¹⁷⁹ and the quality of the water along the river's length.¹⁸⁰

175. Statement by Thomas Frangos, Administrator, Division of Environmental Protection, Department of Natural Resources, State of Wisconsin, to River Basin Planning Seminar, Law School, University of Wisconsin, Oct. 31, 1968.

176. Unpublished research by Douglas Klingberg for author, summer 1967, based on interviews with conservation wardens and examination of arrest records of the Division of Fish, Game and Enforcement, Department of Natural Resources, State of Wisconsin, and its predecessors.

177. *Id.*

178. Plat maps for Lincoln (1966), Marathon (1968), Wood (1968), Portage (1967), Adams (1967), and Juneau (1967) Counties, published by Rockford Map Publishers, Rockford, Ill.; county treasurer plat maps for Wausau, Schofield, Rothchild, Stevens Point, Whiting, Biron, Wisconsin Rapids, Port Edwards and Nekoosa. Preliminary research for this study was done by Heiner Geise.

179. Locations of waste discharge outfalls of pulp and paper mills and of municipal sewage treatment plants were provided by James Kerrigan, Water Resources Center, Univ. of Wis., Madison, Wis.

180. Information on the quality of the river at various points was pro-

The mills' location depends on the availability of water power. Thus, there are many paper mills and power dam flowages between Trappe Rapids and Castle Rock Dams. Because of the concentration of these mills, in only a few places are there long stretches of non-industrial private riparian land along low-quality portions of the river. The lowest quality stretches of the Wisconsin River lie between Brokaw and the top of the Stevens Point Flowage (43 river miles), between Stevens Point and the top of the Biron Flowage (6 river miles), and between Biron and the top of the Petenwell Flowage (19 river miles).¹⁸¹ The pulp and paper companies, and the power companies own sizeable tracts of land along those low-quality stretches of the river notably between Trappe Rapids and Mosinee (27 river miles), through Stevens Point and Whiting (5 river miles), and between Biron and Nekoosa through Wisconsin Rapids and Port Edwards (16 river miles).¹⁸² Along those stretches of the river, the paper mills control 40 per cent, 71 percent, and 64 per cent of the shoreline, respectively.¹⁸³ After lands controlled by power companies, other industries, and municipalities are deducted, non-industrial private landowners are left with control of 37 per cent, 8 per cent, and 24 per cent of the shoreline, respectively.¹⁸⁴

Control of the shoreline may be gained by means other than ownership. Ownership of the bed of an artificial impoundment to the highwater mark will deny acquisition of riparian status by lands abutting the shore, because they would be legally severed from the water.¹⁸⁵ Significant portions of the beds of the Wausau, DuBay,

vided by James Kerrigan, *Id.* His determinations were made on the basis of data on streamwater samplings and bottom biota samplings published by the Division of Environmental Protection, Department of Natural Resources, State of Wisconsin, and its predecessor agencies. See Appendix F, *infra*.

181. See Appendix F, Table 4, *infra*.

182. *Id.*, Table 1.

183. *Id.*, Table 3.

184. *Id.*

185. In Wisconsin cases hold that riparian rights rest upon ownership of the bank or shore of a watercourse in lateral contact with the water. *Mayer v. Grueber*, 29 Wis. 2d 168, 138 N.W.2d 197 (1965); *Colson v. Salzman*, 272 Wis. 397, 75 N.W.2d 421 (1956); *Hermansen v. City of Lake Geneva*, 272 Wis. 293, 75 N.W.2d 439 (1956); *City of Milwaukee v. State*, 193 Wis. 423, 214 N.W. 820 (1927); *Diedrich v. Northwestern Union Ry. Co.*, 42 Wis. 248 (1877). But, when the deed describes the boundary as the edge or shore of a watercourse, then title does not include the bed. Because the boundary runs along dry land and is not in lateral contact with the water, riparian rights do not attach. *Greene v. Nunnemacher*, 36 Wis. 50 (1874) (dictum); *Allen v. Weber*, 80 Wis. 531, 50 N.W. 514 (1891).

A logical extension of these rules is that where the bed of a river or lake is owned by other private persons, riparian rights do not attach to lands bordering on the water. Pennsylvania has so held. *Shaffer v. Baylor's Lake Ass'n*, 392 Pa. 493, 141 A.2d 583 (1958) (dictum); *Loughran v. Matylewicz*, 367 Pa. 593, 81 A.2d 879 (1951); *Baylor v. Decker*, 133 Pa. 168, 19 A. 351 (1890).

The beds of the flowages on the Wisconsin River in many places are

Stevens Point, Petenwell, and Castle Rock Flowages are owned by either the pulp and paper companies or the power companies. Because of the severance rule, the pulp and papers mills and the power companies have added 1-1/2 miles of controlled shoreline to the 9-3/4 miles of shoreline they own, thereby gaining control of 58 per cent of the total shoreline around those three flowages. Other private landowners retain control of 11-3/4 miles of shoreline (36 per cent), and governmental units control 3 miles (9 percent).¹⁸⁶

Significant stretches of nonindustrial private ownership along the low-quality reaches of the Wisconsin River lie between the DuBay Flowage and the Stevens Point Flowage (6 miles), between Whiting and Biron (10 river miles), and below Nekoosa (2 river miles). Except for these 18 river miles,¹⁸⁷ the 129 river miles between Trappe Rapids and Castle Rock Dam are abutted by relatively few riparian owners who would have the legal right or inclination to bring a lawsuit for pollution abatement. Nonindustrial private landowners control 87-1/4 miles of the 252-5/8 miles of shoreline between these two points, or 34 percent. The percentage of such ownership at places of industrial concentration is much lower.

In spite of this pattern of shoreline control, it would be hazardous to assert that it is solely responsible for the dearth of common law water pollution abatement actions. First, the type of pollution caused by the pulp mills is not grossly offensive. Its most visible effect is a darkening of the water, an increase in turbidity, and the creation of some foam. There are no loathsome odors, or globs of floating debris, and fish kills are infrequent. Second, the degree of pollution has not changed markedly in the past 20 or 30 years. It may be regarded by the landowners as an unchanging condition, one which has been in existence "from such time whence the memory of man runneth not to the contrary."¹⁸⁸ Third some nonindustrial private landowners may be employees of the waste dischargers.

severed in ownership from the adjacent shorelands. In that situation, the Wisconsin court is likely to follow its dictum in *Greene v. Nunnemacher*, 36 Wis. 50 (1874), and the Pennsylvania precedent, and hold that the beds of the flowage are riparian and that the adjacent shorelands are not.

186. From the raw data taken from the map summarized in Appendix F, Tables 1 and 2, *infra*.

187. *Id.*

188. This is the traditional phraseology. Traditionally a prescriptive right is acquired when a custom or activity has continued from time immemorial, that is, from such ancient date, real or fictitious, that no contrary custom or activity can be remembered. According to the common law, legal memory commences from the reign of Richard 1, A.D. 1189. Under the statute of limitations of 32 Hen. 8, ch. 2 (1540), legal memory was reduced to 60 years, and under that of 2 & 3 Wm. 4, ch. 71 (1833), it was further reduced to 20 years. See BLACK'S LAW DICTIONARY 1136 (4th ed. 1951). The 20 year period of legal memory is used for acquisition of prescriptive rights in Wisconsin. WIS. STAT. § 893.02 (1969). For a discussion of prescription, see notes 89-97 *supra*, and accompanying text.

Neither state action nor dominance of watercourses by industries completely explains the lack of private litigation. During a brief survey in the Wausau area, the author, attempting to find what advice attorneys give to clients on courses of action against polluters, could find no attorney who had been consulted. Many minor reasons for the lack of trial court activity may be suggested: the expense of litigation; the relative constancy of pollution levels over the past 20 years, which has lulled affected riparians into inactivity (and perhaps into the loss of a cause of action by prescription); lack of awareness of common law rights; difficulties of proving cause; general reluctance to consult lawyers; economic conflicts of interest, either specific or general; and feeling by riparians that waste discharges did not cause unreasonable pollution or nuisances. Finally, the balance of the equities in riparian cases in favor of industrial users may have persuaded some landowners to forego legal action.

IV. CONCLUSION

This article has examined various aspects of the common law of water pollution, has attempted to suggest the extent of its actual use in litigation, and has enunciated several previously unrecognized interpretations of the cases.

First, riparian rights and private nuisance doctrines are not co-extensive and should not be equated. Private nuisance doctrine has been employed by the courts primarily in cases involving injuries to domestic or livestock water supplies, odors, and direct injuries to the land. Riparian rights doctrine has usually been employed in cases involving sedimentation of channels and millponds, pollution of industrial water supplies, and deterioration of fishing.

Second, riparians have a legal right to discharge wastes into watercourses, provided the discharge is reasonable with respect to other riparian uses and provided a private or public nuisance is not created or maintained. That right applies only to relations between riparians and does not affect the right of the state to regulate the discharge of wastes under the police power.

Third, the comparative convenience doctrine, which calls for the balancing of the equities of the parties, is generally used by the courts, although many of them deny that fact in their decisions. Most courts will discuss the equities of both parties, and will adopt comparative convenience language when they feel the defendant's conduct is reasonable under the circumstances, but will not use such language when they feel the defendant's conduct is unreasonable.

Research by the author and others reveals a declining use of the common law in seeking abatement of water pollution. It would seem that, in spite of the difficulties involved in such cases, greater use could be made of the common law in conjunction with state regulation. The common law should be particularly useful against

the large waste discharger who is using a greater proportion of the assimilative capacity of a river than he would be entitled to under the riparian reasonable use doctrine. In fact, what is reasonable may be in the process of redefinition as a result of the establishment of water quality standards by state regulatory agencies. Such quantification of stream standards and the very recent development of computer techniques for quantifying the effect of each waste discharge on the overall water quality of a river adds powerful new tools to the arsenal of the private litigant.¹⁸⁹ With such tools to aid in the problems of proof, the role of the private litigant in improving water quality could easily revive in the near future.

189. See, e.g., C. Falkner, A Dissolved Oxygen Prediction Model for a Long River, 3 Institutional Design for Water Quality Management, Nov. 1970 (mimeo, Water Resources Center, Univ. of Wis.); Federal Water Pollution Control Admin., Delaware Estuary Comprehensive Study (1966).