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The Legal Regulation of Diffused Surface Water

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THE LEGAL REGULATION OF DIFFUSED SURFACE WATER

JOSEPH W. DELLAPENNAT.

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I. INTRODUCTION

ALTHOUGH much of our national history has involved a search for secure sources of water supply, some water has been unwanted. This often occurs at the stage of the hydrologic cycle when water first appears in liquid form as rain or snow, or is otherwise diffused generally over the surface of the ground. Frequently, a landowner will want to prevent such water from coming onto or accumulating on the land, or will want to accelerate or otherwise change its removal from the land. In doing any of these things, each landowner is likely to affect the land of someone else.

Traditionally, a distinction has been drawn between two types of surface water: "diffused" and "non-diffused." Although perhaps a seemingly intuitive and inconsequential distinction (e.g. rainwater runoff is "diffused," whereas a lake is "non-diffused"), the matter is anything but. Many situations present defi-

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nitional ambiguity. Moreover, the determination can have substantial regulatory implications. Historically, for example, the determination of a water source as "diffused" or "non-diffused" could effect (1) the extent of rights to discharge the water from one's land, and (2) the right to use the water, or land underlying it, as a resource. Today, the classification can also be important for determining whether a National Pollution Discharge Elimination System permit is required for the discharge of pollutants into the water. Courts, and subsequently legislatures, have adopted different regulatory schemes for different types of water in response to different perceived needs for, and abilities to manage, the different "types" of water.

The law of diffused surface water is generally ill-defined and has, until recently, been all but ignored in practice and theory.³ In the past, published cases on the subject were few and far between and often proved unhelpful.⁴ With increased urbanization and suburbanization of land, however, and the consequent increase of the volume and velocity of runoff leading to more frequent and more intense drainage disputes, appellate decisions have become far more numerous but not necessarily more clear.⁵ In Ohio, for example, such disputes have now become so common that the decisions from the state's intermediate appellate courts dealing with disputes over surface drainage are now routinely unpublished.⁶

^{1.} Thompson v. Andrews, 39 S.D. 477, 165 N.W. 9 (1917). One early court questioned the wisdom of having different bodies of law applicable to diffused surface water and to water in defined surface waterbodies. Gormley v. Sanford, 52 Ill. 158, 162 (1869).

^{2.} Such a permit is required by the Clean Water Act prior to discharge of pollutants into the navigable waters of the United States. Clean Water Act § 402, 33 U.S.C. § 1342 (1988); Quivira Mining Co. v. EPA, 765 F.2d 126 (10th Cir. 1985), cert. denied, 474 U.S. 1055 (1986); A. Tarlock, Law of Water Rights and Resources § 3.06[3] (1989). Courts did not apply the common law of diffused surface waters to problems created by polluting surface drainage; such problems were (and are) treated as nuisances. See, e.g., Frank v. Environmental Management, Inc., 687 S.W.2d 876 (Mo. 1985); Bower v. Hog Builders, Inc., 461 S.W.2d 784 (Mo. 1970); Biddix v. Henredon Furniture Indus., Inc., 76 N.C. App. 30, 331 S.E.2d 717 (1985).

^{3.} J. SAX, WATER LAW, PLANNING AND POLICY 489 (1968).

^{4.} Probably the best of the early articles on diffused surface waters described several suggested "rules" relating to drainage disputes as either "meaningless" or "silly." Kinyon & McClure, *Interferences with Surface Water*, 24 Minn. L. Rev. 891, 933-35 (1940).

^{5.} See, e.g., Weston, Gone with the Water: Drainage Rights and Storm Water Management in Pennsylvania, 22 VILL. L. REV. 901, 902 (1977); Note, The Application of Surface Water Rules in Urban Areas, 42 Mo. L. REV. 76, 76 (1977).

^{6.} See, e.g., Len Ran, Inc. v. Mellott, 1990 WL 40678 (Ohio Ct. App. 1990); Huggins Farms, Inc. v. Bucyrus Plaza, Ltd., 1989 WL 49484 (Ohio Ct. App.

The law that previously existed relating to diffused surface water traditionally focused on problems of drainage rather than of utilization. As a result, the law of riparian or appropriative rights simply did not speak to disputes over diffused surface water.⁷ The increasing scarcity of usable water, however, has, at times, made even diffused surface water a vital source to be exploited rather than merely a problem to be drained away.⁸ Consequently, the modern trends in the law governing the drainage of diffused surface water have shifted towards principles of "reasonable use," regardless of the state's law governing the consumptive use of groundwater or defined bodies of surface water.⁹

1989); Blashinsky v. Topazio, 1987 WL 9942 (Ohio Ct. App. 1987); Irwin v. City of Bedford, 1986 WL 4951 (Ohio Ct. App. 1986); Lunn v. Schmidt, 1985 WL 8129 (Ohio Ct. App. 1985); Franklin v. Hunter, 1984 WL 7971 (Ohio Ct. App. 1984); Taylor v. General Telephone Co., 1984 WL 3500 (Ohio Ct. App. 1984); Guetter v. Schloegl, 1984 WL 3294 (Ohio Ct. App. 1984); City of Youngstown v. Stlata, 1982 WL 6157 (Ohio Ct. App. 1982); Easton v. Miller, 1982 WL 5678 (Ohio Ct. App. 1982); Calderone v. City of Garfield Heights, 1982 WL 5360 (Ohio Ct. App. 1982); Emminger v. Bergman, 1982 WL 3901 (Ohio Ct. App. 1982); Board of County Comm'rs v. Hertlein, 1982 WL 3721 (Ohio Ct. App. 1982); Warren v. Jemo Assoc., Inc., 1982 WL 3596 (Ohio Ct. App. 1982); State ex rel. Briar Lake Assoc. v. Central Land Corp., 1982 WL 2335 (Ohio Ct. App. 1982); Weinberger v. Wiseman, 1981 WL 10284 (Ohio Ct. App. 1981).

- 7. See, e.g., White v. Pima County, 161 Ariz. 90, 775 P.2d 1154 (Ariz. App. 1989); Merrill v. Penrod, 109 Idaho 46, 704 P.2d 590 (Idaho Ct. App.), review denied, 116 Idaho 466, 776 P.2d 828 (1985); Argyelan v. Haviland, 435 N.E.2d 973 (Ind. 1982); Johnson v. Whitten, 384 A.2d 698 (Me. 1978); Schulze v. Monsanto Co., 782 S.W.2d 419 (Mo. Ct. App. 1989); State v. Feenan, 231 Mont. 255, 752 P.2d 182 (1988); Johnson v. NM Farms Bartlett, Inc., 226 Neb. 680, 414 N.W.2d 256 (1987); Clark County v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980); Abrams v. Wright, 262 S.C. 141, 202 S.E.2d 859 (1974); Terry v. Heppner, 59 S.D. 317, 239 N.W. 759 (1931); Sanford v. University of Utah, 26 Utah 2d 285, 488 P.2d 741 (1971); McCauley v. Phillips, 216 Va. 450, 219 S.E.2d 854 (1975); Island County v. Mackie, 36 Wash. App. 385, 675 P.2d 607 (1984); Broadbent v. Ramsbottom, 11 Ex. 602, 156 Eng. Rep. 971 (1856). See generally Dolson, Diffused Surface Waters and Riparian Rights: Legal Doctrines in Conflict, 1966 Wis. L. Rev. 58.
- 8. See, e.g., Hoefs v. Short, 114 Tex. 501, 273 S.W. 785 (1925) (diffused surface water is appropriable if sufficient to make irrigation practical). See generally Note, The Ownership of Diffused Surface Waters in the West, 20 Stan. L. Rev. 1205 (1968).
- 9. See, e.g., Clark County v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980) (reasonable use adopted as standard for diffused surface water in appropriative rights state); Pendergrast v. Aiken, 293 N.C. 201, 236 S.E.2d 787 (1977) (reasonable use adopted as standard for diffused surface water in regulated riparian state); McGlashan v. Spade Rockledge Terrace Condo Dev. Corp., 62 Ohio St. 2d 55, 402 N.E.2d 1196 (1982) (reasonable use adopted as standard for diffused surface water in riparian rights state); Mattoon v. City of Norman, 617 P.2d 1347 (Okla. 1980) (reasonable use adopted as standard for diffused surface water in dual system state). See also F. Maloney, S. Plager, & F. Baldwin, Water Law and Administration: The Florida Experience § 72.2 (1968); 5A R. Powell, Real Property § 709[3][a] (P. Rohan ed. 1990); A. Tarlock, supra note 2, § 3.05[a][1].

About half of the states east of Kansas City have, in recent decades, replaced

Questions of the exploitation of diffused surface water, on the other hand, have tended to coalesce with state laws governing consumptive uses of defined bodies of surface water.¹⁰

The different legal regimes for diffused and defined surface water frequently persist, even in riparian rights states.¹¹ In so far as the differing physical characteristics of use or disposal persist for the differing types of water, differences in management regimes might never be fully eradicated.¹² Yet, as commentators have noted, "[n]either the judicial definition of 'water course,' nor any definition, can draw a sharp line where nature has not."¹³

The purpose of this Article will be to lay out the evolving legal trends regarding the regulation of both drainage and exploitation of diffused surface water. Section II explores the definitional problems that plague this area. Sections III and IV trace the history and current trends regarding drainage and use, respectively, of diffused surface water. As this piece is intended as much as a research tool as an explanatory introduction, the reader will note that citations include the most recent decision in each relevant state. This should assist the reader in identifying local trends in this area, which can often be rather idiosyncratic.

II. DEFINING DIFFUSED SURFACE WATER

The vagueness that surrounds diffused surface water begins with attempts to define the waters within the classification. Diffused surface water is water on or at the surface without being in a defined body of water.¹⁴ Diffused surface water flows generally over the land after rain falls, snow melts, or the like, or perhaps

their common law riparian systems with what I have termed "regulated riparianism." Like western appropriative rights, the right to use water under regulated riparianism is based upon a state permit, but the administration of the permit system is based on riparian principles rather than temporal priority. See generally I WATER AND WATER RIGHTS, ch. 9 (R. Beck 2d ed. 1991). The concept of "reasonable" (or its close equivalent, "equitable") is the pervasive criterion for most decisions under regulated riparian statutes except for the few which have substituted the concept of "beneficial" or "reasonable-beneficial" use for some decisions. 1 WATER AND WATER RIGHTS, supra § 9.03(b).

- 10. For discussion of the consumptive use of diffused surface water, see infra notes 223-50 and the accompanying text.
- 11. See, e.g., Roberts v. Hocker, 610 S.W.2d 321, 327-28 n.5 (Mo. Ct. App. 1980); RESTATEMENT (SECOND) OF TORTS §§ 845, 846, 858, 864 (1977).
 - 12. D. GETCHES, WATER LAW IN A NUTSHELL 8 (1984).
- 13. Legislature Res. Council, Report Relative to Rights in Surface and Sub-Surface Water in Massachusetts 29 (1957).
- 14. D. GETCHES, supra note 12, at 1-9, 274-76; A SUMMARY DIGEST OF STATE WATER LAWS 1-8 (R. Dewnsup & D. Jensen eds. 1973).

DIFFUSED SURFACE WATER

after arising from springs.¹⁵ It does not flow regularly, or as one early commentator put the matter, "[t]he chief characteristic of [diffused] surface water is its inability to maintain its identity and existence as a water body."¹⁶ While its flowage patterns will naturally tend to follow certain settled paths, these paths lack beds, banks, beaches, or shores, which typify the defined waterbodies.¹⁷

16. 3 H. FARNHAM, THE LAW OF WATER RIGHTS § 889, at 2557 (1904). See also Johnson v. Whitten, 384 A.2d 698, 701 (Me. 1978) (for water to constitute watercourse, it must have "well-defined and substantial existence"); Gruber v. Dawson County, 232 Neb. 1, 7, 439 N.W.2d 446, 452 (1989) (same); Island County v. Mackie, 36 Wash. App. 385, 675 P.2d 607 (1984) (same).

17. Dobbs v. Missouri Pac. R.R., 416 F. Supp. 5 (E.D. Okla. 1975); South Santa Clara Valley Water Conserv. Dist. v. Johnson, 231 Cal. App. 2d 388, 393-94, 41 Cal. Rptr. 846, 849 (1964); Davidson v. Mathis, 180 Ind. App. 524, 527, 389 N.E.2d 364, 366-67 (1979); Woods v. Town of State Centre, 249 Iowa 38, 44, 85 N.W.2d 519, 523 (1957); Lahman v. Commissioner of Highways, 282 N.W.2d 573, 575 (Minn. 1979); Haith v. Atchison County, 793 S.W.2d 151, 154-55 (Mo. Ct. App. 1990). See also Chism v. Tipton, 269 Ark. 907, 601 S.W.2d 254 (Ark. App. 1980); Kramer v. Rager, 441 N.E.2d 700 (Ind. Ct. App. 1982); Larose v. Campbell, 5 Mass. App. 840, 363 N.E.2d 1330 (1977); Department of Nat. Resources v. Mahnomen County Hearings Unit, 407 N.W.2d 434 (Minn. Ct. App. 1987), review denied; Prichard v. Hink, 574 S.W.2d 30 (Mo. 1978); Shotkoski v. Prososki, 219 Neb. 213, 362 N.W.2d 59 (1985); Drogen Wholesale Elec. Supply, Inc. v. State, 27 A.D.2d 763, 276 N.Y.S.2d 1015 (1967). See generally Weston, supra note 5, at 903-05, 918-20.

^{15.} Keys v. Romley, 64 Cal. 2d 396, 400, 412 P.2d 529, 531, 50 Cal. Rptr. 273, 275 (1966); Aetna Ins. Co. v. Walker, Ga. App. 456, 459, 105 S.E.2d 917, 920 (1958); Birdwell v. Moore, 439 N.E.2d 718, 721 (Ind. Ct. App. 1982); Belsky v. Dodge County, 220 Neb. 76, 81, 369 N.W.2d 46, 51 (1985); Rogers v. Petsch, 174 Neb. 313, 319, 117 N.W.2d 771, 774-75 (1962) (spring); Burgett v. Calentine, 56 N.M. 194, 196-97, 242 P.2d 276, 277 (1952) (spring); Midgett v. North Carolina State Highway Comm'n, 260 N.C. 241, 244, 132 S.E.2d 599, 604 (1963); Butler v. Bruno, 115 R.I. 264, 267, 341 A.2d 735, 737 (1975); Sun Underwriters Ins. Co. v. Bunkley, 233 S.W.2d 153, 155 (Tex. Civ. App. 1950), writerfused, no rev'ble error; King County v. Boeing Co., 62 Wash. 2d 545, 550, 384 P.2d 122, 126 (1963). See also Kallevig v. Holmgren, 293 Minn. 193, 197 N.W.2d 714 (1972) (the overflow from a septic tank is not diffused surface water). See generally A Summary Digest of State Water Laws, supra note 14, at 47; A. Tarlock, supra note 2, § 3.05[2][a].

Whether the water has a steady current¹⁸ or a name¹⁹ is irrelevant.

In troublesome cases, determining whether surface water is diffused or is in a defined waterbody leaves considerable discretion in the court or with the jury, especially as expert witnesses are not necessary to establish the nature of the water.²⁰ The difficulty of providing a precise and consistently applied definition reflects both the varied topography of waterbodies and the varied needs for water in different states.²¹ Thus, courts have found a stream, rather than diffused surface water, from the presence of willows,²² or simply because the water flowed with sufficient regularity that it was valuable for irrigation.²³

Typically, courts in the wetter eastern states are more likely than courts in the drier states west of Kansas City to require a more definite and stable relationship of water to a specific channel before classifying a recurring flowing water as a stream.²⁴

^{18.} This rule is virtually required when waters are tidal. See also Gasway v. Lalen, 526 N.E.2d 1199 (Ind. Ct. App. 1988) (constant waterflow unnecessary if there is well-defined channel); Kramer v. Rager, 441 N.E.2d 700 (Ind. Ct. App. 1982) (same); State v. Placid Oil Co., 274 So. 2d 402 (La. App. 1973) (current determined by ability to carry alluvium), rev'd on other grounds, 300 So. 2d 154 (La.), cert. denied, 419 U.S. 1110 (1975); Wemmer v. Compton, 277 Or. 313, 560 P.2d 626 (1977) (intermittent flows make stream so long as flows are "ordinary"); Reichert v. Northern Pac. R.R., 39 N.D. 114, 167 N.W. 127 (1918) (stream despite flows which were so sporadic that grass grew in "channel"); Hough v. Porter, 51 Or. 318, 95 P. 732 (1908) (slough held stream although direction of its current reversed depending on whether the river into which slough flowed was in flood stage). But see Gwinn v. Myers, 234 Ind. 560, 129 N.E.2d 255 (1955) ("definite direction" necessary for stream); Johnson v. Whitten, 384 A.2d 698 (Me. 1978) (same); Thomas v. Estate of Ducat, 769 S.W.2d 819 (Mo. Ct. App. 1989) (particular direction is merely usual).

^{19.} South Santa Clara Valley Water Conserv. Dist. v. Johnson, 231 Cal. App. 2d 388, 394, 41 Cal. Rptr. 846, 849 (1964).

^{21.} Costello v. Bowen, 80 Cal. App. 2d 621, 627, 182 P.2d 615, 619 (1947); 5 R. POUND, JURISPRUDENCE 154-55 (1959). See also Lamong v. Riverside Irrigation Dist., 179 Colo. 134, 498 P.2d 1150 (1972) (groundwater, if found to be "underflow" of stream, is part of stream); International-G.N. R.R. v. Reagan, 121 Tex. 233, 49 S.W.2d 414 (1932) (water constitutes stream for drainage purposes, but not for purposes of riparian and appropriative rights).

^{22.} Wright v. Phillips, 127 Or. 420, 272 P. 554 (1928).

^{23.} Hoefs v. Short, 114 Tex. 501, 273 S.W. 785 (1925). See also Note, supra note 8.

^{24.} Compare two decisions concerning an arroyo in New Mexico which reached opposite conclusions. Walker v. New Mexico, 165 U.S. 593, 600 (1897) ("[T]he arroyos through which the water flowed . . . were not running streams . . . but simply passageways for the rain which fell."); Martinez v. Cook, 56 N.M. 343, —, 244 P.2d 134, 138 (1952) ("[T]he holding in the Walker case that because a deep arroyo terminated in the flat country although the water thereafter traveled to a river through defined channels, that dams may be thrown across

The Missouri Court of Appeals' recent description, in Borgmann v. Florissant Development Co., 25 of the distinction between a stream and mere surface drainage provides as good a summary of the problem as one is likely to find from a riparian jurisdiction. Judge Kelly, in finding that plaintiffs were improperly seeking to enjoin the defendants from draining their land through a natural stream across plaintiff's land, wrote the following:

Plaintiffs . . . make the common mistake of confusing 'watercourse' with a 'natural surface water drainway' A 'watercourse' . . . has been defined as a living stream of water with well-defined banks, a channel and a bed; it need not run continuously but it must be fed from other and more permanent sources than mere surface water. Riparian rights attach to a watercourse. A natural surface water channel or drainway (too frequently referred to in the opinions as a watercourse) is, on the other hand, a drainway through which an upper landowner may discharge surface waters from his land because it is via this drainway that nature has provided for the flow of surface waters. It need not have banks or a bed; the contour of the topographical features of the land itself constitute the 'channel' within which the surface water is contained.26

As Judge Kelly indicated, once surface drainage ceases to flow generally over the surface and becomes confined to a channel, it loses its character as mere surface drainage and becomes a stream.²⁷ Even an artificial drainage channel might be treated as

such channels . . . is ill suited to conditions in this state and . . . will no longer be followed."). In quite a few cases from wetter climes, courts declined to find a watercourse under circumstances in which the New Mexico Supreme Court apparently would have found one. Hendrix v. Creel, 292 Ala. 541, 297 So. 2d 364 (1974); Chism v. Tipton, 269 Ark. 907, 601 S.W.2d 254 (1980); South Santa Clara Valley Water Conserv. Dist. v. Johnson, 231 Cal. App. 2d 388, 41 Cal. Rpir. 846 (1964); Capes v. Barger, 123 Ind. App. 212, 109 N.E.2d 725 (1953); Dyer v. Stahlhut, 147 Kan. 767, 78 P.2d 900 (1938); Withers v. Berea College, 349 S.W.2d 357 (Ky. Ct. App. 1961); Gregory v. Bush, 64 Mich. 37, 31 N.W. 90 (1887); Jeffers v. Jeffers, 107 N.Y. 650, 14 N.E. 316 (1887); Caldwell v. Coldberg, 43 Ohio St. 2d 48, 330 N.E.2d 694 (1975); Nunn v. Osborne, 417 P.2d 571 (Okla. 1966); Neal v. Ohio River R.R., 47 W. Va. 316, 34 S.E. 914 (1899).

^{25. 515} S.W.2d 189, 195 (Mo. Ct. App. 1974).

^{26.} Id. (references omitted).

^{27.} See also Sheffet v. Los Angeles County, 3 Cal. App. 3d 720, 84 Cal. Rptr. 11 (1970); Gwinn v. Myers, 234 Ind. 560, 129 N.E.2d 225 (1955); Withers v. Berea College, 349 S.W.2d 347 (Ky. 1961); Dudley Special Road Dist. v. Harri-

a watercourse if it is of sufficient antiquity.²⁸ In Borgmann, as in other cases from wetter climes, the court found a stream based on brief runoffs after rainstorms in a dispute over the discharge of unwanted water rather than in a dispute over the exercise of dominion over the water as a resource.²⁹ Classifying the water as a stream permitted the court to apply a rule of natural servitude or reasonable use although it was committed to the "common enemy" rule for diffused surface waters.³⁰ These results might change yet again if the focus in wetter climes shifts to using the concept "stream" as a basis of authority to regulate pollution³¹ or to protect wetlands.³²

III. DRAINING DIFFUSED SURFACE WATER

Historically, litigation and regulation relating to diffused surface water has been concerned with drainage rather than exploitation. Like the law of riparian rights, the origins of the modern legal rules relating to the drainage of diffused surface waters is unclear.³³ The early drainage rules most likely originated in

son, 517 S.W.2d 170 (Mo. Ct. App. 1973), transfer denied; Paasch v. Brown, 190 Neb. 421, 208 N.W.2d 695 (1973); Depuy v. Hoeme, 611 P.2d 228 (Okla. 1980).

^{28.} See, e.g., Munn v. Mayor of Pittsburgh, 40 Pa. 364 (1861); Rohrer v. City of Harrisburg, 20 Pa. Super. 543 (1902).

^{29. 515} S.W.2d at 195.

^{30.} For other examples, see St. Louis Merchant's Bridge Terminal R.R. v. Schultz, 226 Ill. 409, 80 N.E. 879 (1907); Card v. Nickerson, 150 Me. 89, 104 A.2d 427 (1954); McClure v. City of Red Wing, 28 Minn. 186, 9 N.W. 767 (1881); Roberts v. Hocker, 610 S.W.2d 321 (Mo. Ct. App. 1980); International-G.N. R.R. v. Reagan, 121 Tex. 233, 49 S.W.2d 414 (1932). But see Dyer v. Stahlhut, 147 Kan. 767, 78 P. 900 (1938). For a discussion of the draining of diffused surface water and the common-enemy rule, see infra notes 41-93 and the accompanying text.

^{31.} Quivira Mining Co. v. EPA, 765 F.2d 126 (10th Cir. 1985), cert. denied, 474 U.S. 1055 (1986); Central Ill. Publ. Serv. Co. v. Pollution Control Bd., 36 Ill. App. 3d 397, 344 N.E.2d 229 (1976); Department of Nat. Resources v. Mahnomen Cnty. Hearings Unit, 407 N.W.2d 434 (Minn. Ct. App. 1987), review denied.

^{32.} MINN. STAT. § 105.37(7), (9) (1989); Department of Nat. Resources v. Mahnomen Cnty. Hearings Unit, 407 N.W.2d 434, 436 (Minn. Ct. App. 1987), review denied.

^{33.} For the origins of riparian rights, see WATERS AND WATER RIGHTS § 7.01(a) (R. Beck 2d ed. 1991). See also M. Horwitz, The Transformation of American Law 33-53 (1977); A. Tarlock, Law of WATER RIGHTS AND RESOURCES § 3.02 (1988); S. Wiel, WATER RIGHTS IN THE WESTERN UNITED STATES chs. 1, 28-30 (3d ed. 1911); Busby, American Water Rights Law, 5 S.C.L. Rev. 106 (1952); Lauer, The Common Law Background of the Riparian Doctrine, 28 Mo. L. Rev. 60 (1963); Maass & Zobel, Anglo-American Water Law: Who Appropriated the Riparian Doctrine?, 10 Pub. Pol'y 109 (1961); Murphy, English Water Law Doctrines Before 1400, 1 Am. J. Legal Hist. 103 (1957); Rose, Energy and Efficiency in the Realignment of Common-Law Water Rights, 19 J. Legal Studies 261, 267-73 (1990); Wiel,

the United States, although they are also described as having originated in England and France.³⁴ Also like early riparian rights, the earliest drainage law rules were expressed in terms of rigidly defined property rights.³⁵ These property rights, however, were typically defined by two diametrically opposed approaches:³⁶ (1) that each landowner was free to take whatever steps were necessary to protect her land from diffused surface water (the "common enemy" rule);³⁷ or (2) that each landowner must maintain the natural drainage across his land in its natural condition, without material change in quantity or velocity (the "natural servitude" rule).³⁸

In recent years, the law regarding surface drainage has, much like the path of riparian rights, moved towards a rule of reasonable use. The dichotomy in the older rules seems to have persisted to a greater extent regarding surface drainage, however, than in the realm of defined surface waterbodies.³⁹ The following three subsections will detail the three approaches. This section will close with a brief look at drainage easements and at the legal rules which come into play when, as is increasingly common,⁴⁰ a

Origin and Comparative Development of the Law of Watercourses in the Common Law and in the Civil Law, 6 Cal. L. Rev. 245, 342 (1918); Wiel, Running Water, 22 Harv. L. Rev. 190 (1909); Wiel, Water: American Law and French Authority, 33 Harv. L. Rev. 133 (1919).

^{34.} See generally Keys v. Romley, 64 Cal. 2d 396, 400-02, 412 P.2d 529, 531-32, 50 Cal. Rptr. 273, 275-76 (1966); Boyd v. Conklin, 54 Mich. 583, 591-93, 20 N.W. 595, 598-99 (1884); Miller v. Letzerich, 121 Tex. 248, 256-58, 49 S.W.2d 404, 409 (1932). See also H. Coulson & U. Forbes, The Law Relating to Waters § 135 (1880); 3 H. Farnham, supra note 16, §§ 889, 889b.

^{35.} While an ambient resource like water never lends itself to a rigid definition like fees in land, the natural flow theory of riparian rights came close. The later primacy of the reasonable use theory of riparian rights gave rise to a system of common property in water rather than something which could be fairly described as private property. See generally 1 WATERS AND WATER RIGHTS, supranote 9, §§ 6.01(b), 7.01. On the displacement of property notions regarding the drainage of diffused surface water by tort notions, see Keys v. Romley, 64 Cal. 2d 396, 412 P.2d 529, 50 Cal. Rptr. 273 (1966).

^{36.} One of the more thorough studies of the law of diffused surface water found that while the two approaches are phrased in opposed ways, courts acting under the two rules often reach the same result. Kinyon & McClure, *supra* note 4, at 923-25, 934-35.

^{37.} For an in-depth discussion of the common-enemy rule, see *infra* notes 41-93 and the accompanying text.

^{38.} For an in-depth discussion of the natural servitude rule, see *infra* notes 94-124 and the accompanying text.

^{39.} See generally Annotation, 93 A.L.R.3d 1193 (1979).

^{40.} For further discussion of drainage easements, see *infra* notes 186-93 and the accompanying text.

public entity takes responsibility for maintaining the drainage of diffused surface water.

A. Three Approaches to Drainage

1. The Common Enemy Rule

The common enemy rule is based on an exaggerated view of the notion of absolute ownership of land;⁴¹ it simply declares that diffused or unconfined surface water is the enemy of all, and that each landowner is privileged to take whatever measures are necessary to protect the land from the onrush of "enemy waters," regardless of any harm those measures might have on the lands of others.⁴² By this reasoning, courts simply ignored that causing a larger amount of water to flow onto neighboring land than would naturally have flowed there was a classic trespass,⁴³ or at least a nuisance.⁴⁴ Instead, the common enemy rule treated the diffused water as a nuisance which all landowners are permitted to dispose of as each owner chose,⁴⁵ so long as they took measures on their

^{41.} See, e.g., Grant v. Allen, 41 Conn. 156, 160 (1874); Gannon v. Hargadon, 92 Mass. (10 Allen) 106, 109-10 (1865); Morrison v. Bucksport & B. R.R., 67 Me. 353, 356 (1877); Barkley v. Wilcox, 86 N.Y. 140, 147 (1881); Cass v. Dicks, 14 Wash. 75, 78-79, 44 P. 113, 114 (1896); Jordan v. City of Benwood, 42 W. Va. 312, 316-17, 26 S.E. 266, 268 (1896). See also Kinyon & McClure, supra note 4, at 898; Weston, supra note 5, at 909.

^{42.} Johnson v. Washington, 474 So. 2d 651 (Ala. 1985); White v. Pima County, 161 Ariz. 90, 775 P.2d 1154 (Ariz. Ct. App. 1989); Pirtle v. Opco, Inc., 269 Ark. 862, 601 S.W.2d 265 (1980); Ballard v. Ace Wrecking Co., 289 A.2d 888 (D.C. 1972); Argyelan v. Haviland, 435 N.E.2d 973 (Ind. 1982); Johnson v. Whitten, 384 A.2d 698 (Me. 1978); M.H. Siegfried Real Estate v. City of Independence, 649 S.W.2d 893 (Mo. 1983); Looney v. Hindman, 649 S.W.2d 207 (Mo. 1983); State v. Feenan, 231 Mont. 255, 752 P.2d 182 (1988); Gruber v. Dawson Cnty., 232 Neb. 1, 439 N.W.2d 446 (1989); Buffalo Sewer Auth. v. Town of Cheektowaga, 20 N.Y.2d 47, 228 N.E.2d 386, 281 N.Y.S.2d 326 (1967); Mullins v. Greer, 226 Va. 587, 311 S.E.2d 110 (1984); Morris Assoc., Inc. v. Priddy, 383 S.E.2d 770 (W. Va. 1989). See generally Kinyon & McClure, supra note 4, at 898-99; Note, supra note 5, at 84-86.

^{43.} See, e.g., Dobbs v. Missouri P. R.R., 416 F. Supp. 5, (E.D. Okla. 1975); Dovin v. Winfield Township, 164 Ill. App. 3d, 517 N.E.2d 1119 (1987), overruled on other grounds; Gerill Corp. v. Jack L. Hargrove Builders, Inc., 128 Ill. 2d 179, 538 N.E.2d 530 (1989), cert. denied, 110 S. Ct. 243 (1989); Connor v. Woodfill, 126 Ind. 85, 25 N.E. 876 (1890); Looney v. Hindman, 649 S.W.2d 207 (Mo. 1983). See also Dekle v. Vann, 284 Ala. 30, 223 So. 2d 30 (1969) (trespass if change in drainage patterns was "willful, wanton and malicious").

^{44.} See, e.g., Looney v. Hindman, 649 S.W.2d 207 (Mo. 1983); Conkin v. Ruth, 581 P.2d 923 (Okla. Ct. App. 1978); Butler v. Bruno, 115 R.I. 264, 341 A.2d 735 (1975); Glenn v. School Dist. No. 5, 294 S.C. 530, 366 S.E.2d 47 (S.C. Ct. App. 1988); CEW Mgmt. Corp. v. First Fed. S. & L. Ass'n, 88 Wis. 2d 631, 277 N.W.2d 766 (1979). See also Burnett, Surface Water and Nuisance Law: A Proposed Synthesis, 20 Idaho L. Rev. 185 (1983).

^{45.} But see Sprecher v. Adamson, 30 Cal. 3d 358, 364-65, 636 P.2d 1121, 1124, 178 Cal. Rptr. 783, 786 (1981) (listing cases); Noel, Nuisances from Land in

own land and not on that of their neighbors.46

The common enemy rule originated in Massachusetts around 1850.⁴⁷ English precedents on the point remained unsettled through the nineteenth century.⁴⁸ Although English courts stressed an obligation of inland landowners not to interfere with the natural drainage of their neighbors' land,⁴⁹ courts in the United States have nonetheless referred to the common enemy rule as the "common law rule."⁵⁰

At a time when courts in most riparian states (including Massachusetts) recognized a right (and an obligation) of a landowner to have the water flow in a defined waterbody according to natural drainage patterns, landowners in the same states were held free to change at will the natural flow patterns of surface water deemed not confined to a defined waterbody.⁵¹ Generally, the right to change the natural flowage pattern in order to protect or develop one's own land could be undertaken regardless of any

Its Natural Condition, 56 HARV. L. REV. 772, 784 (1943); Shaffer, Surface Water in Indiana, 39 IND. L.J. 69, 75 (1963). See also Roope v. Ananconda Co., 159 Mont. 28, 494 P.2d 922 (1972); Payne v. Touchstone, 372 So. 2d 1277 (Miss. 1979); Grosso v. Long Island Lighting Co., 102 Misc. 2d 916, 424 N.Y.S.2d 979 (1980).

^{46.} Whyte v. Altenderfer, 634 S.W.2d 515 (Mo. Ct. App. 1982), transfer denied.

^{47.} For the earliest decision which appears to announce the common enemy rule, see Luther v. Winnisimmet Co., 63 Mass. (9 Cush.) 171 (1851). For the earliest clear expression of the rule, see Gannon v. Hargadon, 92 Mass. (10 Allen) 106, 109-10 (1865). See also Greeley v. Maine Cent. R.R., 53 Me. 200 (1865); Bowlsby v. Speer, 31 N.J.L. 351 (1865). The phrase "common enemy" first appears in a decision relating to diffused surface water in Town of Union v. Durkes, 38 N.J.L. 21, 22 (1875).

^{48.} Kinyon & McClure, supra note 4, at 899-902.

^{49.} Keys v. Romley, 64 Cal. 2d 396, 400-02, 412 P.2d 529, 531-32, 50 Cal. Rptr. 273, 275-76 (1966); Boyd v. Conklin, 54 Mich. 583, 591-93, 20 N.W. 595, 598-99 (1884). See also 3 H. Farnham, supra note 16, § 889b; F. Maloney, S. Plager, & F. Baldwin, supra note 9, § 72.2; Rood, Surface Water in Cities, 6 Mich. L. Rev. 448, 451-53 (1908); Thomson, Surface Waters, 23 Am. L. Rev. 372, 387-91 (1889). The common law right to repel waters in England related to the right of landowners along the coast to protect their lands from the tides. Rex v. Pagham, 15 Eng. Rep. 179 (1828). See also Lamb v. Reclamation Dist. No. 108, 73 Cal. 125, 130-31, 14 P. 625, 627-28 (1887); Miller v. Letzerich, 121 Tex. 248, 260-61, 49 S.W.2d 404, 411 (1932) ("To say that surface waters . . . are a 'common enemy,' comparable to the constant ravages of the sea against its shore line, would tax the credulity of a child."); Lummis v. Lilly, 385 Mass. 41, 429 N.E.2d 1146 (1982) (reasonable use rule adopted for ocean front property) 3 H. Farnham, supra note 16, § 889, at 2596; Dobbins, Surface Water Drainage, 36 Notre Dame L. Rev. 518, 519 (1961).

^{50.} See, e.g., Keys v. Romley, 64 Cal. 2d 396, 400, 412 P.2d 529, 531, 50 Cal. Rptr. 273, 275 (1966); Abbott v. Kansas City, St. J. & C.B. R.R., 83 Mo. 271, 285-88 (1884); Edwards v. Charlotte, C. & A. R.R., 39 S.C. 472, 474-75, 18 S.E. 58, 59 (1893).

^{51.} Kinyon & McClure, supra note 4, at 893.

injurious effects on one's neighbors.⁵² Although the injuries to others often were an unintended result of improving one's own land, nothing in the common enemy rule limited its operation only to unintended results. The privilege to protect one's land usually permitted even intentional injuries to neighboring lands.⁵³ Landowners could undertake both to rechannel drainage for discharge onto the lands of others⁵⁴ and to build dikes or other barriers to prevent water from draining down from the lands of others.⁵⁵

Although based on an outdated absolutist view of the ownership of property, the common enemy rule benefited from the mistaken identification with the common law.⁵⁶ Partly because of this identification, the rule was for many years the most widely followed rule regarding natural drainage.⁵⁷ Other courts justified following the rule on a theory that its preclusion of liability for drainage changes promoted the development of land.⁵⁸

The supposition that the common enemy rule encourages investment in and the development of land arose in the late nineteenth century when large-scale urban growth was well underway, and legal institutions, like other social institutions of the time,

^{52.} Id. at 898.

^{53.} But see Dekle v. Vann, 284 Ala. 30, 223 So. 2d 30 (1969) (trespass if change in drainage patterns was "willful, wanton and malicious").

^{54.} Carty v. Hawaii Cnty., 47 Haw. 68, 384 P.2d 308 (1963); Roberts v. Hocker, 610 S.W.2d 321 (Mo. Ct. App. 1980); Young v. Moore, 241 Mo. App. 436, 236 S.W.2d 740 (1951).

^{55.} White v. Pima County, 161 Ariz. 90, 775 P.2d 1154 (Ariz. Ct. App. 1989); Stacy v. Walker, 222 Ark. 819, 262 S.W.2d 889 (1953); Chism v. Tipton, 269 Ark. 907, 601 S.W.2d 254 (Ark. Ct. App. 1980); Kramer v. Rager, 441 N.E.2d 700 (Ind. Ct. App. 1982); Johnson v. Whitten, 384 A.2d 698 (Me. 1978); Haith v. Atchison Cnty., 793 S.W.2d 151 (Mo. Ct. App. 1990); Shotkoski v. Prososki, 219 Neb. 213, 362 N.W.2d 59 (1985); Grint v. Hart, 216 Neb. 406, 343 N.W.2d 921 (1984); Sullivan v. Hoffman, 207 Neb. 166, 296 N.W.2d 707 (1980).

^{56.} See, e.g., Little Rock & Ft. S. R.R. v. Chapman, 39 Ark. 463, 474 (1882); Grant v. Allen, 41 Conn. 156, 161 (1874); Baltimore & O. R.R. v. Thomas, 37 App. D.C. 255, 257 (1911) (court preferred natural servitude rule but felt bound by common law); Abbott v. Kansas City, St. J. & C.B. R.R., 83 Mo. 271, 285-88 (1884); Le Munyon v. Gallatin Valley Ry., 60 Mont. 517, 523-24, 199 P. 915, 916 (1921); Goodale v. Tuttle, 29 N.Y. 459, 466 n.2 (1864); Chicago, R.I. & P. Ry. v. Groves, 20 Okla. 101, 111-13, 93 P. 755, 758-59 (1908); Edwards v. Charlotte, C. & A. R.R., 39 S.C. 472, 474-75, 18 S.E. 58, 59 (1893). See also Kraft v. Langford, 565 S.W.2d 223, 229 (Tex. 1978) ("civil law" rule is applicable to lands granted by Spain or Mexico; "common law" rule is applicable to lands granted by Texas, until, in 1915, legislature extended the "civil law" rule to all lands in state).

^{57.} Kinyon & McClure, supra note 4, at 902-04.

^{58.} See, e.g., Barkley v. Wilcox, 86 N.Y. 140, 148 (1887); Edwards v. Charlotte, C. & A. R.R., 39 S.C. 472, 474-75, 18 S.E. 58, 59 (1893). See also Kinyon & McClure, supra note 4, at 899; Note, supra note 5, at 77.

strongly supported development and expansion.⁵⁹ As the reasonable use rule had only been applied to diffused surface water in one state at that time,⁶⁰ courts saw the choice as between the common enemy rule and the natural servitude rule. As between the two, the common enemy rule was deemed the one most likely to promote urban growth as it minimized the potential liability costs of development.⁶¹

This supposed relation between the common enemy rule and growth assumes that developers would not be deterred by a fear that other developers might later injure their project in developing adjacent land.⁶² Although the empirical truth of these considerations has never been established,⁶³ their appeal was strong enough that many courts adopted the common enemy rule for urban areas.⁶⁴ In those states committed to the common enemy rule, only rural areas were typically left to the natural servitude rule.⁶⁵

The common enemy rule could often have harsh results. One commentator summed the rule up as "a neighborhood contest between pipes and dikes from which 'breach of the peace is

^{59.} Note, supra note 5, at 85-86.

^{60.} Swett v. Cutts, 50 N.H. 439 (1870). See also Note, supra note 5, at 85.

^{61.} See, e.g., Hall v. Rising, 141 Ala. 431, 433, 37 So. 586, 587 (1904); Levy v. Nash, 87 Ark. 41, 44, 112 S.W. 173, 174 (1908); Taylor v. Fickas, 64 Ind. 167, 175-76 (1878); Morrison v. Bucksport & B. R.R., 67 Me. 353, 356 (1877); Gannon v. Hargodon, 92 Mass. (10 Allen) 106, 110 (1865); Abbott v. Kansas City, St. J. & C.B. R.R., 83 Mo. 271, 286 (1884); Bowlsby v. Speer, 31 N.J.L. 351, 353 (1865); Barkley v. Wilcox, 86 N.Y. 140, 148 (1881); Henderson v. Hines, 48 N.D. 152, 159, 183 N.W. 531, 534 (1921); Jordan v. City of Benwood, 42 W. Va. 312, 316, 26 S.E. 266, 267 (1896).

^{62.} See, e.g., Lare v. Young, 153 Pa. Super. 28, 33 A.2d 662 (1943). See generally Hanks, The Law of Waters in New Jersey, 22 RUTGERS L. REV. 621, 690-91 (1968); Maloney & Plager, Diffused Surface Water: Scourge or Bounty?, 8 NAT. RESOURCES J. 72, 78 (1968); Weston, supra note 5, at 909-10; Note, California's Surface Waters, 39 So. CAL. L. REV. 128, 136 (1966).

^{63.} These assumptions were questioned in Keys v. Romley, 64 Cal. 2d 396, 406-07, 412 P.2d 529, 535, 50 Cal. Rptr. 273, 279 (1966).

^{64.} Betz v. Armstrong, 8 Watts & Serg. 40 (Pa. 1844). See also, Street v. Tackett, 494 So. 2d 13 (Ala. 1986); Johnston v. Miller, 15 Ohio App. 233, 240 N.E.2d 566 (1968); Mulder v. Tague, 85 S.D. 544, 186 N.W.2d 884 (1971); Annotation, 12 A.L.R.3d 1338, 1350 (1950). See generally Weston, supra note 5, at 911-14, 921-36; Note, supra note 5, at 79-80. But see Taylor v. Harrison Const. Co., 178 Pa. Super. 544, 548, 115 A.2d 757, 759 (1955) (court expressed difficulty in finding difference between rules actually applied to urban and rural property).

^{65.} See, e.g., DeWerff v. Schartz, 12 Kan. App. 553, 751 P.2d 1047 (1988); Steinbeck v. Philip Stenger Sons, Inc., 46 Ohio App. 2d 22, 345 N.E.2d 633 (1975); Young v. Huffman, 77 S.D. 254, 90 N.W.2d 401 (1958). For further discussion of the natural servitude rule, see infra notes 94-124 and the accompanying text.

often inevitable.' "66 Consequently, courts in nearly all states committed to the common enemy rule gradually developed one or both of two exceptions to the rule:67 The first is termed the "collection and discharge" exception; the second is termed the "due care" exception. Recourse to either exception still remains somewhat limited, however, given the persistence of the pro-development policies underlying the rule.68

Under the "collection and discharge" exception, courts in every common enemy jurisdiction will find a tort if a landowner has concentrated runoff on the land so that its discharge onto neighboring land has become seriously injurious.⁶⁹ This exception's effect, however, is generally limited to urban areas, offering protection only from downspouts, street gutters, sewers, or the like.⁷⁰ It does not protect neighbors from steps taken to fend off

^{66.} Weston, supra note 5, at 908. See also Butler v. Bruno, 115 R.I. 264, 268, 341 A.2d 735, 737 (1975) (adoption of common enemy rule proliferates "litigation and neighborhood ill will"); Maloney & Plager, supra note 62, at 78.

^{67.} See generally Note, supra note 5, at 86-91.

^{68.} See, e.g., Haferkamp v. City of Rock Hill, 316 S.W.2d 620 (Mo. 1958). See also Note, Landowner's Right to Fight Surface Water: The Application of the Common Enemy Doctrine in Indiana, 18 VAL. U.L. Rev. 481, 487-88 (1984).

^{69.} Johnson v. Washington, 474 So. 2d 651 (Ala. 1985); Roosevelt Irrigation Dist. v. Beardsley Land Co., 36 Ariz. 65, 282 P. 937 (1929); Lee-Phillips Drainage Dist. v. Beaver Bayou Drainage Dist., 226 Ark. 105, 289 S.W.2d 192 (1956); Hannaher v. St. Paul, M. & M. R.R., 5 Dak. 1, 37 N.W. 717 (1887); Ballard v. Ace Wrecking Co., 289 A.2d 888 (D.C. App. 1972); Bell v. Northside Finance Corp., 452 N.E.2d 951 (Ind. 1983); Johnston v. Hyre, 83 Kan. 38, 109 P. 1075 (1910); Goodwin v. Texas Co., 133 Me. 260, 176 A. 873 (1935); Jacobs v. Pine Manor College, 399 Mass. 411, 504 N.E.2d 639 (1987); Mississippi St. Highway Comm'n v. Engell, 251 Miss. 855, 171 So. 2d 860 (1965); Looney v. Hindman, 649 S.W.2d 207 (Mo. 1983); O'Hare v. Johnson, 116 Mont. 410, 153 P.2d 888 (1944); Delp v. Laier, 205 Neb. 417, 288 N.W.2d 265 (1980); Rix v. Town of Alamogordo, 42 N.M. 325, 77 P.2d 765 (1938); Buffalo Sewer Auth'y v. Town of Cheektowaga, 20 N.Y.2d 47, 228 N.E.2d 386, 281 N.Y.S.2d 326 (1967); Musumeci v. State, 43 A.D.2d 288, 351 N.Y.S.2d 211 (1974), appeal denied, 34 N.Y.2d 516, 316 N.E.2d 351, 358 N.Y.S.2d 1026 (1974); Johnston v. Miller, 15 Ohio App. 233, 240 N.E.2d 566 (1968); Iven v. Roder, 431 P.2d 321 (Okla. 1967); Rau v. Wilden Acres, 376 Pa. 493, 103 A.2d 422 (1954); Abrams v. Wright, 262 S.C. 141, 202 S.E.2d 859 (1974); Smith v. Charles Mix Cnty., 85 S.D. 343, 182 N.W.2d 223 (1970); Third Buckingham Comm'y v. Anderson, 178 Va. 478, 17 S.E.2d 433 (1941); Tope v. King County, 189 Wash. 463, 65 P.2d 1283 (1937); Gallagher v. City of Westover, 167 W. Va. 644, 280 S.E.2d 330 (1981). See generally Kinyon & McClure, supra note 4, at 916-19; Note, supra note 5, at 87, 90-91.

^{70.} See, e.g., United States v. Shapiro, Inc., 202 F.2d 459, 460 (D.C. Cir. 1952) ("channels, ditches, or other extraordinary construction"). See also, City of Tucson v. Dunseath, 15 Ariz. 355, 139 P. 177 (1914); Melin v. Richman, 96 Conn. 686, 115 A. 426 (1921); Cloverleaf Farms, Inc. v. Surratt, 169 Ind. App. 554, 349 N.E.2d 731 (1976); Kapayanis v. Fishbein, 344 Mass. 86, 181 N.E.2d 653 (1962); Mississippi St. Highway Comm'n v. Engell, 251 Miss. 855, 171 So. 2d 860 (1965); Nickerson Township v. Adams, 173 Neb. 387, 173 N.W.2d 387

diffused surface water.⁷¹ or if the diverted water ultimately enters the neighboring land in a diffused state.⁷² South Carolina's Supreme Court recently limited the collection and discharge exception by excluding artificial channels if they did not increase the overall discharge of water.⁷³

The "due care" exception to the common enemy rule is also followed in more than half of the common enemy jurisdictions.74 Under this exception, courts will hold landowners liable if changes they make to their land's drainage pattern "negligently" or "unnecessarily" injures the land of another. 75 The precise language used to formulate the exception varies from state to state, and thus what behavior constitutes due care itself might vary somewhat from state to state. Generally, the test focuses on whether the defendant has used reasonable efforts to avoid injury

(1970); Buffalo Sewer Auth. v. Town of Cheektowaga, 20 N.Y.2d 47, 228 N.E.2d 386, 281 N.Y.S.2d 326 (1967); Seifert v. Sound Beach Property Owners Ass'n, 60 Misc. 2d 300, 303 N.Y.S.2d 85 (1969); McCauley v. Phillips, 216 Va. 450, 219 S.E.2d 854 (1975); Getka v. Lader, 71 Wis. 2d 237, 238 N.W.2d 87 (1976). See also Note, supra note 5, at 87. But see Johnson v. Washington, 474 So. 2d 651 (Ala. 1985) (channeling found from cutting trees and building driveway); Looney v. Hindman, 649 S.W.2d 207, 211 (Mo. 1983) (collection and discharge found from gardening which permitted saturation of ground with resulting increased runoff); Delp v. Laier, 205 Neb. 417, 288 N.W.2d 265 (1980) (leaking retaining pits in rural area held to be collection and discharge).

71. Haith v. Atchison Cnty., 793 S.W.2d 151 (Mo. Ct. App. 1990); Schulze v. Monsanto Co., 782 S.W.2d 419 (Mo. Ct. App. 1989); Thomas v. Estate of Ducat, 769 S.W.2d 819 (Mo. Ct. App. 1989); Pollock v. Rose, 708 S.W.2d 218 (Mo. Ct. App. 1986), transfer denied; Krafka v. Brase, 218 Neb. 335, 353 N.W.2d 276 (1984); Sullivan v. Hoffman, 207 Neb. 166, 296 N.W.2d 707 (1980).

72. See, e.g., Argyelan v. Haviland, 435 N.E.2d 973, 976 (Ind. 1982); Mc-Cauley v. Phillips, 216 Va. 450, 219 S.E.2d 854 (1975). See also Weston, supra note 5, at 926-36; Note, supra note 5, at 85; Note, supra note 68, at 487.

73. Irwin v. Michelin Tire Corp., 288 S.C. 221, 341 S.E.2d 783 (1986). But see Abrams v. Wright, 262 S.C. 141, 202 S.E.2d 859 (1974).

74. Kinyon & McClure, supra note 4, at 928; Note, supra note 5, at 87 n.77. 75. Perhaps the earliest instance of this notion is found in Betz v. Armstrong,

8 Watts & Serg. 40 (Pa. 1844). See also Dobbs v. Missouri P. R.R., 416 F. Supp. 5 (E.D. Okla. 1975); King v. Adams, 349 So. 2d 611 (Ala. Ct. App. 1977); White v. Pima Cnty., 161 Ariz. 90, 775 P.2d 1154 (Ariz. Ct. App. 1989); Pirtle v. Opco, Inc., 269 Ark. 862, 601 S.W.2d 265 (1980); Ballard v. Ace Wrecking Co., 289 A.2 888 (D.C. 1972); Cairo & V. R.R. v. Stevens, 73 Ind. 278 (1881); Holman v. Richardson, 115 Miss. 169, 76 So. 136 (1917); Hawkins v. Burlington N., Inc., 514 S.W.2d 593 (Mo. 1974); Kirkham v. Wright, 760 S.W.2d 474 (Mo. Ct. App. 1988); State v. Feenan, 231 Mont. 255, 752 P.2d 182 (1988); Krafka v. Brase, 218 Neb. 335, 353 N.W.2d 276 (1984); Kossoff v. Rathgeb-Walsh Inc., 3 N.Y.2d 583, 148 N.E.2d 132, 170 N.Y.S.2d 789 (1958); Iven v. Roder, 431 P.2d 321 (Okla. 1967); Yenchko v. Grontkowski, 385 Pa. 272, 122 A.2d 705 (1956); Brandenburg v. Zeigler, 62 S.C. 18, 39 S.E. 790 (1901); Mullins v. Greer, 226 Va. 587, 311 S.E.2d 110 (1984); Gallagher v. City of Westover, 167 W. Va. 644, 280 S.E.2d 330 (1981). See also Weston, supra note 5, at 911-14, 922-26; Note, supra note 5, at 87-90; Note, supra note 68, at 488.

to others, and not on a weighing of the utility of the actor's conduct against the gravity of the harm to the others.⁷⁶ Thus, courts applying the due care exception could reach very different results from courts acting under the reasonable use rule.⁷⁷

Despite the historical linkage of the common enemy rule with the development of land, today there is a decided trend against the rule in favor of the reasonable use rule.⁷⁸ The trend began with statutes that directly repealed the common enemy rule, at least as to railroads or the like.⁷⁹ The real impetus, however, came from several well-known cases in which the court rejected the very contention that the common enemy rule fosters investment in and the development of land. These opinions accurately noted the rapid investment in and development of land in states which had previously rejected the common enemy rule.⁸⁰

This debunking of the idea that the common enemy rule is mandated by the need to develop land,⁸¹ the demise of the abso-

^{76.} See, e.g., Pirtle v. Opco, Inc., 269 Ark. 862, 601 S.W.2d 265 (1980); Roberts v. Hocker, 610 S.W.2d 321 (Mo. Ct. App. 1980); Butler v. Bruno, 115 R.I. 264, 272-73, 341 A.2d 735, 739-40 (1975). Note, supra note 5, at 76, 88; Note, supra note 68, at 488 n.42.

^{77.} For a discussion of the reasonable use rule, see *infra* notes 125-85 and the accompanying text.

^{78.} Page Motor Co. v. Baker, 182 Conn. 484, 438 A.2d 739 (1980) (dictum); Smith v. Rosen, 37 Conn. Super. 634, 432 A.2d 1193 (1981); Rodrigues v. State, 52 Haw. 156, 472 P.2d 509 (1970); Von Henneberg v. Generazio, 403 Mass. 519, 531 N.E.2d 563 (1988); Tucker v. Badoian, 376 Mass. 907, 384 N.E.2d 1195 (1978) (dictum); Enderson v. Kelehan, 226 Minn. 163, 32 N.W.2d 286 (1948); Clark County v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980); Armstrong v. Francis Corp., 20 N.J. 320, 120 A.2d 4 (1956); Jones v. Boeing Corp., 153 N.W.2d 897 (N.D. 1967); McGlashan v. Spade Rockledge Terrace Condo Dev. Corp., 62 Ohio St. 2d 55, 402 N.E.2d 1196 (1980); Mattoon v. City of Norman, 617 P.2d 1347 (Okla. 1980) (common enemy rule is modified by "rule of reason" principle); Butler v. Bruno, 115 R.I. 264, 341 A.2d 735 (1975); Morris Assoc., Inc. v. Priddy, 383 S.E.2d 770 (W. Va. 1989); State v. Deetz, 66 Wis. 2d 1, 224 N.W.2d 407 (1974). See also Bohemian Brethren Presbyterian Church v. Greek Archdiocesan Cathedral, 94 Misc. 2d 841, 405 N.Y.S.2d 926 (1978), aff'd mem., 70 A.D.2d 538, 416 N.Y.S.2d 751 (1979). At least one Missouri court is ready to join this group, although the court has thus far withheld the relevant opinion from publication. Hansen v. Gary Naugle Const. Co., 1990 WL 12071 (Mo. Ct. App.).

^{79.} See, e.g., Gluck v. Terminal R.R. Ass'n, 702 S.W.2d 476 (Mo. 1986); Formicove v. Burlington N., Inc., 207 Mont. 189, 673 P.2d 469 (1983). See also Camden Special Road Dist. v. Taylor, 495 S.W.2d 93 (Mo. Ct. App. 1973) (statute making it misdemeanor to obstruct public road by willfully turning water onto it merely adopts collection and discharge exception to common enemy rule).

^{80.} Keys v. Romley, 64 Cal. 2d 396, 406-07, 412 P.2d 529, 535, 50 Cal. Rptr. 273, 279 (1966); Clark Cnty. v. Powers, 96 Nev. 497, 502-03, 611 P.2d 1072, 1075-76 (1980). See generally Note, supra note 5, at 91-93.

^{81.} For a discussion of the notion that the common enemy rule was needed

lutist notions of the rights of landowners,⁸² along with the far-reaching exceptions to the rule,⁸³ all served to seriously undercut the impact of the rule. In addition to the general questioning of the empirical evidence for a link between the common enemy rule and urban growth, a few cases also demonstrated that a rule of reasonable use might actually provide more protection for the development of land than would the common enemy, as limited by its exceptions. Consider *Jacobs v. Pine Manor College*.⁸⁴

In Jacobs, a landowner sued a neighboring college for damages from the college's alleged collecting and discharging large quantities of surface water onto the landowner's land through an artificial drainage channel.⁸⁵ In reversing a previously affirmed judgment for the college, the Supreme Judicial Court of Massachusetts noted the differences between the "common enemy" and "reasonable use" rules. Although the "reasonable use" doctrine might allow rechannelling water in a damaging way if it were deemed "reasonable" under all the circumstances, the court pointed out that liability could nonetheless attach under the "common enemy" rule if "the injury suffered was more than inconsequential." The court noted that a landowner/developer could be liable under the common enemy rule for any damage caused by the discharge of water through an artificial channel even though that discharge might have been reasonable.⁸⁷

This rejection of any supposed developmental benefits destroys the rationale for applying the common enemy rule.⁸⁸ Courts also noted the unfairness of casting the full cost of the benefits obtained by developing land onto other landowners.⁸⁹ Also noted was a change in public policy from one of promoting maximum development of land to one of protecting existing land

to promote the development of land, see *supra* notes 59-65 and the accompanying text.

^{82.} For a discussion of the implications of such absolutist notions of land-owners rights, see *supra* notes 51-58 and the accompanying text.

^{83.} For a discussion of the exceptions to the common enemy rule, see *supra* notes 67-77 and the accompanying text.

^{84. 399} Mass. 411, 504 N.E.2d 639 (1987).

^{85.} Id. at 412, 504 N.E.2d at 640.

^{86.} Id. at 416, 504 N.E.2d at 642.

^{87.} Id. at 418, 504 N.E.2d at 643. Cf. McCauley v. Phillips, 216 Va. 450, 453-54, 219 S.E.2d 854, 858 (1975) (rejecting this notion).

^{88.} See generally Note, supra note 5, at 91-93.

^{89.} Clark County v. Powers, 96 Nev. 497, 502-03, 611 P.2d 1072, 1075-76 (1980); McGlashan v. Spade Rockledge Terrace Condo Dev. Corp., 62 Ohio St. 2d 55, 58-59, 402 N.E.2d 1196, 1199-1200 (1980).

resources and of preserving the natural environment.90

Despite these various reasons for the demise of the common enemy rule, some courts have nonetheless recently reaffirmed the rule, though acknowledging no other reason than that the rule had been adopted in the state's earlier cases. 91 While such a response could be justified as protecting reliance by various landowners on the old law, this reliance could be protected adequately, as several states have done, by making the adoption of newer approaches prospective only. 92 The reliance argument is tenuous in any case, given the considerable uncertainty already inherent in the exceptions to rule. 93 Thus, from almost any perspective, the common enemy rule is insupportable.

2. The Natural Servitude Rule

The natural servitude rule posits that each landowner has a legal right to drain the land as it would drain naturally, and is also burdened with the obligation to receive the natural drainage of adjoining lands.⁹⁴ Under this scheme, the higher land is termed

^{90.} Armstrong v. Francis Corp., 20 N.J. 320, 330, 120 A.2d 4, 10 (1956). See generally Maloney & Plager, supra note 62, at 73; Note, supra note 5, at 93. See also White v. Pima County, 161 Ariz. 90, 93-94, 775 P.2d 1154, 1157-58 (Ariz. Ct. App. 1989) (enactment of flood plain zoning act did not implicitly repeal common enemy doctrine).

^{91.} Argyelan v. Haviland, 435 N.E.2d 973 (Ind. 1982), disapproving Rounds v. Hoelscher, 428 N.E.2d 1308 (Ind. Ct. App. 1981); Johnson v. Whitten, 384 A.2d 698 (Me. 1978); M.H. Siegfried Real Estate v. City of Independence, 649 S.W.2d 893 (Mo. 1983); Williams v. Skipper, 284 S.C. 261, 325 S.E.2d 577 (S.C. Ct. App. 1985). See also Note, supra note 5, at 491-510.

^{92.} Page Motor Co. v. Baker, 182 Conn. 484, 438 A.2d 739 (1980); Jacobs v. Pine Manor College, 399 Mass. 411, 504 N.E.2d 639 (1987); Getka v. Lader, 71 Wis. 2d 237, 238 N.W.2d 87 (1976).

^{93.} Rodrigues v. State, 52 Haw. 156, 162-65, 472 P.2d 509, 515-16 (1970); Butler v. Bruno, 115 R.I. 264, 274-75, 341 A.2d 735, 741 (1975); Morris Assoc., Inc. v. Priddy, 383 S.E.2d 770, 774 (W. Va. 1989).

^{94.} This theory is often expressed by a Latin maxim: Aqua currit, et debet currere, ut solebat ex jure naturae: "Water runs and ought to run as it is used to run from the law of nature." Kauffman v. Griesemer, 26 Pa. 406, 413 (1856). See also Elmore v. Ingalls, 245 Ala. 481, 482, 17 So. 2d 674, 674 (1944); Goble v. Louisville & N. R.R., 187 Ga. 243, 246, 200 S.E. 259, 261 (1938); Baer v. Board of County Comm'rs, 255 Md. 163, 167, 257 A.2d 203, 204 (1969).

While most cases invoking the natural servitude rule had concerned objections by owners of lower lying land to increased or concentrated drainage, the few cases involving efforts to repel drainage make it clear that the rule works in both directions. See, e.g., Dessen v. Jones, 194 Ill. App. 3d 869, 551 N.E.2d 782 (1990); Bodenschatz v. Parrott, 153 Ill. App. 3d 1008, 506 N.E.2d 617 (1987); Skinner v. Wolf, 126 Kan. 158, 266 P. 926 (1928); Nicholson v. Holloway Planting Co., 255 La. 1, 229 So. 2d 679 (1969); Broussard v. Cormier, 154 La. 877, 98 So. 403 (1923); Volentine v. Houseman, 14 La. App. 704, 130 So. 863 (1930); Mitchell v. Blomdahl, 730 S.W.2d 791 (Tex. Ct. App. 1987); Bishop v. Harris, 669 S.W.2d 859 (Tex. Ct. App. 1984).

the "dominant estate," while the lower land is termed the "servient estate." By this rule, any change in natural drainage patterns is actionable if it injures another's land. The natural servitude rule functions much like the natural flow rule, which once prevailed for water in defined surface waterbodies. 97

The natural servitude rule is often called "the civil law rule," largely because it derives from the Louisiana case of *Orleans Navigation Co. v. City of New Orleans*, 98 an 1812 decision which ostensi-

98. 2 Mart. 214 (La. 1812). See also Becknell v. Weindhal, 7 La. Ann. 291

^{95.} Proving which estate is dominant and which is servient is not always easy. See, e.g., Calvaresi v. Brannan Sand Co., 35 Colo. App. 271, 534 P.2d 652 (1975); Dessen v. Jones, 194 Ill. App. 3d 869, 551 N.E.2d 782 (1990); Witthauer v. City of Council Bluffs, 257 Iowa 493, 133 N.W.2d 71 (1965); Poole v. Guste, 246 So. 2d 353 (La. Ct. App. 1971); Winterton v. Elverson, 389 N.W.2d 633 (S.D. 1986).

^{96.} Mitchell v. Mackin, 376 So. 2d 684 (Ala. 1979); Andrew Jergens Co. v. City of Los Angeles, 103 Cal. App. 2d 232, 229 P.2d 475 (1951); Colusa County v. Strain, 215 Cal. App. 2d 472, 30 Cal. Rptr. 415 (1963); Calvaresi v. Brannan Sand Co., 35 Colo. App. 271, 534 P.2d 652 (1975); Seminole Cnty. v. Mertz, 415 So. 2d 1286 (Fla. Dist. Ct. App. 1982); Smith v. King Creek Grazing Ass'n, 105 Idaho 644, 671 P.2d 1107 (Idaho Ct. App. 1983); Blink v. McNabb, 287 N.W.2d 596 (Iowa 1980); Thome v. Relterath, 433 N.W.2d 51 (Iowa App. 1988); Gott v. Franklin, 307 Ky. 466, 211 S.W.2d 680 (1948); East Baton Rouge Parish v. Pourciau, 387 So. 2d 645 (La. Ct. App. 1980); Robinson v. Belanger, 332 Mich. 657, 52 N.W.2d 538 (1952); Lewallen v. City of Niles, 86 Mich. App. 332, 272 N.W.2d 350 (1978); Payne v. Touchstone, 372 So. 2d 1277 (Miss. 1979); Sells v. Nickerson, 76 Or. App. 686, 711 P.2d 171, review denied, 300 Or. 722, 717 P.2d 630 (1985); Gross v. Connecticut Mutual Life Ins. Co., 361 N.W.2d 259 (S.D. 1985); Butts v. City of South Fulton, 565 S.W.2d 879 (Tenn. Ct. App. 1977); Town of Manchester v. Cherbonneau, 131 Vt. 107, 300 A.2d 548 (1973); Colella v. King County, 72 Wash. 2d 386, 433 P.2d 154 (1967). See also DeWerff v. Schartz, 12 Kan. App. 2d 553, 751 P.2d 1047 (1988); Bossler v. Countryside Gardens, Inc., 44 Ill. App. 3d 423, 358 N.E.2d 352 (1976); Tomrich Corp. v. George W. Sparks Const. Co., 17 N.C. App. 263, 193 S.E.2d 764 (1973); Lynn v. Rainey, 400 P.2d 805 (Okla. 1965); Blackwell v. Butler, 582 S.W.2d 760 (Tenn. Ct. App. 1978). See generally Hanks, supra note 62, at 688; Kinyon & McClure, supra note 4, at 893-94; Weston, supra note 5, at 906-08; Note, supra note 5, at 78-84; Note, supra note 68, at 484-86.

^{97.} The natural flow theory is sometimes called the "English Rule," even though the best historical evidence suggests that it originated in courts in the United States. In statement, the natural flow theory is relatively straightforward: Each riparian owner on a waterbody is entitled to have the water flow across, or lie upon, the land in its natural condition without alteration by others of the rate of flow or of the quantity or quality of the water. Boyd v. Greene County, 7 Ark. App. 110, 644 S.W.2d 615 (1983); Brown v. Tomlinson, 246 Ga. 513, 272 S.E.2d 258 (1980); Davidson v. Mathis, 389 N.E.2d 364 (Ind. Ct. App. 1979); Wisniewski v. Gemmill, 123 N.H. 701, 465 A.2d 875 (N.H. 1983); Board of Transp. v. Terminal Warehouse Corp., 300 N.C. 700, 268 S.E.2d 180 (1980); Wimmer v. Compton, 277 Or. 313, 560 P.2d 626 (1977); Pennsylvania R.R. v. Miller, 112 Pa. 34, 3 A. 780 (1886); Snyder v. Callaghan, 284 S.E.2d 241 (W. Va. 1981). An occasional plaintiff has asserted a right to the "natural flow" of groundwater. Artesian Water Co. v. New Castle County, 1981 WL 15606 (Del. Ch. 1981) (argument was used unsuccessfully to demand maintenance of artesian head, and not as reference to underground stream).

bly applied the civil law as received in that state.⁹⁹ This association of the rule with the civil law is questionable, however, both because of uncertainty about the true sources of law for the Louisiana tradition,¹⁰⁰ and because others have attributed the rule to *Martin v. Riddle*,¹⁰¹ a later Pennsylvania case in no way connected with the civil law tradition.

Martin, however, involved drainage through a natural stream rather than diffused surface water, and thus could only have contributed to the natural servitude rule through a rather thoroughgoing confusion. Henry Farnham has argued that precisely such a confusion did occur, for he contended that the natural servitude rule properly applied only to waterbodies or at least a natural drain even if it did not amount to a waterbody. Whatever the source of the rule, it had become widely applied to diffused surface water by the late nineteenth century. 103

From earliest times, the rule has been justified, as its name implies, as embodying the law of nature, which, it is said, necessarily leads to a reasonable and just result.¹⁰⁴ Other early courts adopted the rule in preference to what they saw as the crudity of the common enemy rule, which was viewed as representing "the law of force" rather than justice.¹⁰⁵ Still other courts advanced the natural servitude rule as necessary to promote agriculture.

^{(1852);} Darby v. Miller, 6 La. Ann. 645 (1851); Hays v. Hays, 19 La. 351 (1841); Lattimore v. Davis, 14 La. 161 (1839); Martin v. Jett, 12 La. 501 (1838).

^{99.} One consequence of this identification of the natural servitude rule was the rule, peculiar to Texas, that the "civil law rule" applies to lands originally granted by Spain or Mexico, and the "common law rule" applies to lands originally granted by Texas. Kraft v. Langford, 565 S.W.2d 223, 229 (Tex. 1978). In 1915, Texas through a statute extended the natural servitude rule to all lands. *Id.*

^{100.} Note that the Louisiana version of the Civil Code was not adopted until after the principal case was decided. For a brief discussion of the evolution of the rule in Louisiana, see Kinyon & McClure, supra note 4, at 894 n.8.

^{101. 26} Pa. 415 (1848).

^{102. 3} H. FARNHAM, supra note 16, § 889a, at 2587.

^{103.} Kinyon & McClure, supra note 4, at 896-98.

^{104.} Hughes v. Anderson, 68 Ala. 280, 284 (1880); Gormley v. Sanford, 52 Ill. 158, 162 (1869). See generally Kinyon & McClure, supra note 4, at 895. This emphasis on the natural basis of the relationship means that the servitude ends when the parties have cooperated to, or at least acquiesced in, utterly ending the natural drainage system. Elam v. Cortinas, 219 La. 406, 53 So. 2d 146 (1951).

^{105.} Ogburn v. Connor, 46 Cal. 346, 351-52 (1873); Mayor of Albany v. Sikes, 94 Ga. 30, 33, 20 S.E. 257, 258 (1894); Gillham v. Madison County R.R., 49 Ill. 484, 486 (1869). Note that many of the early decisions did not seem to be aware of the common enemy rule, and even relatively late decisions did not seem to be aware of the reasonable use rule. Kinyon & McClure, supra note 4, at 895 & n.14.

DIFFUSED SURFACE WATER

Under this rationale, landowners would be unable to cultivate their land if the water were not permitted to drain away via lower lands, ¹⁰⁶ or (at least inferentially) if the water draining onto the land were to be artificially increased. Those states stressing the importance of the natural servitude rule to promote agriculture tended to limit its applications to rural areas, while applying the common enemy rule to urban lands. ¹⁰⁷

Adoption of the natural servitude rule, however, actually appeared to impede investment in and the development of land. The inhibiting effect of the rule was apparently more pronounced when applied to urban settings where almost any significant use of land involved things such as grading, paving, or building, all of which increase runoff and change flow patterns. ¹⁰⁸ Fearing that impediments to development might extend even to the cultivation of agricultural land, courts responded by devising two exceptions: the "acceleration exception"; and the "good husbandry exception."

Most natural servitude states adopted some form of the acceleration exception.¹⁰⁹ This exception recognizes a right to ac-

^{106.} Carland v. Aurin, 103 Tenn. 555, 559-60, 53 S.W. 940, 941 (1899).

^{107.} Betz v. Armstrong, 8 Watts & Serg. 40 (Pa. 1844). See also, Street v. Tackett, 494 So. 2d 13 (Ala. 1986); Westland Skating Center, Inc. v. Gus Machado Buick, Inc., 542 So. 2d 959 (Fla. 1989) (reasonable use); Dovin v. Winfield Township, 164 Ill. App. 3d 326, 517 N.E.2d 1119 (2d Dist. 1987), overruled on other grounds, Gerill Corp. v. Jack L. Hargrove Builders, Inc., 128 Ill. 2d 179, 538 N.E.2d 530, cert. denied, 110 S. Ct. 243 (1989) (reasonable use), declining to follow Mileur v. McBride, 147 Ill. App. 3d 755, 498 N.E.2d 581 (5th Dist. 1986); Delano v. Collins, 49 Ill. App. 3d 791, 364 N.E.2d 716 (4th Dist. 1977) (reasonable use); DeWerff v. Schartz, 12 Kan. App. 553, 751 P.2d 1047 (1988); Steinbeck v. Philip Stenger Sons, Inc., 46 Ohio App. 2d 22, 345 N.E.2d 633 (1975); Mulder v. Tague, 85 S.D. 544, 488 P.2d 741 (1971) (reasonable use); City of Houston v. Renault, Inc., 431 S.W.2d 322 (Tex. 1968) (reasonable use); Annotation, 12 A.L.R.3d 1338, 1350 (1950). Compare Johnston v. Miller, 15 Ohio App. 233, 240 N.E.2d 566 (1968). See generally Kinyon & McClure, supra note 4, at 931-32; Weston, supra note 5, at 911-21; Note, supra note 5, at 79-82. But see Calvaresi v. Brannan Sand Co., 35 Colo. App. 271, 275-76, 543 P.2d 652, 654-55 (1975) (rejecting limitation of natural servitude rule to rural land); Taylor v. Harrison Const. Co., 178 Pa. Super. 544, 548, 115 A.2d 757, 759 (1955) (court expressed difficulty in finding difference between rules actually applied to urban and rural property). The distinction has less impact than one might expect as the land generally is classified as urban or rural according to whether it was located within an incorporated city rather than according to its uses. See Long & Long, Surface Waters and the Civil Law Rule, 23 EMORY L.J. 1015, 1029 (1974). For a general discussion of the common enemy rule, see supra notes 41-95 and the accompanying text

^{108.} See Hanks, supra note 62, at 688; Maloney & Plager, supra note 62, at 76; Weston, supra note 5, at 907; Note, supra note 5, at 83-84.

^{109.} Edason v. Denison, 142 Fla. 101, 194 So. 342 (1940); Smith v. King Creek Grazing Ass'n, 105 Idaho 644, 671 P.2d 1107 (Idaho Ct. App. 1983); Day-

celerate the drainage of diffused surface water into a natural watercourse or even over the surface of the land so long as the quantity is not increased to the point of injuring neighboring landowners. The exception did not, however, entitle the discharging landowner to overburden the capacity of a watercourse or to injure another by first collecting and then discharging the water. Nor, under the acceleration exception,

- ton v. Rutherford, 128 Ill. 271, 21 N.E. 198 (1889); Terrebonne Parish Police Jury v. Matherne, 405 So. 2d 314 (La. 1981), cert. denied, 456 U.S. 972 (1982); Mason v. Commissioners of Fulton County, 80 Ohio St. 151, 88 N.E. 401 (1909); Johnson v. Metropolitan Life Ins. Co., 71 S.D. 154, 22 N.W.2d 737 (1946); Johnson v. McMahon, 118 Tex. 633, 15 S.W.2d 1023 (1929). See also Ambrosio v. Perl-Mack Const. Co., 143 Colo. 49, 351 P.2d 803 (1960); City of Boulder v. Boulder & W.R. Ditch Co., 73 Colo. 426, 216 P. 553 (1923); Lindberg v. Lemanager, 73 Ill. App. 3d 623, 392 N.E.2d 382 (1979); Board of Supervisors of Pottawattamie County v. Board of Supervisors of Harrison Cnty., 214 Iowa 655, 241 N.W. 14 (1932); Garbarino v. Van Cleave, 214 Or. 554, 330 P.2d 28 (1958). See generally Kinyon & McClure, supra note 4, at 920-25.
- 110. Mitchell v. Mackin, 376 So. 2d 684 (Ala. 1979); Martinson v. Hughey, 199 Cal. App. 3d 318, 244 Cal. Rptr. 795 (1988); Hankins v. Borland, 163 Colo. 575, 431 P.2d 1007 (1967); Woods v. Town of State Centre, 249 Iowa 38, 85 N.W.2d 519 (1957); Freestate Indus. Dev. Co. v. T. & H., Inc., 209 So. 2d 568 (La. App. 1968); Peacock v. Stinchcomb, 189 Mich. 301, 155 N.W. 349 (1915); Payne v. Touchstone, 372 So. 2d 1277 (Miss. 1979); Slatten v. Mitchell, 22 Tenn. App. 547, 124 S.W.2d 310 (1938). See generally Weston, supra note 5, at 918-21.
- 111. Hicks v. Silliman, 93 Ill. 255, 264 (1879) ("undue and unnatural quantities"); Board of Supervisors of Pottawattamie County v. Board of Supervisors of Harrison County, 214 Iowa 655, 670, 241 N.W. 14, 20 (1932) ("unusual quantities"); Johnson v. Metropolitan Life Ins. Co., 71 S.D. 154, 158, 22 N.W.2d 737, 739 (1946) ("unusual or unnatural quantities"). See also East Baton Rouge Parish v. Pourciau, 387 So. 2d 645 (La. App. 1980); Mason v. Commissioners of Fulton County, 80 Ohio St. 151, 88 N.E. 401 (1909). An occasional court has questioned the capacity test. Callan v. G.M. Cypher Co., 71 Fla. 14, 70 So. 841 (1916); Payne v. Touchstone, 372 So. 2d 1277, 1279-80 (Miss. 1979).
- 112. Bogar v. Sperry Rand Corp., 504 F. Supp. 872 (E.D. Pa. 1980), aff'd mem., 671 F.2d 495 (3d Cir. 1980); Burkey v. Ellis, 483 F. Supp. 897 (N.D. Ala. 1979); Woodlawn Mem. Park v. L. & N. R.R., 377 F. Supp. 932 (M.D. Tenn. 1972); Vinson v. Turner, 252 Ala. 271, 40 So. 2d 863 (1949); Inns v. San Juan Unified School Dist., 222 Cal. App. 2d 174, 34 Cal. Rptr. 903 (1963); Clark v. Beauprez, 151 Colo. 119, 377 P.2d 105 (1962); New Homes of Pensacola, Inc. v. Mayne, 169 So. 2d 345 (Fla. Dist. Ct. App. 1964); Gill v. First Christian Church, 216 Ga. 454, 117 S.E.2d 164 (1960); Drainage Dist. No. 1 v. Village of Green Valley, 69 Ill. App. 3d 330, 387 N.E.2d 422 (1979); Willis v. Rich, 30 Ill. 2d 323, 196 N.E.2d 676 (1964); Braverman v. Eicher, 238 N.W.2d 331 (Iowa 1976); Clawson v. Garrison, 3 Kan. App. 2d 188, 592 P.2d 117 (1979); Pike County Bd. of Educ. v. Belfry Coal Corp., 346 S.W.2d 37 (Ky. 1961); Terrebonne Parish Police Jury v. Matherne, 405 So. 2d 314 (La. 1981), cert. denied, 456 U.S. 972 (1982); Irvine v. Montgomery County, 239 Md. 113, 210 A.2d 359 (1965); Schmidt v. Eger, 94 Mich. App. 728, 289 N.W.2d 851 (1980); Payne v. Touchstone, 372 So. 2d 1277 (Miss. 1979); Budagher v. Amrep Corp., 97 N.M. 116, 637 P.2d 547 (1981); Winterton v. Elverson, 389 N.W.2d 633 (S.D. 1986); Mitchell v. Blomdahl, 730 S.W.2d 791 (Tex. Ct. App. 1987). For an example of a permissible acceleration crossing over into an impermissible collection and

could the landowner drain the land into a different watershed from where the water would naturally drain.¹¹³

The "good-husbandry" exception was slower to gain wide acceptance, perhaps because it was deemed potentially far more expansive than the acceleration exception. The "good-husbandry" exception permits added quantities of water to be drained onto or repelled from a neighbor's land so long as the means used amount to "good husbandry" of the soil.114 Although this technically authorizes such drainage practices as exceptions to the natural servitude rule, its operation closely approximates that of the "reasonable use" rule—a particular practice would be permitted if deemed prudent (i.e. "reasonable" or "good").115 More recently, a few courts have opted for a more explicit adoption of the reasonable use rule. 116 Initially, the natural servitude rule was almost as widely adopted as the common enemy rule, and it has, on the whole, had fewer defections to the reasonable use rule than the common enemy rule. Most of the defections have been in the form of a newly announced "reasonable use exception" to the rule rather than an outright rejection of it. 117

discharge, compare Kay-Noojin Dev. Co. v. Kinzer, 259 Ala. 49, 65 So. 2d 510 (1953), with Kay-Noojin Dev. Co. v. Kinzer, 253 Ala. 588, 45 So. 2d 792 (1950). See generally Weston, supra note 5, at 917-18.

- 114. Hughes v. Anderson, 68 Ala. 280, 286 (1880) ("with great caution and prudence"); Dessen v. Jones, 194 Ill. App. 3d 869, 551 N.E.2d 782 (1990); Schmitt v. Kirkpatrick, 245 Iowa 971, 63 N.W.2d 228 (1954); Johnson v. Metropolitan Life Ins. Co., 71 S.D. 154, 22 N.W.2d 737 (1946).
- 115. Templeton v. Huss, 57 Ill. 2d 134, 311 N.E.2d 141 (1974); Lee v. Schultz, 374 N.W.2d 87 (S.D. 1985); Note, From Good Husbandry to Reasonable Use: Illinois Surface Water Drainage Law Evolves in Subdivision Case, 52 CHI.[-]KENT L. REV. 169 (1975).
- 116. For discussion of a case explicitly adopting the "reasonable use" rule, see *infra* notes 154-58 and the accompanying text.
- 117. Street v. Tackett, 494 So. 2d 13, 15 (Ala. 1986); Keys v. Romley, 64 Cal. 2d 396, 408-09, 412 P.2d 529, 536, 50 Cal. Rptr. 273, 280-81 (1966); Templeton v. Huss, 57 Ill. 2d 134, 138, 141, 311 N.E.2d 141, 145-46 (1974); Klutey v. Commonwealth, 428 S.W.2d 766, 769 (Ky. 1967); Kidwell v. Bay Shore Dev. Corp., 232 Md. 577, 194 A.2d 809 (1963); Payne v. Touchstone, 372 So. 2d 1277, 1280 (Miss. 1979). For further discussion of the relationship between the

^{113.} Hughes v. Anderson, 68 Ala. 280 (1880); Rinzler v. Folsom, 209 Ga. 549, 74 S.E.2d 661 (1953); Callahan v. Rickey, 93 Ill. App. 3d 916, 418 N.E.2d 167 (1981); Halsrud v. Brodale, 247 Iowa 243, 72 N.W.2d 94 (Iowa 1955); Clawson v. Garrison, 3 Kan. App. 2d 188, 592 P.2d 117 (1979); Freestate Indus. Dev. Co. v. T. & H., Inc., 209 So. 2d 568 (La. Ct. App. 1968); Smith v. Eaton, 138 Mich. 511, 101 N.W. 661 (1904); Cowan v. Baker, 87 So. 2d 34 (Miss. 1956); Grieger v. City of N. Royalton, 59 Ohio Misc. 103, 394 N.E.2d 353 (1977); Garbarino v. Van Cleave, 214 Or. 554, 330 P.2d 28 (1958); Elliott v. H.B. Alexander & Son, Inc., 41 Pa. Commw. 184, 399 A.2d 1130 (1979); Johnson v. Metropolitan Life Ins. Co., 71 S.D. 154, 22 N.W.2d 737 (1946).

As the right to drain has been considered a sort of easement, 118 some courts have feared that to change outright to the rule of reasonable use might be seen as a taking of an interest in real property for which compensation would be due. 119 Courts have also defended continued adherence to the natural servitude rule as producing the certainty which some believe is a "cardinal attribute of ownership." One student commentator, viewing the problem as one of certainty, stated as follows:

[The natural servitude rule] forces property owners to face the problem of disposing of surface waters at the earliest possible time—before improvement; it also minimizes damage, promotes the most efficient use of land, and eliminates unnecessary litigation. In contrast, the reasonable use rule determines the issue only after damage has occurred; the common enemy rule encourages one party to damage another, mitigating against the most economic decision.

Because the improver faced with the civil law rule must plan for the disposal of surface waters before construction, he is in the best position to build an economical and efficient drainage system and to seek the aid of municipalities in arriving at solutions beneficial not only to the improver, but the community at large. The reasonable use rule, on the other hand, may lead a property owner to conclude that since his costs are uncertain, he will not improve his property. The common enemy rule may lead to the destruction of an improvement once it has been built. The civil law rule, however, allows a property owner to calculate in advance what the costs of his improvement will be based on those estimates, and to

natural servitude rule and the reasonable use rule, see infra notes 138-40 and the accompanying text.

^{118.} Only a few courts have held, however, that the "natural easement" was such as to permit the owner of the dominant estate to go onto the servient estate to keep the drainage open. Bodenschatz v. Parrott, 153 Ill. App. 3d 1008, 506 N.E.2d 617 (1987). See also Scanlan v. Hopkins, 128 Vt. 626, 631, 270 A.2d 352, 356 (1970) (natural easement is not true easement).

^{119.} Winter v. Cain, 279 Ala. 481, 187 So. 2d 237 (1966); Braswell v. State Highway Comm'n, 250 N.C. 508, 108 S.E.2d 912 (1959). For a discussion of the evolution and application of the reasonable use rule, see *infra* notes 125-85 and the accompanying text.

^{120.} Dekle v. Vann, 279 Ala. 153, 156, 182 So. 2d 885, 887 (1966). See also Keys v. Romley, 64 Cal. 2d 396, 409, 412 P.2d 529, 537, 50 Cal. Rptr. 273, 281 (1966).

realize most nearly the highest and best use of his land. 121

This comment overlooks the fact that the exceptions to the rule detract substantially from any certainty sought in continued adherence to the rule. Increasingly, courts and others have criticized the law relating to water for focusing too much on property concepts and ignoring relevant torts concepts.¹²² A wholesale change to the reasonable use rule is necessary because the persistence of the natural servitude concept perpetuates significant burdens on lower land, while the several exceptions to the rule all tend to reduce the burden on the upper land.¹²³ The reasonable use rule parallels the tort rule long expressed in the maxim that one should not use one's property so as to injure that of another.¹²⁴ Such a rule is neither particularly new or surprising. Moreover, its application in this context cannot be more problematic than the continued embellishment of the natural servitude rule and its ill-defined and self-contradictory exceptions.

3. The Reasonable Use Rule

The reasonable use rule permits each landowner to alter the drainage on the land in any way chosen so long as the altered drainage does not unreasonably injure neighboring land.¹²⁵ The rule is almost as old as the common enemy and natural servitude rules, having first been adopted in cases relating to diffused surface water in New Hampshire as early as 1870.¹²⁶ Nonetheless, the rule remained more or less confined to New Hampshire de-

^{121.} Note, supra note 62, at 136.

^{122.} Keys v. Romley, 64 Cal. 2d 396, 407-08, 412 P.2d 529, 536, 50 Cal. Rptr. 273, 280 (1966); Kinyon & McClure, supra note 4, at 936-39. See also Freyfogle, Water Justice, 1986 U. Ill. L. Rev. 481.

^{123.} See Note, supra note 5, at 80-81.

^{124. &}quot;Sic utere tuo ut alienam non laedas." See, e.g., State v. Michels Pipeline Const. Co., 63 Wis. 2d 278, 292, 217 N.W.2d 339, 345 (1974) (groundwater).

^{125.} See generally Kinyon & McClure, supra note 4, at 904-13; Note, supra note 5, at 94-98; Note, supra note 68, at 488-91, 516-20. On the absence of liability for natural drainage under the reasonable use rule, see Blink v. McNabb, 287 N.W.2d 596 (Iowa 1980).

^{126.} Swett v. Cutts, 50 N.H. 439, 446 (1870). The same court had applied the same rule to the drainage of groundwater eight years earlier. Bassett v. Salisbury Mfg. Co., 43 N.H. 569, 577 (1862). The common enemy rule emerged no earlier than 1851, while the natural servitude rule emerged between 1812 and 1848. Luther v. Winnisimmet Co., 63 Mass. (9 Cush.) 171 (1851); Orleans Navigation Co. v. City of New Orleans, 2 Mart. 214 (La. 1812). For discussion of the history of the common enemy rule, see *supra* notes 47-50 and the accompanying text. For discussion of the history of the natural servitude rule, see *supra* notes 98-103 and the accompanying text.

spite occasional decisions elsewhere that seemed to reflect its premises.¹²⁷ At the same time, several exceptions to the more widely followed rules often made those rules function as if they were based on the reasonable use theory, despite the absence of an express reference to the reasonableness of a particular drainage scheme.¹²⁸

That the reasonable use rule should have been overtly neglected for so long is something of a puzzle. A parallel rule had long carried the day in riparian states for disputes over consumptive uses of surface water,¹²⁹ and the reasonable use rule in both consumption and drainage contexts was based on one of the most venerable maxims of the common law: Sic utere two ut alienam non laedas ("Use your property so as not to injure that of another").¹³⁰ This premise underlies the entire law of private nuisance, yet, inexplicably, it was rarely applied directly in disputes over the drainage of diffused surface water.¹³¹

The reasonable use rule today seems to be emerging as the dominant approach to drainage disputes over diffused surface water. The rule was endorsed by the *Restatement of Torts* in 1939.¹³² Only a year later, Professor Stanley Kinyon and Mr. Robert McClure strongly endorsed the rule in the most significant early article on such disputes.¹³³ Finally, in 1948, the rule was renewed in Minnesota after a long dormancy.¹³⁴ Thereafter, the

^{127.} See, e.g., Hughes v. Anderson, 68 Ala. 280, 286 (1880); Gormley v. Sanford, 52 Ill. 158 (1869); Schmitt v. Kirkpatrick, 245 Iowa 971, 63 N.W.2d 228 (1954); Sheehan v. Flynn, 59 Minn. 436, 61 N.W. 462 (1894); Johnson v. Metropolitan Life Ins. Co., 71 S.D. 154, 22 N.W.2d 737 (1946).

^{128.} For a discussion of exceptions to the traditional rules, see *supra* notes 66-77, 109-17 and the accompanying text. Some question exists as to whether these exceptions really lead to the same results as the reasonable use rule. See supra notes 76-77, 115 and the accompanying text. See generally Maloney & Plager, supra note 62, at 79 (only differences arise from "the practical question of predilection and proof"). See also Note, Surface Water Flooding in Urban Areas: Rights and Remedies under the Common Enemy Doctrine, 12 Tulsa L.I. 574 (1977).

^{129.} See, e.g., Tyler v. Wilkinson, 24 Fed. Cas. 472, 474 (D.R.I. 1827) (No. 14,312); Merritt v. Parker, 1 N.J.L. App. 460, 463 (1795).

^{130.} See Martin v. Weckerly, 364 N.W.2d 93, 94 (N.D. 1985). See also State v. Michels Pipeline Const. Co., 63 Wis. 2d 278, 292, 217 N.W.2d 339, 345 (1974).

^{131.} See also Burnett, supra note 44.

^{132.} RESTATEMENT OF TORTS § 833 (1939). See also RESTATEMENT (SECOND) OF TORTS § 833 (1979).

^{133.} Kinyon & McClure, *supra* note 4. To make their point, they quoted extensively from the opinion of Justice Walker in *Franklin v. Durgee*, 71 N.H. 186, 51 A. 911 (1901).

^{134.} Enderson v. Kelehan, 226 Minn. 163, 32 N.W.2d 286 (1948). But see Kallevig v. Holmgren, 293 Minn. 193, 197, 197 N.W.2d 714, 718 (1972) (reasonable use is merely exception to common enemy rule).

movement towards the reasonable use rule has accelerated dramatically until today, when at least half of the states have adopted it in some form.

Courts in three states settled what had been a thoroughly uncertain body of law by adopting the reasonable use rule. 135 Courts in eleven states abandoned the common enemy rule for the reasonable use rule, 136 with lower courts in two other states suggesting that such a move is imminent. 137 While courts in natural servitude states proved more reluctant to adopt the reasonable use rule outright (only one state court has unequivocally done so), 138 at least six have adopted a "reasonable use exception" to the servitude. 139 Courts in four other natural servitude states have adopted the reasonable use rule for "developed land," leaving the natural servitude rule in place for "undeveloped land." Similarly, two courts in common enemy states have devised a nuisance or reasonable use exception to their version of that rule. 141

^{135.} Weinberg v. Northern Alaska Dev. Co., 384 P.2d 450 (Alaska 1963); Weldin Farms, Inc. v. Glassman, 414 A.2d 500 (Del. 1980); Sanford v. University of Utah, 26 Utah 2d 285, 488 P.2d 741 (1971).

^{136.} Page Motor Co. v. Baker, 182 Conn. 484, 438 A.2d 739 (1980) (dictum); Smith v. Rosen, 37 Conn. Super. 634, 432 A.2d 1193 (1981); Rodrigues v. State, 52 Haw. 156, 472 P.2d 509 (1970); Von Henneberg v. Generazio, 403 Mass. 519, 531 N.E.2d 563 (1988); Tucker v. Badoian, 376 Mass. 907, 384 N.E.2d 1195 (1978) (dictum); Clark Cnty. v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980); Armstrong v. Francis Corp., 20 N.J. 320, 120 A.2d 4 (1956); Jones v. Boeing Corp., 153 N.W.2d 897 (N.D. 1967); McGlashan v. Spade Rockledge v. Bruno, 115 R.I. 264, 341 A.2d 735 (1975); City of Houston v. Renault, Inc., 431 S.W.2d 322 (Tex. 1968); Morris Assoc., Inc. v. Priddy, 383 S.E.2d 770 (W. Va. 1989); State v. Deetz, 66 Wis. 2d 1, 224 N.W.2d 407 (1974).

^{137.} Hansen v. Gary Naugle Const. Co., 1990 WL 12071 (Mo. App.); Bohemian Brethren Presbyterian Church v. Greek Archdiocesan Cathedral, 94 Misc. 2d 841, 405 N.Y.S.2d 926 (1978), aff 'd mem., 70 A.D.2d 538, 416 N.Y.S.2d 751 (1979).

^{138.} Pendergrast v. Aiken, 293 N.C. 201, 216, 236 S.E.2d 787, 796 (1977).

^{139.} Street v. Tackett, 494 So. 2d 13, 15 (Ala. 1986); Keys v. Romley, 64 Cal. 2d 396, 408-09, 412 P.2d 529, 536, 50 Cal. Rptr. 273, 280-81 (1966); Templeton v. Huss, 57 Ill. 2d 134, 138, 141, 311 N.E.2d 141, 145-46 (1974); Klutey v. Commonwealth, 428 S.W.2d 766, 769 (Ky. 1967); Kidwell v. Bay Shore Dev. Corp., 232 Md. 577, 194 A.2d 809 (1963); Payne v. Touchstone, 372 So. 2d 1277, 1280 (Miss. 1979). See also supra note 117 and the accompanying text.

^{140.} Westland Skating Center, Inc. v. Gus Machado Buick, Inc., 542 So. 2d 959 (Fla. 1989); Dovin v. Winfield Township, 164 Ill. App. 3d 326, 517 N.E.2d 1119 (1987), overruled on other grounds, Gerill Corp. v. Jack L. Hargrove Bldrs., Inc., 128 Ill. 2d 179, 538 N.E.2d 530, cert. denied, 110 S. Ct. 243 (1989); Mulder v. Tague, 85 S.D. 544, 186 N.W.2d 884 (1971).

^{141.} Mattoon v. City of Norman, 617 P.2d 1347 (Okla. 1980) (reasonable use exception); Glenn v. School Dist. No. 5, 294 S.C. 530, 366 S.E.2d 47 (1988) (nuisance exception). South Carolina's intermediate appellate court recently de-

In the best known of the natural servitude decisions, Keys v. Romley, 142 Justice Stanley Mosk, writing for the California Supreme Court, explained the interaction of the two approaches. 143 In Keys, the defendant built an ice rink and paved the surrounding land as a parking lot. 144 These and related changes produced a runoff increased in volume and velocity, producing considerable erosion on the plaintiff's downhill property. 145 Justice Mosk explained that if only one landowner's conduct was reasonable, that landowner would prevail in any litigation. If both landowners had behaved reasonably, however, then the one who had changed the natural drainage system would be liable for any resulting damages "in accordance with our traditional civil law [natural servitude] rule." 146

The court's language in Keys suggests that whether a change in surface drainage is reasonable is to be adjudged in the abstract, measured against some invariable notion of proper conduct. So long as courts focus on this particular statement, its import is far from clear. One panel of California's Court of Appeals interpreted this statement as permitting upper owners to raise a defense previously not recognized under the natural servitude rule: the unreasonableness of the lower owner's conduct. 147 an anomaly clearly not contemplated by the reasonable use exception, which instead focuses on the conduct of the dominant owner. Another court thought that the Keys decision was limited to "the intentional diversion of surface waters,"148 perhaps suggesting a requirement that the action be directed intentionally at the neighbor—something which does not appear to have been the case in Keys. In yet a third case, the court considered the Keys rule as simply requiring plaintiffs to have taken reasonable steps to mitigate their damages. 149

clined to consider adopting an explicit reasonable use rule because the court concluded that changing the rule would not lead to a different result. Williams v. Skipper, 284 S.C. 261, 325 S.E.2d 577 (S.C. Ct. App. 1985).

^{142. 64} Cal. 2d 396, 409, 412 P.2d 529, 537, 50 Cal. Rptr. 273, 281 (1966).

^{143.} Id. at 409, 412 P.2d at 537, 50 Cal. Rptr. at 281.

^{144.} Id.

^{145.} Id.

^{146.} Id.

^{147.} Burrows v. State, 260 Cal. App. 2d 29, 33, 66 Cal. Rptr. 868, 871 (1968).

^{148.} Western Salt Co. v. City of Newport Beach, 271 Cal. App. 2d 397, 403-04, 76 Cal. Rptr. 322, 326 (1969).

^{149.} Sheffet v. Los Angeles County, 3 Cal. App. 3d 720, 730, 84 Cal. Rptr. 11, 17 (1970). See also Pagliotti v. Acquistapace, 64 Cal. 2d 873, 412 P.2d 538, 50 Cal. Rptr. 282 (1966); Braverman v. Eicher, 238 N.W.2d 331 (Iowa 1976).

As these later California cases suggest, Keys appears to have changed very little regarding the drainage of diffused surface water. 150 Arguably, however, Keys stands for a much more fundamental change in the relevant law. Justice Mosk stated clearly that "the question of reasonableness of conduct is not related solely to the actor's interest, however legitimate; it must be weighed against the effect of the act upon others." 151 He also referred to the essentially "relational test for reasonableness" set out in the Restatement of Torts regarding finding of nuisance, 152 and concluded with a direction to balance the utility of the actor's conduct against the gravity of the harm to the other party. 153

To suggest that a person could be held to have acted reasonably under the "relational tests" and yet still be held liable to another because that other was also reasonable is inherently contradictory. States like California, thus, should be counted as following the reasonable use rule rather than the natural servitude rule. The only case in which a court explicitly renounced the natural servitude rule in favor of the reasonable use rule, however, is *Pendergrast v. Aiken*, ¹⁵⁴ decided in 1977 by North Carolina's Supreme Court.

In *Pendergrast*, upstream property owners brought suit against the owner of an adjoining downstream property, seeking to recover for flood damage arising from changes on the downstream property. The downstream defendant had placed a thirty-six inch drainage pipe in the stream and then covered over the stream with dirt. Water accumulation from subsequent rainfalls proved too great to be drained by the thirty-six inch pipe, and the stream backed up into plaintiff's basement on three occasions. 156

Noting the historical flexibility that jurisdictions had exhibited in making alterations to the common enemy and civil law rules according to the exigencies of modern drainage needs, and the uncertainty created by each rule with its exceptions, the court opted for an explicit adoption of the reasonable use rule.¹⁵⁷ The North Carolina court expressed the reasonable use rule as follows: "Each possessor is legally privileged to make a reasonable

^{150.} See Note, supra note 5, at 80-81.

^{151.} Keys, 64 Cal. 2d at 409-10, 412 P.2d at 537, 50 Cal. Rptr. at 281.

^{152.} RESTATEMENT OF TORTS §§ 822-833 (1939).

^{153.} Keys, 64 Cal. 2d at 410, 412 P.2d at 537, 50 Cal. Rptr. at 281.

^{154. 293} N.C. 201, 216, 236 S.E.2d 787, 796 (1977).

^{155.} Id. at 204, 236 S.E.2d at 789.

^{156.} Id.

^{157.} Id. at 216, 236 S.E.2d at 796.

use of his land, even though the flow of surface water is altered thereby and causes some harm to others, but liability is incurred when his harmful interference with the flow of surface waters is unreasonable and causes substantial damage."¹⁵⁸

The great virtue of the rule of reasonable use is its flexibility, allowing the trier of fact to tailor its decision to the particular circumstances in the case. ¹⁵⁹ This flexibility enables a court at times to adopt the policy orientation of the common enemy rule of favoring investment in and the development of land, ¹⁶⁰ and at other times to adopt the policy orientation of the natural servitude rule of discouraging what the court deems to be overinvestment and excessive development. ¹⁶¹ The rule's flexibility also obviates the problems which arise under the natural servitude rule when it is no longer possible, or at least is no longer meaningful, to determine what the natural condition was. ¹⁶²

^{158.} Id. Courts in four other states have also recently adopted the reasonable use rule for "developed land," leaving the natural servitude rule in place for "undeveloped land." Westland Skating Center, Inc. v. Gus Machado Buick, Inc., 542 So. 2d 959 (Fla. 1989); Dovin v. Winfield Township, 164 Ill. App. 3d 326, 517 N.E.2d 1119 (1987), overruled on other grounds, Gerill Corp. v. Jack L. Hargrove Builders, Inc., 128 Ill. 2d 179, 538 N.E.2d 530, cert. denied, 110 S. Ct. 243 (1989); Mulder v. Tague, 85 S.D. 544, 186 N.W.2d 884 (1971); City of Houston v. Renault, Inc., 431 S.W.2d 322 (Tex. 1968). Some would also count Delaware and Utah as having shifted from the natural servitude rule to the reasonable use rule, although its law in both states was actually quite unsettled until the adoption of the reasonable use rule. Weldin Farms, Inc. v. Glassman, 414 A.2d 500 (Del. 1980); Sanford v. University of Utah, 26 Utah 2d 285, 488 P.2d 741 (1971).

^{159.} See, e.g., Page Motor Co. v. Baker, 182 Conn. 484, 488, 438 A.2d 739, 741 (1980) (dictum); Armstrong v. Francis Corp., 20 N.J. 320, 330, 120 A.2d 4, 10 (1956); 5A R. Powell, supra note 9, § 7.09[3][d]; Note, supra note 5, at 96-97; Note, supra note 68, at 488-90. Courts treat the question of reasonableness as a question of fact within the province of the jury, if there is one. Braham v. Fuller, 728 P.2d 641, 643-44 (Alaska 1986); Sprecher v. Adamson Cos., 30 Cal. 3d 358, 372, 636 P.2d 1121, 1129, 178 Cal. Rptr. 783, 791 (1981); Page Motor Co., supra, 182 Conn. at 490, 438 A.2d at 742 (dictum); Taylor v. Carrico, 528 S.W.2d 694, 695 (Ky. 1975); Beane v. Prince George's County, 20 Md. App. 383, 395, 315 A.2d 777, 783 (1974); Pell v. Nelson, 294 Minn. 363, 366, 201 N.W.2d 136, 138-39 (1972); Martin v. Weckerly, 364 N.W.2d 93, 95 (N.D. 1985); Butler v. Bruno, 115 R.I. 264, 273, 341 A.2d 735, 740 (1975).

^{160.} Crest Chevrolet-Oldsmobile-Cadillac, Inc. v. Willemsen, 129 Wis. 2d 129, 146, 384 N.W.2d 692, 698 (1986).

^{161.} Id. Note that at the origin of the natural servitude rule, advocates of the rule often promoted it as favoring investment in and the development of agricultural land; only later did it appear to impede urban development. See supra notes 106-08 and the accompanying text. On the malleability of the reasonable use rule in terms of changing policy perspectives, see Note, supra note 5, at 95, 97.

^{162.} See, e.g., Keys v. Romley, 64 Cal. 2d 396, 406, 412 P.2d 529, 536, 50 Cal. Rptr. 273, 279 (1966); Martinson v. Hughey, 199 Cal. App. 3d 318, 329-30, 244 Cal. Rptr. 795, 802 (1988); Dayley v. City of Burley, 96 Idaho 101, 524 P.2d

The test of reasonableness, however, requires not only close attention to the facts of a case, but a weighing of the facts to reflect the interests of the competing parties and of society. The process requires judges to demonstrate a considerable measure of fairness and common sense." As a result, the rule creates considerable uncertainty about the legal consequences of any planned course of action—a problem which in other contexts has led courts and legislatures to abandon the rule of reasonable use in favor of a more rigid property-oriented approach or a regime of public management. Beginning many years ago, and increasingly so over the years, communities are turning to publicly managed drainage systems to accommodate and to restrain development. 166

In principle, the same factors which apply to determine whether a particular use of surface water is reasonable should apply to determine whether the draining of surface water is reasonable. Few courts have considered, however, how far to go in

- 164. Kinyon & McClure, supra note 4, at 905.
- 165. See generally Shoemaker, Engineering—Legal Solution to Urban Drainage Problems, 45 Den. U.L.J. 381 (1968).
- 166. See infra notes 194-222 and the accompanying text. See also, Shoemaker, supra note 165.
- 167. See, e.g., Red River Roller Mills v. Wright, 30 Minn. 249, 253, 15 N.W. 167, 169 (1883):

In determining what is a reasonable use, regard must be had to the subject-matter of the use; the occasion and manner of its application; the object, extent, necessity, and duration of the use; the nature and size of the stream; the kind of business to which it is subservient; the importance and necessity of the use claimed by one party, and the extent of the injury to the other party; the state of improvement of the country in regard to mills and machinery, and the use of water as a

^{1073 (1974);} City of Houston v. Renault, Inc., 431 S.W.2d 322, 325 (Tex. 1968). See also Howard v. City of Buffalo, 211 N.Y. 241, 262-65, 105 N.E.2d 426, 432 (1914); Note, supra note 5, at 99 n.152.

^{163.} See, e.g., Keys v. Romley, 64 Cal. 2d 396, 410, 412 P.2d 529, 537, 50 Cal. Rptr. 273, 281 (1966); Page Motor Co. v. Baker, 182 Conn. 484, 490, 438 A.2d 739, 742 (1980) (dictum); Westland Skating Center, Inc. v. Gus Machado Buick, Inc., 542 So. 2d 959, 963 (Fla. 1989); Rodrigues v. State, 52 Haw. 156, 165 n.5, 472 P.2d 509, 516 n.5 (1970); Klutey v. Commonwealth, 428 S.W.2d 766, 769 (Ky. 1967); Baer v. Board of County Comm'rs, 255 Md. 163, 168, 257 A.2d 201, 204 (1969); Miles v. City of Oakdale, 323 N.W.2d 51, 56 (Minn. 1982); Clark County v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980); Armstrong v. Francis Corp., 20 N.J. 320, 330, 120 A.2d 4, 10 (1956); Pendergrast v. Aiken, 293 N.C. 201, 217, 236 S.E.2d 787, 797 (1977); Martin v. Weckerly, 364 N.W.2d 93, 95 (N.D. 1985); Chudzinski v. City of Sylvania, 53 Ohio App. 2d 151, 158, 372 N.E.2d 611, 616 (1976); Crest Chevrolet-Oldsmobile-Cadillac, Inc. v. Willemsen, 129 Wis. 2d 129, 139, 384 N.W.2d 692, 695 (1986). As many of these cases indicate, such a balancing is the traditional approach to nuisance claims and to riparian rights. See also Restatement (Second) of Torts §§ 826-28, 850A (1979).

drawing analogies from the law of riparian rights, such as whether draining water from a different watershed onto a neighbor's land is unreasonable *per se.* ¹⁶⁸ Courts have considered the following eleven somewhat overlapping factors in determining whether an alteration of natural drainage was reasonable (arranged in the order of the number of states in which one or more courts have indicated that the factor is to be considered):

- (1) The injury to neighboring lands;169
- (2) The benefit to the drained land;170

propelling power; the general and established usages of the country in similar cases; and all the other and ever-varying circumstances of each particular case, bearing upon the question of the fitness and propriety of the use of the water under consideration.

See also Three Lakes Ass'n v. Kessler, 91 Mich. App. 371, 285 N.W.2d 303 (1979). See generally 1 WATERS AND WATER RIGHTS, supra note 9, §§ 7.02(d), 7.03; RESTATEMENT (SECOND) OF TORTS § 850A (1977).

168. See Templeton v. Huss, 57 Ill. 2d 134, 141, 311 N.E.2d 141, 146 (1974) (rejecting rule of per se unreasonableness for drainage from outside natural watershed despite holding that rule of reasonable use is merely limitation on state's natural servitude rule). For a review of state statutes which incorporate various definitions of "reasonableness," see 1 WATERS AND WATER RIGHTS, supra note 9, § 9.03(b).

169. Sprecher v. Adamson, 30 Cal. 3d 358, 371, 636 P.2d 1121, 1129, 178 Cal. Rptr. 783, 790 (1981); Page Motor Co. v. Baker, 182 Conn. 484, 490, 438 A.2d 739, 742 (1980) (dictum); Westland Skating Center, Inc. v. Gus Machado Buick, Inc., 542 So. 2d 959, 963 (Fla. 1989); Rodrigues v. State, 52 Haw. 156, 165 n.5, 472 P.2d 509, 516 n.5 (1970); Klutey v. Commonwealth, 428 S.W.2d 766, 770 (Ky. 1967); Beane v. Prince George's County, 20 Md. App. 383, 396, 315 A.2d 777, 783-84 (1974); Lummis v. Lilly, 385 Mass. 41, 47, 429 N.E.2d 1146, 1150 (1982); Miles v. City of Oakdale, 323 N.W.2d 51, 56 (Minn. 1982); Clark Cnty. v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980); Dudley v. Beckey, 132 N.H. 568, 570, 567 A.2d 573, 575 (1989); Armstrong v. Francis Corp., 20 N.J. 320, 330, 120 A.2d 4, 10 (1956); Bohemian Brethren Presbyterian Church v. Greek Archdiocesan Cathedral, 94 Misc. 2d 841, 844-45, 405 N.Y.S.2d 926, 928 (1978), aff'd mem., 70 A.D.2d 538, 416 N.Y.S.2d 751 (1979); Pendergrast v. Aiken, 293 N.C. 201, 217, 236 S.E.2d 787, 797 (1977); Martin v. Weckerly, 364 N.W.2d 93, 95 (N.D. 1985); Chudzinski v. City of Sylvania, 53 Ohio App. 2d 151, 158, 372 N.E.2d 611, 616 (1976); Butler v. Bruno, 115 R.I. 264, 273, 341 A.2d 735, 740 (1975); Crest Chevrolet-Oldsmobile-Cadillac, Inc. v. Willemsen, 129 Wis. 2d 129, 141, 384 N.W.2d 692, 696 (1986).

170. Keys v. Romley, 64 Cal. 2d 396, 410, 412 P.2d 529, 537, 50 Cal. Rptr. 273, 281 (1966); Page Motor Co. v. Baker, 182 Conn. 484, 490, 438 A.2d 739, 742 (1980) (dictum); Westland Skating Center, Inc. v. Gus Machado Buick, Inc., 542 So. 2d 959, 963 (Fla. 1989); Rodrigues v. State, 52 Haw. 156, 165 n.5, 472 P.2d 509, 516 n.5 (1970); Klutey v. Commonwealth, 428 S.W.2d 766, 770 (Ky. 1967); Lummis v. Lilly, 385 Mass. 41, 47, 429 N.E.2d 1146, 1150 (1982); Johnson v. Agerbeck, 247 Minn. 432, 439, 77 N.W.2d 539, 544 (1956); Clark Cnty. v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980); Dudley v. Beckey, 132 N.H. 568, 570, 567 A.2d 573, 575 (1989); Armstrong v. Francis Corp., 20 N.J. 320, 330, 120 A.2d 4, 10 (1956); Bohemian Brethren Presbyterian Church v. Greek Archdiocesan Cathedral, 94 Misc. 2d 841, 845, 405 N.Y.S.2d 926, 928 (1978), aff'd mem., 70 A.D.2d 538, 416 N.Y.S.2d 751 (1979); Pendergrast v. Aiken, 293 N.C. 201, 217, 236 S.E.2d 787, 797 (1977); Martin v. Weckerly, 364 N.W.2d 93, 95

- (3) The burden on either party of ameliorating the injury;¹⁷¹
- (4) The extent of the change to the drainage system;¹⁷²
- (5) The necessity for changing the drainage system; 173
- (6) The motive for changing the drainage system;174

(N.D. 1985); Chudzinski v. City of Sylvania, 53 Ohio App. 2d 151, 159, 372 N.E.2d 611, 616 (1976); Butler v. Bruno, 115 R.I. 264, 274, 341 A.2d 735, 740 (1975); Crest Chevrolet-Oldsmobile-Cadillac, Inc. v. Willemsen, 129 Wis. 2d 129, 141, 384 N.W.2d 692, 696 (1986).

171. Braham v. Fuller, 728 P.2d 641, 644 (Alaska 1986); Sprecher v. Adamson, 30 Cal. 3d 358, 371, 636 P.2d 1121, 1129, 178 Cal. Rptr. 783, 790 (1981); Klutey v. Commonwealth, 428 S.W.2d 766, 770 (Ky. 1967); Kidwell v. Bay Shore Dev. Co., 232 Md. 577, 584-85, 194 A.2d 809, 812-13 (1963); Lummis v. Lilly, 385 Mass. 41, 47, 429 N.E.2d 1146, 1150 (1982); Pell v. Nelson, 294 Minn. 363, 365, 201 N.W.2d 136, 138 (1972); Hall v. Wood, 443 So. 2d 834, 839 (Miss. 1983); Clark Cnty. v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980); Micucci v. White Mt. Trust Co., 114 N.H. 436, 438, 321 A.2d 573, 575 (1974); Pendergrast v. Aiken, 293 N.C. 201, 217, 236 S.E.2d 787, 797 (1977); Martin v. Weckerly, 364 N.W.2d 93, 95 (N.D. 1985); Chudzinski v. City of Sylvania, 53 Ohio App. 2d 151, 158-59, 372 N.E.2d 611, 616 (1976); Butler v. Bruno, 115 R.I. 264, 273, 341 A.2d 735, 740 (1975); Crest Chevrolet-Oldsmobile-Cadillac, Inc. v. Willemsen, 129 Wis. 2d 129, 143, 384 N.W.2d 692, 697 (1986).

172. Weinberg v. Northern Alaska Dev. Corp., 384 P.2d 450, 452 (Alaska 1963); Rodrigues v. State, 52 Haw. 156, 165 n.5, 472 P.2d 509, 516 n.5 (1970); Klutey v. Commonwealth, 428 S.W.2d 766, 770 (Ky. 1967); Lummis v. Lilly, 385 Mass. 41, 47, 429 N.E.2d 1146, 1150 (1982); Johnson v. Agerbeck, 247 Minn. 432, 439, 77 N.W.2d 539, 544 (1956); Hansen v. Gary Naugle Const. Co., 1990 WL 12071, slip op. at 3 (Mo. Ct. App. 1990); Clark County v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980); Dudley v. Beckey, 132 N.H. 568, 570, 567 A.2d 573, 575 (1989); Bohemian Brethren Presbyterian Church v. Greek Archdiocesan Cathedral, 94 Misc. 2d 841, 844, 405 N.Y.S.2d 926, 928 (1978), aff 'd mem., 70 A.D.2d 538, 416 N.Y.S.2d 751 (1979); Pendergrast v. Aiken, 293 N.C. 201, 217, 236 S.E.2d 787, 797 (1977); Martin v. Weckerly, 364 N.W.2d 93, 95 (N.D. 1985); Chudzinski v. City of Sylvania, 53 Ohio App. 2d 151, 158-59, 372 N.E.2d 611, 616 (1976); Butler v. Bruno, 115 R.I. 264, 273, 341 A.2d 735, 740 (1975); Crest Chevrolet-Oldsmobile-Cadillac, Inc. v. Willemsen, 129 Wis. 2d 129, 141, 384 N.W.2d 692, 696 (1986).

173. Weinberg v. Northern Alaska Dev. Corp., 384 P.2d 450, 452 (Alaska 1963); Rodrigues v. State, 52 Haw. 156, 165 n.5, 472 P.2d 509, 516 n.5 (1970); Klutey v. Commonwealth, 428 S.W.2d 766, 770 (Ky. 1967); Lummis v. Lilly, 385 Mass. 41, 47, 429 N.E.2d 1146, 1150 (1982); Johnson v. Agerbeck, 247 Minn. 432, 439, 77 N.W.2d 539, 544 (1956); Clark County v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980); Bohemian Brethren Presbyterian Church v. Greek Archdiocesan Cathedral, 94 Misc. 2d 841, 844, 405 N.Y.S.2d 926, 928 (1978), aff 'd mem., 70 A.D.2d 538, 416 N.Y.S.2d 751 (1979); Martin v. Weckerly, 364 N.W.2d 93, 95 (N.D. 1985); Chudzinski v. City of Sylvania, 53 Ohio App. 2d 151, 159, 372 N.E.2d 611, 616 (1976); Butler v. Bruno, 115 R.I. 264, 273, 341 A.2d 735, 740 (1975).

174. Weinberg v. Northern Alaska Dev. Corp., 384 P.2d 450, 452 (Alaska 1963); Keys v. Romley, 64 Cal. 2d 396, 410, 412 P.2d 529, 537, 50 Cal. Rptr. 273, 281 (1966); Page Motor Co. v. Baker, 182 Conn. 484, 490, 438 A.2d 739, 742 (1980) (dictum); Lummis v. Lilly, 385 Mass. 41, 47, 429 N.E.2d 1146, 1150 (1982); Miles v. City of Oakdale, 323 N.W.2d 51, 55 (Minn. 1982); Clark County v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980); Armstrong v. Francis Corp., 20

- (7) The foreseeability of impact on neighboring lands;¹⁷⁵
 - (8) Justice and other social values;176
 - (9) The location of the lands;177
- (10) The extent and intended effect of any public authorization;¹⁷⁸ and
- (11) The protection of existing values. 179

Treating the reasonable use rule for surface drainage as a purely relational test is simply the application of the traditional test for nuisance. The first Restatement of Torts adopted just such a balancing test for intentional nuisance in 1939. The American Law Institute adopted a somewhat different approach in its Restatement (Second) of Torts, in the following language:

Section 826. Unreasonableness of Intentional Invasion

An intentional invasion of another's interest in the use and enjoyment of land is unreasonable if

- (a) the gravity of the harm outweighs the utility of the actor's conduct, or
- (b) the harm caused by the conduct is serious and the financial burden of compensating for this and similar harm to others would not make the continua-

N.J. 320, 330, 120 A.2d 4, 10 (1956); Young v. Hamilton, 322 N.W.2d 237, 241 (N.D. 1983).

^{175.} Sprecher v. Adamson, 30 Cal. 3d 358, 371, 636 P.2d 1121, 1128, 178 Cal. Rptr. 783, 790 (1981); Page Motor Co. v. Baker, 182 Conn. 484, 490, 438 A.2d 739, 742 (1980) (dictum); Rodrigues v. State, 52 Haw. 156, 165 n.5, 472 P.2d 509, 516 n.5 (1970); Dudley v. Beckey, 132 N.H. 568, 570, 567 A.2d 573, 575 (1989); Armstrong v. Francis Corp., 20 N.J. 320, 330, 120 A.2d 4, 10 (1956); Jones v. Boeing Co., 153 N.W.2d 897, 904 (N.D. 1967).

^{176.} Page Motor Co. v. Baker, 182 Conn. 484, 489, 438 A.2d 739, 741 (1980) (dictum); Lummis v. Lilly, 385 Mass. 41, 47, 429 N.E.2d 1146, 1150 (1982); Pendergrast v. Aiken, 293 N.C. 201, 217, 236 S.E.2d 787, 797 (1977); Chudzinski v. City of Sylvania, 53 Ohio App. 2d 151, 158-59, 372 N.E.2d 611, 616 (1976); Crest Chevrolet-Oldsmobile-Cadillac, Inc. v. Willemsen, 129 Wis. 2d 129, 141, 384 N.W.2d 692, 696 (1986).

^{177.} Sprecher v. Adamson, 30 Cal. 3d 358, 366, 372, 636 P.2d 1121, 1125, 1129, 178 Cal. Rptr. 783, 787, 791 (1981); Crest Chevrolet-Oldsmobile-Cadillac, Inc. v. Willemsen, 129 Wis. 2d 129, 142, 384 N.W.2d 692, 697 (1986).

^{178.} Lummis v. Lilly, 385 Mass. 41, 46, 429 N.E.2d 1146, 1150 (1982). But see Tahan v. Thomas, 7 Cal. App. 3d 78, 82, 86 Cal. Rptr. 440, 442 (1970) (repelling floodwaters by diking public road without permit is unreasonable as matter of law); Weldin Farms, Inc. v. Glassman, 414 A.2d 500, 506 (Del. 1980) (county's approval of drainage plans is void if it conflicts with common law).

^{179.} Lummis v. Lilly, 385 Mass. 41, 47, 429 N.E.2d 1146, 1150 (1982).

^{180.} RESTATEMENT OF TORTS § 826 (1939).

tion of the conduct not feasible.181

The new language, found in section 826(b), would render an actor liable if the actor causes "serious" harm and the actor can afford to pay for the harm regardless of whether the utility of the activity outweighs the gravity of the harm. Thus far, only the Wisconsin Supreme Court has adopted this change. In Crest Chevrolet-Oldsmobile-Cadillac, Inc. v. Willemsen 182 the plaintiff did not even attempt to argue that the gravity of the harm outweighed the utility of the conduct.183 The court did not entirely abandon the balancing process, however, but the outcome of what balancing it did was changed by the court's emphasis on the cost to remedy the harm inflicted compared to the costs of the overall project. The court considered the same factors that it would have applied in the weighing process to determine that the harm was serious. 184 but the court's conclusion seemed to rest ultimately on its finding that awarding \$16,120 to the plaintiff when the defendant had already incurred \$269,000 in expenses was not a crippling burden. 185 It remains to be seen whether any other court will follow this approach.

B. Drainage Easements

Courts have recognized that drainage easements can be created just like any other easement. Such easements have been created by grant or reservation, express or implied. Even a mere license or the like creates an enforceable right to drain

^{181.} RESTATEMENT (SECOND) OF TORTS § 826 (1977).

^{182. 129} Wis. 2d 129, 139, 384 N.W.2d 692, 695 (1986).

^{183.} Id. at 139, 384 N.W.2d at 696.

^{184.} Id. at 140-42, 384 N.W.2d at 696-97.

^{185.} Id. at 143-47, 384 N.W.2d at 697-99. The court also went on to reject the defendant's contentions that the damages should be reduced for the plaintiff's contributory fault and failure to mitigate damages. Id. at 147-52, 384 N.W.2d at 697-701.

^{186.} See generally McKeon v. Brammer, 238 Iowa 1113, 29 N.W.2d 518 (1947).

^{187.} Ostrem v. Alyeska Pipeline Co., 648 P.2d 986 (Alaska 1982) (express grant); Peterson v. Town of Oxford, 189 Conn. 740, 459 A.2d 100 (1983) (express reservation); Johnson v. Gustafson, 49 Idaho 376, 288 P. 427 (1930) (implication); Halsrud v. Brodale, 247 Iowa 273, 72 N.W.2d 94 (1955) (express grant); Schmidt v. Eger, 94 Mich. App. 728, 289 N.W.2d 851 (1980) (grant implied because it was "reasonably necessary"); Kallevig v. Holmgren, 293 Minn. 193, 197 N.W.2d 714 (1972) (express grant); Mississippi State Highway Comm'n v. Wood, 487 So. 2d 798 (Miss. 1986) (implied grant); Woodward v. Cloer, 68 N.C. App. 331, 315 S.E.2d 335 (1984) (express reservation); Seventeen, Inc. v. Pilot Life Ins. Co., 215 Va. 74, 205 S.E.2d 648 (1974) (express grant benefiting third party). See also Clemson Univ. v. First Provident Corp., 260 S.C.

across another's land. ¹⁸⁸ Similarly, drainage easements can be acquired or extinguished by prescription ¹⁸⁹ or through eminent domain. ¹⁹⁰ However acquired, the easement is limited to its original dimensions. Most cases addressing the limits on a drainage easement involved disputes about increases in the volume of the drainage. ¹⁹¹ In one case, *Anntco v. Shrewsbury Bank*, ¹⁹² the court held that a private landowner, even with the permission of the

640, 197 S.E.2d 914 (1973) (no grant of drainage rights implied when special drainage rights were not necessary at time of grant).

188. See, e.g., Holbrook v. Appleberry, 249 Ark. 1037, 463 S.W.2d 100 (1974) (license); Tahan v. Thomas, 7 Cal. App. 3d 78, 86 Cal. Rptr. 440 (1970) (estoppel); Manning v. Hall, 110 So. 2d 424 (Fla. Dist. Ct. App. 1959) (license); Eppling v. Seuntjens, 254 Iowa 396, 117 N.W.2d 820 (1962) (executed oral agreement); Jones v. Stover, 131 Iowa 119, 108 N.W. 112 (1906) (license); Brown v. Armstrong, 127 Iowa 175, 102 N.W. 1047 (1905) (estoppel).

189. Drainage easement acquired through prescription: City of Mt. Brook v. Beatty, 292 Ala. 398, 295 So. 2d 388 (1974); Hankins v. Borland, 163 Colo. 575, 431 P.2d 1007 (1967); H.A. Bosworth & Son, Inc. v. Tamiola, 24 Conn. App. 328, 190 A.2d 506 (1963); City of Atlanta v. Williams, 218 Ga. 379, 128 S.E.2d 41 (1962); Merrill v. Penrod, 109 Idaho 46, 704 P.2d 950 (Idaho Ct. App.), review denied, 116 Idaho 466, 776 P.2d 828 (1985); Jones v. Williamson, 74 Ill. App. 2d 367, 220 N.E.2d 645 (1966); Cleveland, C. C. & St. L. Ry. v. Huddleston, 21 Ind. App. 621, 52 N.E. 1008 (1899); McKeon v. Brammer, 238 Iowa 1113, 29 N.W.2d 518 (1947); Johnson v. Willis, 220 So. 2d 134 (La. Ct. App. 1969); Freestate Indus. Dev. Co. v. T. & H. Inc., 188 So. 2d 746 (La. Ct. App. 1966); Dickinson v. City of Worcester, 89 Mass. (7 Allen) 19 (1863); Peacock v. Stinchcomb, 189 Mich. 301, 155 N.W. 349 (1915); Crumbaugh v. Mobile & O. R.R., 105 Miss. 485, 62 So. 233 (1913); Minton v. Steakley, 466 S.W.2d 441 (Mo. Ct. App. 1971), transfer denied; Nickman v. Kirschner, 202 Neb. 78, 273 N.W.2d 675 (1979); Lynn v. Rainey, 400 P.2d 805 (Okla. 1964); Roberts v. Von Briesen, 107 Wis. 486, 83 N.W. 755 (1900); Auchmuty v. Chicago, B. & O. R.R., 349 P.2d 193 (Wyo. 1960). Drainage easement extinguished through prescription: Willis v. Rich, 30 Ill. 2d 323, 196 N.E.2d 676 (1964); Kougl v. Curry, 73 S.D. 427, 44 N.W.2d 114 (1950). See also Moreland v. Acadian Mobil Homes Park, Inc., 313 So. 2d 877 (La. App.), writ denied, 319 So. 2d 442 (La. 1975) (failure to prove loss of drainage easement by prescription); Armstrong v. Red River, A. & B.B. Levee Bd., 261 So. 2d 298 (La. App. 1972) (same); Senkevich v. Vaughn, 610 S.W.2d 399 (Mo. App. 1980) (failure to prove the acquisition of a drainage easement through prescription); Grint v. Hart, 216 Neb. 406, 343 N.W.2d 921 (1984) (prescriptive easement abandoned); Allen v. City of Gold Beach, 12 Or. App. 196, 506 P.2d 507 (1973) (same).

190. See, e.g., Ostrem v. Alyeska Pipeline Co., 648 P.2d 986 (Alaska 1982); Tahan v. Thomas, 7 Cal. App. 3d 78, 86 Cal. Rptr. 440 (1970); H.A. Bosworth & Son, Inc. v. Tamiola, 24 Conn. Super. 328, 190 A.2d 506 (1963). See also Sheffet v. Los Angeles County, 3 Cal. App. 3d 720, 84 Cal. Rptr. 11 (1970) (taking by eminent domain does not shield public agency from liability for subsequent drainage damage to retained property caused by agency's negligence in carrying out project for which property was taken).

191. See, e.g., City of Mt. Brook v. Beatty, 292 Ala. 398, 295 So. 2d 388 (1974); Peterson v. Town of Oxford, 189 Conn. 740, 459 A.2d 100 (1983); Halsrud v. Brodale, 247 Iowa 273, 72 N.W.2d 94 (1955); Peacock v. Stinchcomb, 189 Mich. 301, 155 N.W. 349 (1915); Harvey v. Illinois Cent. R.R., 111 Miss. 835, 72 So. 273 (1916).

192. 353 Mass. 250, 230 N.E.2d 795 (1967).

maintained.

owner of the easement (the Commonwealth), could not drain its land through a drainpipe for a public highway as general drainage exceeded the scope of the easement under which the pipe was

Three courts recently devised a means of obtaining a drainage easement simply by treating the aggressive conduct of a party in a fashion similar to eminent domain. ¹⁹³ In these cases, the defendants went onto the plaintiffs' land to alter the drainage pattern and defied their neighbors to sue them. While the courts awarded permanent damages based on the irreparable harm produced by the trespass, the courts declined to enjoin the trespass after "balancing the equities."

C. Public Control of Drainage

The state or other governmental units as landowners are treated much like any other landowner when they affect drainage as an incident to their other activities. ¹⁹⁴ Today, at least in urban and suburban areas, but increasingly in rural areas as well, drainage has become a governmental responsibility. In large measure, however, those governmental activities are still constrained by the common law rules of drainage already considered.

Governmental responsibility for drainage has antecedents which predate the settlement of the country. During the nineteenth century, governments supported cooperative action by groups of landowners, even binding holdouts within the drainage area to decisions by the majority. Later, states empowered

^{193.} Ostrem v. Alyeska Pipeline Co., 648 P.2d 986 (Alaska 1982); Price v. Georgia Indus. Realty Co., 132 Ga. App. 107, 207 S.E.2d 556 (1974); Hoffman v. Koehler, 757 S.W.2d 289 (Mo. App. 1988). See also Smith v. City of Woodstock, 17 Ill. App. 3d 948, 309 N.E.2d 45 (1974); Beane v. Prince George's Cnty., 20 Md. App. 383, 315 A.2d 777 (1974); Triangle Center, Inc. v. Department of Public Works, 386 Mass. 858, 438 N.E.2d 798 (1982).

^{194.} See, e.g., White v. Pima Cnty., 161 Ariz. 90, 775 P.2d 1154 (Ariz. App. 1989); Sheffet v. Los Angeles Cnty., 3 Cal. App. 3d 720, 84 Cal. Rptr. 11 (1970); Sandifer Motors, Inc. v. City of Roeland Park, 6 Kan. App. 2d 308, 628 P.2d 239 (1981); Triangle Center, Inc. v. Department of Public Works, 386 Mass. 858, 438 N.E.2d 798 (1982); M.H. Siegfried Real Estate v. City of Independence, 649 S.W.2d 893 (Mo. 1983); Slusarski v. Platte Cnty., 226 Neb. 889, 416 N.W.2d 213 (1987); Lang v. Wonneberg, 455 N.W.2d 832 (N.D. 1990); Sanford v. University of Utah, 26 Utah 2d 285, 488 P.2d 741 (1971); State ex rel. Teter v. State Road Comm'n, 152 W. Va. 805, 166 S.E.2d 757 (1969). See generally Weston, supra note 5, at 941-46.

^{195.} See, e.g., Statute on the Commissioners of Sewers, 6 Hen. VI, ch. 5 (1427).

^{196.} See, e.g., Head v. Amoskeag Mfg. Co., 113 U.S. 9 (1885); Coomes v. Burt, 39 Mass. (22 Pick.) 422 (1839).

such groups to incorporate private drainage companies with the power to drain and to levy special assessments on all benefited lands by a decision of the majority of the shares.¹⁹⁷ In urban areas, governments took more direct responsibility from early times;¹⁹⁸ by the end of the nineteenth century direct responsibility spread to rural areas, often in the form of special drainage districts.¹⁹⁹ Only rarely has anyone been able to challenge such programs on grounds that the activity did not serve a public purpose.²⁰⁰

Governments now both regulate private activities affecting drainage and construct and operate artificial drainage systems to substitute for the natural systems which have been obliterated or overwhelmed by public and private development.²⁰¹ Such governmental activities are almost entirely statutory and vary considerably from state to state.

Zoning and other controls on land use have long had a direct impact on drainage; today, there are special zoning or licensing authorities that focus directly on drainage. In particular, private landowners are often not permitted to undertake measures to protect themselves from the risk of flood or other drainage damage without the approval of one or more flood control agencies. Such requirements have long been held to be exercises of the police power, and not a taking of property. So

Obtaining a governmental license or permit can have real advantages to private actors. Courts often treat the presence or absence of such approvals as important factors in determining whether private activity is reasonable or lawful.²⁰⁴ On the other

^{197.} See, e.g., O'Reilly v. Kankakee Valley Draining Co., 32 Ind. 169 (1869); Coster v. Tide Water Co., 18 N.J. Eq. 54 (1866).

^{198.} See, e.g., Wright v. City of Boston, 63 Mass. (9 Cush.) 233 (1852); Reeves v. Treasurer of Wood Cnty., 8 Ohio St. 333 (1858).

^{199.} Mound City Land Co. v. Miller, 170 Mo. 240, 251-53, 70 S.W. 721, 724-25 (1902).

^{200.} Such attacks occasionally do succeed. Miller Land Co. v. Liberty Township, 510 S.W.2d 473 (Mo. Ct. App. 1974).

^{201.} See generally Weston, supra note 5, at 946-82.

^{202.} See, e.g., Iowa Natural Resources Council v. Van Zee, 261 Iowa 287, 158 N.W.2d 111 (1968); Simon v. Neines, 193 Kan. 343, 395 P.2d 308 (1964).

^{203.} See, e.g., Sun Ridge Dev., Inc. v. City of Cheyenne, 787 P.2d 583 (Wyo. 1990).

^{204.} Tahan v. Thomas, 7 Cal. App. 3d 78, 82, 86 Cal. Rptr. 440, 442 (1970) (repelling floodwaters by diking public road without permit is unreasonable as matter of law); DeWerff v. Schartz, 12 Kan. App. 2d 553, 751 P.2d 1047 (1988) (statutorily authorized ditch necessarily is reasonable); Lummis v. Lilly, 385 Mass. 41, 46, 429 N.E.2d 1146, 1150 (1982) (dictum). But see Weldin Farms, Inc. v. Glassman, 414 A.2d 500, 506 (Del. 1980) (county's approval of drainage plans

hand, at least four courts have held the public agency liable to private parties injured by other private activities authorized by the public agency.²⁰⁵

Generally, there is no statutory duty on a local government to undertake direct drainage programs, yet drainage usually is provided by municipal authorities in urban and suburban areas. Nearly all states also provide for the creation of special purpose governmental units, referred to as drainage districts.²⁰⁶ These largely function in rural areas, although sometimes they continue functioning after a rural area is suburbanized. Once local governments undertake to provide for drainage, they will be held liable under ordinary tort principles if they perform the task improperly.²⁰⁷ Courts can force governments to keep their sewer systems abreast of developing land uses and changing technology through decisions finding negligence or nuisance.

is void if it conflicts with common law); Bily v. Omni Equities, Inc., 731 S.W.2d 606 (Tex. Ct. App. 1987) (compliance with city ordinance not defense), writ refused, no rev'ble error.

205. Seminole County v. Mertz, 415 So. 2d 1286 (Fla. Dist. Ct. App.), review denied, 424 So. 2d 763 (Fla. 1982); Sheffet v. Los Angeles County, 3 Cal. App. 3d 720, 84 Cal. Rptr. 11 (1970); Templeton v. Huss, 57 Ill. 2d 134, 311 N.E.2d 141 (1974); Myotte v. Village of Mayfield, 54 Ohio App. 2d 97, 375 N.E.2d 816 (1977). But see Cootey v. Sun Inv., Inc., 68 Haw. 480, 718 P.2d 1086 (1986); Barney's Furniture Warehouse v. City of Newark, 62 N.J. 456, 303 A.2d 76 (1973); Mark Downs, Inc. v. McCormick Properties, Inc., 51 Md. App. 171, 441 A.2d 1119 (1982); Wilson v. Ramacher, 352 N.W.2d 389 (Minn. 1984); Darst v. Metropolitan St. L. Sewer Dist., 757 S.W.2d 270 (Mo. Ct. App. 1988), transfer denied; Johnson v. Essex County, 223 N.J. Super. 239, 538 A.2d 448 (1987); Laform v. Bethlehem Township, 346 Pa. Super. 512, 499 A.2d 1373 (1985), appeal denied.

206. See, e.g., Reeder v. Board of County Comm'rs, 193 Kan. 182, 392 P.2d 888 (1964).

207. See, e.g., Central Nat. Ins. Co. v. Kansas City, 546 F. Supp. 1237 (W.D. Mo. 1982) (negligence); Rodrigues v. State, 52 Haw. 156, 472 P.2d 283 (1970) (negligence); Dovin v. Winfield Township, 164 Ill. App. 3d 326, 517 N.E.2d 1119 (1987) (trespass or nuisance), overruled on other grounds, Gerill Corp. v. Jack L. Hargrove Bldrs., Inc., 128 Ill. 2d 179, 538 N.E.2d 530, cert. denied, 110 S. Ct. 243 (1989); Beane v. Prince George's Cnty., 20 Md. App. 383, 315 A.2d 777 (1974) (nuisance); Schleisenger v. Town of Provincetown, 27 Mass. App. 392, 538 N.E.2d 995 (1989) (nuisance); Hadfield v. Oakland County Drain Comm'rs, 430 Mich. 139, 422 N.W.2d 205 (1988) (nuisance); Highview N. Apts. v. Ramsey County, 323 N.W.2d 65 (Minn. 1982) (nuisance); Fletcher v. City of Independence, 708 S.W.2d 158 (Mo. Ct. App. 1986), transfer denied (nuisance); Clark County v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980) (unspecified tort); Cannata v. Town of Deerfield, 132 N.H. 235, 566 A.2d 162 (1989) (negligence); Board of Educ. v. State, 69 N.J. 92, 351 A.2d 17 (1976) (nuisance); Musumeci v. State, 43 A.D.2d 288, 351 N.Y.S.2d 211, appeal denied, 34 N.Y.2d 516, 316 N.E.2d 351, 358 N.Y.S.2d 1026 (1974) (trespass); City of Portsmouth v. Culpepper, 192 Va. 362, 64 S.E.2d 799 (1951) (negligence); Gallagher v. City of Westover, 167 W. Va. 644, 280 S.E.2d 330 (1981) (negligence); ABC Bldrs., Inc. v. Phillips, 632 P.2d 925 (Wyo. 1981) (negligence).

The creation of a drainage district, or the like, does not of itself divest a riparian owner of any of his, her, or its rights.²⁰⁸ In Okaw Drainage District v. National Distillers Corp.,²⁰⁹ the court, in an opinion by Judge Posner, held that even a contract to help maintain a drainage ditch did not divest a riparian of its rights. The court also held that when the exercise of National Distillers' riparian rights imposed greater maintenance costs on the District, the District could not enjoin National Distillers' actions; the District had to content itself with recovering its increased costs.²¹⁰ On the other hand, governmental drainage activity will often escape liability on the converse basis—the government itself can take advantage of the rights of a landowner relative to drainage if the government owns land.²¹¹ Still, governmentally managed drainage necessarily requires extensive resort to the eminent domain power.²¹²

From early times, cities and drainage districts alike have often adopted a natural stream as part of their drainage system.²¹³ So long as they do not undertake to alter the stream physically and do not materially increase the total waterflow in the stream, the governmental unit will not be liable to landowners,

^{208.} See, e.g., Accurate Die Casting Co. v. City of Cleveland, 2 Ohio App. 3d 386, 442 N.E.2d 459 (1981).

^{209. 882} F.2d 1241, 1246 (7th Cir. 1989).

^{210.} Id. at 1247-48.

^{211.} See, e.g., City of Mt. Brook v. Beatty, 292 Ala. 398, 295 So. 2d 388 (1974) (prescription); Belair v. Riverside County Flood Control Dist., 47 Cal. 3d 764, 764 P.2d 1070, 232 Cal. Rptr. 693 (1989) (reasonable use rule); Peterson v. Town of Oxford, 189 Conn. 740, 459 A.2d 100 (1983) (expressly reserved easement); Earth Const., Inc. v. DeMille, 460 N.E.2d 984 (Ind. Ct. App. 1984) (common enemy rule); Terrebonne Parish Police Jury v. Matherne, 405 So. 2d 314 (La. 1981), cert. denied, 456 U.S. 972 (1982) (natural servitude rule); Baer v. Board of Cnty. Comm'rs, 255 Md. 163, 257 Md. 201 (1969) (reasonable use rule); Mississippi State Highway Comm'n v. Wood, 487 So. 2d 798 (Miss. 1986) (implied easement); Clark Cnty. v. Powers, 96 Nev. 497, 611 P.2d 1072 (1980) (reasonable use). See also State v. Deetz, 66 Wis. 2d 1, 224 N.W.2d 407 (1974) (state can assert public trust doctrine against landowners whose surface drainage affects lake).

^{212.} See, e.g., Marshall v. Department of Water, 219 Cal. App. 3d 1124, 268 Cal. Rptr. 559 (1990); Department of Transp'n v. Burnette, 384 So. 2d 916 (Fla. Dist. Ct. App. 1980), further op., 399 So. 2d 51 (Fla. Dist. Ct. App. 1981); Terrebonne Parish Police Jury v. Matherne, 405 So. 2d 314 (La. 1981), cert. denied, 456 U.S. 972 (1982); Triangle Center, Inc. v. Department of Public Works, 386 Mass. 858, 438 N.E.2d 798 (1982); City of Luna Pier v. Lake Erie Landowners, 175 Mich. App. 430, 438 N.W.2d 636 (1989); Wilson v. Ramacher, 352 N.W.2d 389 (Minn. 1984); State v. Feenan, 231 Mont. 255, 752 P.2d 182 (1988); Department of Transp'n v. Bragg, 308 N.C. 367, 302 S.E.2d 227 (1983); Masley v. City of Lorain, 48 Ohio St. 2d 334, 358 N.E.2d 596 (1976); Mattoon v. City of Norman, 617 P.2d 1347 (Okla. 1980).

^{213.} See, e.g., Munn v. Mayor of Pittsburgh, 40 Pa. 364, 370 (1861).

usually on the basis that the governmental activities did not cause an injury.²¹⁴ Substantial changes in the physical characteristics of the streambed or streamflow are likely to result in liability on the part of the governmental unit responsible for the changes,²¹⁵ but, even with such alterations, a governmental unit will generally not be responsible if the agency can show that an injury to adjacent land was not caused by the unit's activities.²¹⁶

The application of the rules on the division of responsibility for stream maintenance, dependent as these rules are on often uncertain factual bases and challenges to governmental discretion, 217 has often proven difficult. Pennsylvania's Supreme Court provided a good example in the case of Borough of Ambler v. Shepherd. The Borough sued a landowner for a nuisance, seeking an order to remove part of a retaining wall which had fallen into a creek which was used as an "open sewer" by the borough. The Borough presented evidence that the retaining wall had collapsed because a truck had run into a utility pole in the center of the wall, knocking over the pole and cracking the wall. Despite the cause of the collapse of the wall, the court held that the Borough could only require the Shepherds to repair the retaining wall, while the Borough had to bear the responsibility for removing the debris from the creek. 220

As Borough of Ambler shows, courts have occasionally held governments to a higher standard than a private party would have been held under similar circumstances. Most often, the higher standard is implemented through a judicial finding that the governmental activity has amounted to a taking of private property.²²¹ Courts usually will not find a taking, however, if the

^{214.} See, e.g., Central Nat'l Ins. Co. v. Kansas City, 546 F. Supp. 1237 (W.D. Mo. 1982); Ullery v. Contra Costa County, 202 Cal. App. 3d 562, 248 Cal. Rptr. 727 (1988).

^{215.} See, e.g., Buffalo Sewer Auth. v. Town of Cheektowaga, 20 N.Y.2d 47, 228 N.E.2d 386, 281 N.Y.S.2d 326 (1967).

^{216.} See, e.g., City of Fridley v. Village of Spring Lake Park, 296 Minn. 532, 208 N.W.2d 768 (1973) (reasonable action); Haferkamp v. City of Rock Hill, 316 S.W.2d 620 (Mo. 1958); Buffalo Sewer Auth. v. Town of Cheektowaga, 20 N.Y.2d 47, 228 N.E.2d 386, 281 N.Y.S.2d 326 (1967); Robertson v. City of Alexandria, 210 Va. 418, 171 S.E.2d 692 (1970).

^{217.} On the shielding of governmental discretion, see Central Nat'l Ins. Co. v. Kansas City, 546 F. Supp. 1237 (W.D. Mo. 1982).

^{218. 443} Pa. 375, 278 A.2d 886 (1971).

^{219.} Id. at 381, 278 A.2d at 889.

^{220.} Id. at 382, 278 A.2d at 889.

^{221.} See, e.g., Mehl v. People, 13 Cal. 3d 710, 532 P.2d 489, 119 Cal. Rptr. 625 (1975); Ektelon v. City of San Diego, 200 Cal. App. 3d 804, 246 Cal. Rptr. 483 (1988), review denied; Dayley v. City of Burley, 96 Idaho 101, 524 P.2d 1073

government has merely done what a private party might have done.²²²

IV. CONSUMPTIVE USE OF DIFFUSED WATER

Diffused surface water is in many ways a relatively unreliable source for exploitation by municipalities, industries, or other potential users. Flows are of brief duration, thinly spread over the land, and occur at irregular intervals. Farmers or ranchers, however, have found that they can have the benefit of the water falling on the land with no more effort than that necessary to excavate a small pond or to bulldoze a small earthen dam or gully plug. A survey made 25 years ago found that one farm in every four had "one or more artificial ponds, pits, reservoirs, or earthen tanks." While such ponds are mostly in the states to the west of Kansas City, increasingly, they are found in eastern states as well. 224

In the west, where demand often far outstrips supplies and annual evapotranspiration rates exceed annual precipitation rates,²²⁵ even diffused surface water has become an object of occasional legislative and judicial concern.²²⁶ To the east of Kansas

(1974); Drainage Dist. No. 1 v. Village of Green Valley, 69 Ill. App. 3d 330, 387 N.E.2d 422 (1979); Wilson v. Ramacher, 352 N.W.2d 389 (Minn. 1984); State v. Feenan, 231 Mont. 255, 752 P.2d 182 (1988); Slusarski v. Platte Cnty., 226 Neb. 889, 416 N.W.2d 213 (1987); Masley v. City of Lorain, 48 Ohio St. 2d 334, 358 N.E.2d 596 (1976); Myotte v. Village of Mayfield, 54 Ohio App. 2d 97, 375 N.E.2d 816 (1977).

222. See, e.g., Earth Const., Inc. v. DeMille, 460 N.E.2d 984 (1984) (Ind. App. 1984); Terrebonne Parish Police Jury v. Matherne, 405 So. 2d 314 (La. 1981), cert. denied, 456 U.S. 972 (1982); Chudzinski v. City of Sylvania, 53 Ohio App. 2d 151, 372 N.E.2d 611 (1976); Mattoon v. City of Norman, 617 P.2d 1347 (Okla. 1980); Island Cnty. v. Mackie, 36 Wash. App. 385, 675 P.2d 607 (1984). See also Tri-Chem, Inc. v. Los Angeles County Flood Control Dist., 60 Cal. App. 3d 306, 132 Cal. Rptr. 142 (1976) (no taking even if the district was negligent because of the absence of proximate cause).

223. U.S. Census Bureau, Census of Agriculture, 1964, Statistics by Subject 949 (1968). *See also* Nunn v. Osborne, 417 P.2d 571, 575 (Okla. 1966) (over 200,000 farm ponds in Oklahoma alone).

224. As early as 1954, one study estimated that one-half of the irrigation water used in Kentucky came from impoundments of diffused surface water. Comment, Irrigation with Non-Riparian Surface Water and Subterranean Water in Kentucky, 42 Ky. L.J. 493 (1954). Ten years later, the Census Bureau found that Kentucky, Missouri, and Tennessee were three of the six states which had more than half of all the ponds, etc., in the country. (Kansas, Oklahoma, and Texas were the other three states.) U.S. Census Bureau, supra note 223, at 949.

225. Thomas, Hydrology vs. Water Allocation in the Eastern United States, in The Law of Water Allocation in the Eastern United States 165, 166 (D. Haber & S. Bergen eds. 1958).

226. See, e.g., Cline v. Whitten, 150 Colo. 179, 372 P.2d 145 (1962); Depuy v. Hoeme, 611 P.2d 228 (Okla. 1980); Hoefs v. Short, 114 Tex. 501, 273 S.W.

City, on the other hand, disputes over the exploitation of diffused surface water have been so rare that one can hardly find more than stray dicta to indicate the law applicable to such disputes. Such dicta as there are suggest that the right to exploit diffused surface water depends on a rule of capture, that is, any landowner who obtains control of diffused surface waters before the water reaches a defined waterbody can do with the captured water as the landowner pleases.²²⁷

A rule of capture functions as an agricultural and domestic preference,²²⁸ much like the preferences embodied in many modern regulated riparian statutes.²²⁹ Indeed, these and other statutes requiring permits for dams often exempt farm ponds or the like²³⁰ or drainage captured on the land on which it originates, in

^{785 (1925);} McNaugton v. Eaton, 121 Utah 394, 242 P.2d 570 (1952). See generally Note, supra note 8.

^{227.} Argyelan v. Haviland, 435 N.E.2d 973, 975 (Ind. 1982); Pohlman v. Chicago, M. & St. P. Ry., 131 Iowa 89, 93, 107 N.W. 1025, 1026 (1906); Withers v. Berea College, 349 S.W.2d 357, 358 (Ky. App. 1961); Johnson v. Whitten, 384 A.2d 698, 700-01 (Me. 1978); Mahoney v. Barrows, 240 Mass. 378, 379, 134 N.E. 246, 246 (1922); Harvey v. Illinois Cent. R.R., 111 Miss. 835, 838, 72 So. 273, 274 (1916); Swett v. Cutts, 50 N.H. 439, 445 (1870); Barkley v. Wilcox, 86 N.Y. 140, 147 (1881); Buffum v. Harris, 5 R.I. 243, 253-54 (1858); Brandeburg v. Zeigler, 62 S.C. 18, 23, 39 S.E. 790, 792 (1901); Boynton v. Gilman, 53 Vt. 17, 23 (1880); Uhl v. Ohio River R.R., 56 W. Va. 494, 497, 49 S.E. 378, 379 (1904); Pettigrew v. Village of Evansville, 25 Wis. 223, 228 (1870). See also Hughes v. Anderson, 68 Ala. 280 (1880); Dimmock v. City of New London, 157 Conn. 9, 245 A.2d 569 (1968); Libby, McNeil & Libby v. Roberts, 110 So. 2d 82 (Fla. App. 1959); Chandler v. Scogin, 5 La. App. 484 (1926); Morrison v. Bucksport & B. R.R., 67 Me. 353 (1877); Appelgate v. Franklin, 109 Mo. App. 293, 84 S.W. 347 (1904); Howlett v. City of South Norfolk, 193 Va. 564, 69 S.E.2d 346 (1952); Broadbent v. Ramsbottom, 11 Ex. 602, 156 Eng. Rep. 971 (1856). See generally RESTATEMENT (SECOND) OF TORTS § 864 (1979); 3 H. FARNHAM, supra note 16, § 883; F. Maloney, S. Plager, & F. Baldwin, supra note 9, § 57.1; A. TARLOCK, supra note 2, § 3.05[2][b]; Dolson, supra note 7, at 60-61; Hanks, supra note 62, at 715; Kinyon & McClure, supra note 4, at 913-14; Maloney & Plager, supra note 62, at 108.

^{228.} Compare Miller v. Letzerich, 121 Tex. 248, 254, 49 S.W.2d 404, 408 (1932).

^{229.} Riparian states have long granted statutory preferences for particular private uses of water. See Water and Water Rights, supra note 33, § 9.02. Regulated riparian statutes also contain preferences exempting some users from the permit requirements, a guaranteed first permit, a reduced permit fee, or a priority in terms of severe water shortage. Generally, these preferences favor direct human consumption (municipal and domestic uses) and agricultural uses, although some schemes are more detailed and specific. See id. §§ 9.03(a)(3), 9.05(c).

^{230.} Regulated riparian statutes: GA. Code Ann. § 12-5-31(2) (1988); Ky. Rev. Stat. Ann. § 151.120(2) (Michie 1987); Md. Nat. Resources Code Ann. § 8-803(f) (1990). Dam licensing statutes: Iowa Code Ann. § 469.1 (West 1990); Mass. Gen. Laws Ann. ch. 253, § 44 (West 1988); Mich. Comp. Laws Ann. § 281.131 (West 1979); Mo. Ann. Stat. § 236.435(6) (West Supp. 1989); Tenn.

small watersheds, or behind small dams.²⁸¹ Others have suggested that the rule is a kind of *de minimis* rule epitomized by the rain barrel or contour plowing.²⁸² Yet, others have seen the right to capture and exploit diffused surface water falling on one's land as part of the property right in the land which cannot be taken without just compensation.²⁸³ Finally, the rule of capture today might also be justified by policies favoring environmental protection, watershed protection, and related values.

Matters are seldom so simple as the foregoing discussion would suggest. On the physical side, despite, or perhaps because of the low costs of the typically small impoundments, the exploitation of diffused surface water wastes more water in the aggregate than the large reservoirs and diversion systems which have been the focus of most legal attention in this century. The problem was aptly summarized in a student note written more than 20 years ago:

[M]ore water is wasted under a system of small landowner impoundments than under a system of large channel reservoirs. Evaporation from a group of stock dams and farm ponds far exceeds that from large reservoirs. Seepage in and around small impoundments results in a high, if not complete, waste of water. In addition, experience with farm ponds and stock dams has demonstrated that a large percentage fail because of the individual landowner's lack of technical knowledge to plan efficient impoundments. Finally, because farm ponds and stock dams have "first call" on runoff, their effect is most strongly felt on channel flows after periods of drought, when a more uniform distribution of water among a variety of users is most desirable. As a result of

CODE ANN. § 69-12-102(3)(B) (1987); Vt. Stat. Ann. tit. 10, § 1083a (1984); W. Va. CODE Ann. § 20-5D-3(e) (1989).

^{231.} Regulated riparian statutes: ARK. CODE ANN. § 15-22-214, 15-22-215(a) (Supp. 1989); Del. Code Ann. tit. 7, § 6029(1) (1983); Ga. Code Ann. § 12-5-29(a) (1988); Iowa Code Ann. § 455B.270 (West 1990); Md. Nat. Resources Ann. Code, § 8-803(b); Miss. Code § 51-3-7(2) (1972); N.C. Gen. Stat. § 143-215.25(2)(f) (1987). Dam licensing statutes: Ga. Code Ann. § 12-5-372(4)(A) (Supp. 1990); Mass. Gen. Laws Ann. ch. 253, § 44 (West 1988); Mich. Comp. Laws Ann. § 281.131 (West 1979); N.J. Stat. Ann. § 58:4-1 (West 1982); Ohio Rev. Code Ann. § 1521.06 (Anderson 1986); 32 Pa. Cons. Stat. Ann. § 693.4(1) (Purdon Supp. 1990); S.C. Code Ann. § 49-11-120(4)(a) (Law. Coop. 1987); Tenn. Code Ann. § 69-12-102(3) (1987); Vt. Stat. Ann. tit. 10, § 1082 (1984); W. Va. Code Ann. § 20-5D-3(e) (1989).

^{232.} Note, supra note 8, at 1127-28.

^{233.} Turner v. Big Lake Oil Co., 128 Tex. 155, 96 S.W.2d 221 (1936).

the above factors, estimates for one river basin indicate that for every unit of water actually consumed by livestock in stock dams, 64 units of water were prevented from flowing into downstream channel reservoirs.²³⁴

Scientific and legal scholars have argued over the years that excluding one part or another of the hydrologic cycle from an otherwise comprehensive regulatory scheme is inevitably self-defeating.²³⁵ Examples are not difficult to find. Consider in this regard a well-known case decided during the great Northeast drought of the 1960's, Dimmock v. City of New London.²³⁶ There, the court threatened the City with an injunction unless it were to compensate riparians who had shown no injury to themselves because the City was diverting water from a pond to the municipal system outside the watershed of the pond—a practice which under riparian theory is unreasonable per se.²³⁷ The court ignored the City's arguments that the City was taking no more water than the runoff proportional to the city-owned share of the watershed.²³⁸

Apparently, if the City had dug a trench around the edge of the pond and captured the runoff (and perhaps some seepage as well) just before it entered the pond, the City would have owned the water absolutely under the rule of capture. Yet, by using the less costly technique of capturing the runoff in the pond and existing dam, the City lost all rights to export the water to meet its needs. Solving this problem requires merely a modernization of the law applicable to streams or ponds, and the application of that law to the stream or pond and to the runoff which feeds it. Experience thus far, however, gives little cause to expect such changes in the near future.

^{234.} Note, supra note 8, at 1228 (citations omitted). See also F. MALONEY, R. AUSNESS, & J. MORRIS, A MODEL WATER CODE 72-81 (1972) (hereafter Model Water Code).

^{235.} See, e.g., NATIONAL WATER COMM'N, WATER POLICIES FOR THE FUTURE 232 (1973); L. RICE & M. WHITE, ENGINEERING ASPECTS OF WATER LAW 1-11 (1987); A. TARLOCK, supra note 2, 2.02; Ausness, Water Rights Legislation in the East: A Program for Reform, 24 Wm. & MARY L. Rev. 547, 577 (1983); Castleberry, A Proposal for Adoption of a Legal Doctrine of Ground-Stream Interrelationship in Texas, 7 St. Mary's L. Rev. 503 (1975); Davis, Wells and Streams: Relationship at Law, 37 Mo. L. Rev. 189 (1972); Thompson & Fiedler, Some Problems Relating to Legal Control of the Use of Groundwaters, 30 Am. WATER WORKS ASS'N J. 1052 (1938); Wiel, Need of Unified Law for Surface and Underground Water, 2 S. Cal. L. Rev. 358 (1929).

^{236. 157} Conn. 9, 245 A.2d 569 (1968).

^{237.} Id. at 11-16, 245 A.2d at 570-572.

^{238.} Id. at 17, 245 A.2d at 573.

Stephen Kinyon and Robert McClure, in their article on the law of diffused surface water which remains after fifty years as perhaps the best single source on the topic, suggested as much, arguing that the rule of capture implicitly was limited by a rule requiring that a use be beneficial or even reasonable.²³⁹ While dictum in only one case actually lends support for a reasonable use rule applicable to the exploitation of diffused surface water,²⁴⁰ their prediction is more than mere conjecture.

As Professor Kinyon and Mr. McClure noted, the rule of capture derives from the common enemy rule for the drainage of unwanted surface water.²⁴¹ While they could not realize it given the then similarly primitive state of the law of groundwater, in this the evolution of the law of diffused surface water parallels the law of groundwater: At first, a drainage rule of absolute ownership is simply carried over to disputes between competing exploiters of the water source,²⁴² followed by the evolution of more complex rules to require the reasonable or correlative sharing of the resource.²⁴³ In the end, the newer exploitation-focused rules were carried back to apply to drainage disputes relating to groundwater.²⁴⁴

Remarkably, little of this pattern has shown up thus far in the reported cases relating to diffused surface water, although strong pressures from drainage disputes have favored a significant trend to the adoption of a reasonable use rule for drainage disputes involving diffused surface water.²⁴⁵ Nor has the need to regulate the exploitation of diffused surface water yet impressed itself on

^{239.} Kinyon & McClure, supra note 4, at 914-15.

^{240.} Bush v. City of Rochester, 191 Minn. 591, 592, 255 N.W. 256, 257 (1934) ("a landowner may within reason appropriate to his own use . . . mere surface water." [emphasis added]). See also Thompson v. New Haven Water Co., 86 Conn. 597, 86 A. 585 (1913).

^{241.} Kinyon & McClure, supra note 4, at 914. For a discussion of the common enemy rule, see supra notes 41-93 and the accompanying text.

^{242.} Compare Acton v. Blundell, 152 Eng. Rep. 1223 (1843) (drainage), with Popplewell v. Hodkinson, 4 L.R. Exch. 248 (1869) (consumptive withdrawal). See also Wiggins v. Brazil Coal Corp., 452 N.E.2d 958 (Ind. 1983); Finley v. Teeter Stone, Inc., 251 Md. 428, 248 A.2d 106 (1968); Wheatley v. Baugh, 25 Pa. 528 (1855).

^{243.} See, e.g., Katz v. Walkinshaw, 141 Cal. 116, 74 P. 766 (1902); Higday v. Nikolaus, 469 S.W.2d 859 (Mo. Ct. App. 1971); Friendswood Dev. Co. v. Smith-Southwest Indus., Inc., 576 S.W.2d 21 (Tex. 1978).

^{244.} See, e.g., Hart v. D'Agostini, 7 Mich. App. 319, 151 N.E.2d 826 (1967); Huelsmann v. State, 56 Ohio App. 2d 100, 381 N.E.2d 950 (1977); State v. Michels Pipeline Const. Co., 63 Wis. 2d 278, 217 N.W.2d 339 (1974). See also Gamer v. Town of Milton, 346 Mass. 617, 195 N.E.2d 65 (1964).

^{245.} See supra notes 125-85 and the accompanying text.

the legislatures of the nation. The drafters of the Model Water Code did perceive the need to include diffused surface water if their scheme were to be effective in managing water resources with a minimum of waste and a maximum opportunity to achieve socially defined goals. The drafters expressly included diffused surface water within the Code's permit and other regulatory requirements.²⁴⁶

Only two regulated riparian statutes, however, actually cover diffused surface water.²⁴⁷ In neither state is there much reported experience from which one might discover problems or discern achievements. In marked contrast, no less than ten (of seventeen) regulated riparian statutes expressly exclude some or all diffused surface waters from their statutory scheme.²⁴⁸ Even Florida's legislature, in one of its few significant departures from the *Model Water Code*, delegated to the state's water management districts the decision as to whether to include diffused surface water (and groundwater) in the regulatory system.²⁴⁹ One can only surmise that the pressures to manage the dimension of the hydrologic cycle during which water is diffused over the surface of the land have simply not yet grown to the point of creating sufficient demand for legislative or judicial action.

V. CONCLUSION

The evolution of the law relating to diffused surface water contains interesting parallels to the legal regimes applied to other forms of water and to property generally. Beginning in the nineteenth century from premises rooted in rigid property concepts focused exclusively on drainage problems, courts have struggled to moderate these concepts based on variously phrased excep-

^{246.} MODEL WATER CODE, supra note 235, §§ 1.03(8), (10), 2.01(1).

^{247.} Del. Code Ann. tit. 7, §§ 6002(22), 6003(a)(3) (1983); Va. Code Ann. § 62.1-242 (Supp. 1990).

^{248.} ARK. Code Ann. §§ 15-22-202(10), 15-22-215, 15-22-217 (Supp. 1989); GA. Code Ann. § 12-5-29(a) (1988); Ind. Code Ann. § 13-2-1-2 (West 1990); Iowa Code Ann. § 455B.270 (West 1990); Ky. Rev. Stat. Ann. § 151.120(2) (Michie 1987); Md. Nat. Res. Code § 8-101(k) (1990) (including flood plains for freely flowing waters as determined by "100-year flood frequency"; inferentially excluding other diffused waters); Mass. Gen. Laws Ann. ch. 21G, § 2 (West Supp. 1990); Minn. Stat. Ann. § 105.37(7) (West Supp. 1990); Miss. Code Ann. §§ 51-3-3(b), 51-3-5, 51-3-7(1) (Supp. 1989); Wis. Stat. Ann. § 30.18(1)(a) (West 1989).

^{249.} FLA. STAT. ANN. §§ 373.019(8), 373.023(1), 373.069, 373.0695, 373.103 (1) (West 1988). On the influence of the Model Water Code on Florida's law, see Ausness, The Influence of the Model Water Code on Water Resources Management in Florida, 3 J. LAND USE & ENVIL. L. 1 (1987).

tions or limitations masking a balancing of costs against benefits in several contexts. Today, however, there is a strong trend towards absorbing all the contending common law legal theories into a broadly stated rule of reasonable use supplemented by increasing public management of drainage and usage.

Initially, disputes about diffuse surface water were almost invariably disputes about land usage, and not really disputes about water at all. Long after disputes about water in defined surface bodies or underground had become disputes about use of water rather than the draining of water which impeded land uses, disputes about diffused surface water continue to be about land use rather than water; seeking diffused surface water for use, consumptive or otherwise, remains a relatively unusual situation at least in the more humid states. As demands relative to the use or discharge of diffused surface water changed more slowly than did demands relative to water in defined surface bodies or groundwater, this evolution proceeded more slowly than did the evolution relative to the other common forms of water.

Because of the relative retardation of the evolution of the law of diffused surface water, an attorney confronting a problem related to such water must still confront a body of confusing precedents and incomplete regulation. The attorney can only understand the problem through a firm grasp of the traditional legal concepts as well as the emerging patterns of the modern law of diffused surface water (including how similar patterns have evolved regarding those forms of water where the evolution is more advanced). In particular, attorneys must master the analytical models whereby the reasonableness of particular competing uses are to be measured, becoming comfortable with recourse to economics, ethics, and other relevant discourses used to reason about the reasonableness of land use. Only thus equipped is an advocate likely to make sound predictions about the resolution of problems of the law, or a judge to make welcome solutions to present problems or apt contributions to the future development of the law of diffused surface water