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DIFFUSED SURFACE WATER: SCOURGE OR BOUNTY?

FRANK E. MALONEY[†] AND SHELDON J. PLAGER[‡]

Surface waters, or diffused surface waters as they are more accurately called, are those waters resulting from falling rain or melting snow, or those rising to the surface in springs which have not collected in a lake or pond or natural watercourse and are still in a diffused state or condition.¹ Rain is by far the greatest source of surface water, and of the rain that falls, the greatest amount is evaporated or transpired into the atmosphere, while some percolates into the soil and ultimately becomes ground water or finds its way into a lake or stream. The remainder, probably less than twenty-five percent, moves over the land as diffused surface water for an appreciable time, until it, too, evaporates, percolates or reaches a waterbody. Because of the transitory nature of this surface water, little is known about its volume, behavior, or potential use for beneficial purposes, but capture and use of such waters for irrigation, stock watering, and even recreation, is increasing. Although there has been relatively little litigation involving use of surface water, it is to be expected that this will change as the area becomes increasingly more important in the future.

Presently, the damage potential of surface water is of greater significance than the regulation of its consumptive use, and the problem is largely one of disposal. Heavy but seasonal rainfall frequently results in periodic overabundance of surface waters which overtax natural and artificial drainage systems as well as the capacity of the soil to absorb water. The resulting flooding and standing water interfere with agricultural operations, make land unsuitable for improvement, and cause damage by erosion or silting.

As competition for available water supplies becomes more intense, another facet of the drainage problem has emerged. Large areas of swamp or marshland have been drained in order to provide land for agriculture or other development. These wetlands often serve as

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1. See generally 3 H. Farnham, *Waters and Water Rights* § 878 (1904).

storage basins for flood waters and recharge reservoirs for extensive ground water aquifers. In such cases, drainage of the wetlands results in more extreme fluctuations in streamflow and in lower ground water levels.² This problem most often arises in the context of large public drainage projects, but the cumulative effect of many small private projects or the activities of large corporate landowners may produce similar consequences.³

Many of the problems of drainage and disposal of surface water are dealt with through public bodies as authorized by legislative acts,⁴ but many other problems arise when a landowner attempts to benefit his land by some alteration in the natural drainage pattern, which results in injury to the land of another.

PART I

DISTINGUISHING DIFFUSED SURFACE WATER FROM OTHER FORMS

The *Restatement of Torts* describes surface water as: "(W)aters from rain, springs or melting snow which lie or flow on the surface of the earth but which do not form part of a watercourse or lake."⁵

This definition emphasizes two characteristics of surface water: its origin and its lack of the characteristics of a permanent water body. Classification on the basis of origin seems questionable and such classification was rejected by the Florida Supreme Court in *Tampa Waterworks Co. v. Cline*,⁶ defining surface water as water, regardless of origin, that drains without any distinct or well-defined channel. It is somewhat futile to attempt to define surface water, however, because in the final analysis the courts treat as surface water those waters which do not fit within any other legal classification of water. A better understanding of the nature of surface water may be had, then, by discussing what it is not.

A. Natural Watercourses

Probably the most certain thing that may be said of surface water

2. Comprehensive Report on Central and Southern Florida For Flood Control and Other Purposes. H.R. Doc. No. 643, 80th Cong., 2d Sess. (1949).

3. One corporation in Florida, for example, has undertaken a drainage project embracing 60,000 acres for timber growing purposes. See Jarvis & Beers, *Reclamation of a Wasteland in Central Gulf Coastal Florida*, 63 J. Forestry 3 (January 1965).

4. E.g., Fla. Law Ext. Sess. 1925, c. 11641; Fla. Spec. Acts 1953, c. 29301; Fla. Spec. Acts 1925, c. 11128.

5. Restatement of Torts § 846 (1939).

6. 37 Fla. 586, 20 So. 780 (1896).

is that it does not include water in a natural watercourse. The characteristics of a natural watercourse have been discussed elsewhere and will not be reexamined here.⁷

B. Lakes and Ponds

A definition of diffused surface water based only on the absence of a well-defined channel⁸ fails to distinguish surface water from natural lakes and ponds, but it is well settled that a body of water which can be classified as a lake or pond is not diffused surface water.⁹ The main characteristic of surface water in contrast with a lake is its inability to maintain its identity and existence as a water body.¹⁰ Therefore, puddles and "ponds" with no outlet and which exist only in times of heavy rainfall are surface water.¹¹

C. Marshes and Swamps

Surface waters do not lose their character merely because they are in a measure and to a certain extent absorbed by or soaked into the marshy or boggy land where collected.¹² A marsh or swamp which is not physically connected to a lake or stream by even occasional overflow is treated as surface water in spite of its permanence. A swamp has been defined as wet, spongy, soft, low ground saturated with water but not usually covered by it.¹³

D. Flood Waters

Water which overflows the banks of a natural watercourse and which follows the course of the stream to its outlet or which on subsidence returns to the stream is considered to be part of the watercourse from which it comes and is subject to the law of watercourses.¹⁴ Likewise, water which overflows the banks of a lake but

7. Maloney & Plager, *Florida's Streams—Water Rights in a Water Wonderland*, 10 U. Fla. L. Rev. 294, 297, 299 (1957).

8. *E.g.*, Davis v. Ivey, 93 Fla. 387, 112 So. 264 (1927).

9. 3 H. Farnham, *Waters and Water Rights* § 878 (1904).

10. Hunt v. Smith, 238 Iowa 543, 28 N.W.2d 213 (1947).

11. Brandenburg v. Zeigler, 62 S.C. 18, 39 S.E. 790 (1901) (water in pond unable to maintain its existence for a considerable length of time held mere surface water). See Maloney & Plager, *Florida's Lakes: Problems in a Water Paradise*, 13 U. Fla. L. Rev. 1 (1960) for thorough discussion of the characteristics of lakes.

12. Enderson v. Kelehan, 226 Minn. 163, 32 N.W.2d 286 (1948).

13. Campbell v. Walker, 137 Ore. 375, 380, 2 P.2d 912, 914 (1931).

14. Watts v. Evansville, Mt. C. & N. Ry., 191 Ind. 27, 129 N.E. 315 (1921); Frese v. Michalec, 148 Neb. 567, 28 N.W.2d 197 (1947). But cf. DeRuwe v. Morrison 28 Wash. 2d 797, 184 P.2d 273 (1947); Kenner v. Sharp, 341 Mo. 1192, 111 S.W.2d 118 (1937).

which remains connected to the lake, or flows through the natural outlet of the lake in a defined path into another body of water, or returns to the lake is not surface water.¹⁵ On the other hand, flood waters which entirely lose their connection with a lake or stream and spread out over the adjoining country and settle in low places and become stagnant can no longer be treated as part of the lake or stream and are surface waters.¹⁶ Cases interpreting coverage under water damage insurance policies have termed flooding, caused by accumulation of heavy rainfall, surface water while water moving in volume, whose source is a stream, is called a flood.¹⁷

E. Water Artificially Brought on Property

One who brings water on his property by artificial means cannot treat it as surface water. Therefore, if water is brought on land to store or use, it must be cared for, and it may not be discharged onto neighboring land.¹⁸ If percolating water is brought to the surface by excavation, well drilling, or otherwise, it may not be treated as surface water.¹⁹ The same rule applies to the disposal of sewage, and the one who produces it is liable in damages if he allows it to escape onto the land of his neighbor.²⁰

PART II

DISPOSAL OF SURFACE WATERS

A. Doctrinal Analysis

Two basic doctrines are employed in determining the legality of an upper owner draining his land over that of an adjoining lower owner, as contrasted with the possible right of the lower owner to turn the draining surface waters back upon his neighbor. The civil-law rule provides that the upper owner has an easement on the lower owner's land for the water to drain in its natural manner.²¹ The

15. *Thomson v. Public Service Comm'n*, 241 Wis. 243, 5 N.W.2d 769 (1942).

16. *Hengelfelt v. Ehrmann*, 141 Neb. 322, 3 N.W.2d 576 (1942); *Crawford v. Rambo*, 44 Ohio St. 279, 7 N.E. 429 (1886); 3 H. Farnham, *Waters and Water Rights* § 880 (1904).

17. *E.g.*, *Poole v. Sun Underwriters Ins. Co.*, 65 S.D. 422, 274 N.W. 658 (1937); *Miller v. Eastern Ry. & Lumber Co.*, 84 Wash. 31, 146 P. 171 (1915).

18. *Thomson v. Public Service Comm'n*, 241 Wis. 243, 5 N.W.2d 769 (1942); 3 H. Farnham, *Waters and Water Rights* § 881 (1904).

19. *Parker v. Larsen*, 86 Cal. 236, 24 P. 989 (1890).

20. 3 H. Farnham, *Waters and Water Rights* § 877 (1904).

21. *See, e.g.*, *Tiedeman v. Village of Middleton*, 25 Wis. 2d 443, 130 N.W.2d 783 (1964); *Phillips v. Chesson*, 231 N.C. 566, 58 S.E.2d 343 (1950); *Slatten v. Mitchell*, 22 Tenn. App. 547, 124 S.W.2d 310 (1938); Note, *California's Surface Waters*, 39 S. Cal. L. Rev. 128 (1966).

common-enemy rule states that the lower owner may take any measures necessary to keep the water off his land, even to the point of turning the water back on the land of the upper owner.²² A few states have abandoned both rules in favor of the tort-oriented rule of "reasonable use."²³

1. The Civil-Law Rule

The civil-law rule for the disposition of surface water is expressed by the maxim, *aqua currit, et debet curreret, ut solebat es jure naturae* (water runs and should run, as it is wont to do by natural right).²⁴ The rule in its purest form is that no man may interfere with the natural flow of surface waters. It is usually expressed in terms of an easement of natural drainage as between adjoining lands, so that the lower owner must accept the surface water which naturally drains onto his land, but the upper owner can do nothing to increase that burden.²⁵ The rule is a part of the common law of England²⁶ and dates back to the Roman Law and the Code Napoleon.²⁷ The advantage of the civil-law rule is that rights thereunder are readily predictable, but, strictly applied, the rule tends to inhibit development and improvement of land.²⁸

The need to accommodate the strictness of the civil-law rule with the practical necessity for improvement and development of lands

22. See, e.g., *Turner v. Smith*, 217 Ark. 441, 231 S.W.2d 110 (1950); *Tide Water Oil Sales Corp. v. Shimelman*, 114 Conn. 182, 158 A. 229 (1932); *Bennett v. Cupina*, 253 N.Y. 436, 171 N.E. 698 (1930); *Davis, The Law of Surface Water in Missouri*, 24 Mo. L. Rev. 137, 149-151 (1959).

23. See, e.g., *Weinberg v. Northern Alaska Development Corp.*, 384 P.2d 450 (Alaska 1963); *Armstrong v. Francis Corp.*, 20 N.J. 320, 120 A.2d 4 (1956); *Franklin v. Durgee*, 71 N.H. 186, 51 A. 911 (1901).

24. 3 Kent, *Commentaries on American Law* 439 (14th ed. 1896); *Kauffman v. Griesemer*, 26 Pa. 407, 413 (1856).

25. *Gough v. Goble*, 2 Ill. 2d 577, 119 N.E.2d 252 (1954); see *Annot.*, 59 A.L.R.2d 421, 429 (1958).

26. 3 H. Farnham, *Waters and Water Rights* § 877 (1904). The modern English law of drainage is largely statutory. See, *Coulson & Forbes, Law of Waters* 823-37 (6th ed. 1952).

27. 3 H. Farnham, *Waters and Water Rights* § 889a (1904).

28. The present provisions of the Louisiana Civil Code express the civil law position: "It is a servitude due by the estate situated below to receive the waters which run naturally from the estate situated above, provided the industry of man has not been used to create that servitude.

"The proprietor below is not at liberty to raise any dam, or to make any other work, to prevent this running of the water.

"The proprietor above can do nothing whereby the natural servitude due by the estate below may be rendered more burdensome." La. Stat. Ann.—Civ. Code Ann. art. 660 (West 1952).

has led most jurisdictions following the civil-law rule to modify it in various ways. The rule is almost universally interpreted to allow the upper owner to enhance the drainage of his property to some degree, particularly for agricultural purposes.²⁹ The upper owner is generally allowed to hasten the flow of water by improving the natural drainage.³⁰ The degree to which he is allowed to artificially drain his upper estate has been limited by the requirement that he not act unreasonably or negligently;³¹ by a balancing of relative benefit and harm;³² by the limitation that the increase in flow not be substantial or material;³³ by a prudent regard for the welfare of his neighbor;³⁴ and by the requirement that the waters not be diverted from their natural flow and concentrated so as to flow onto the lower lands at a different point.³⁵ On the other hand, the upper owner is sometimes allowed to greatly increase the flow of water by a simple finding that the drainage channel by which the water leaves his land is a "natural watercourse."³⁶

While the lower owner is forbidden by the rule to obstruct the "natural" flow of surface waters, his burden may be eased by finding that the flow obstructed is not natural; that it has been artificially created or enhanced by another.³⁷ Other courts have allowed the lower owner to obstruct surface water so long as he did not act negligently.³⁸

As a result of these modifications, the general civil-law rule today is that the upper owner may improve and enhance the natural drainage of his land so long as he acts reasonably and does not divert the flow, and that the lower owner is subject to an easement for such flow as the upper owner is allowed to cast upon him. Any obstruction of this flow by the lower owner or diversion by the upper owner is generally forbidden, but may be allowed in some jurisdictions subject to the limitation of reasonableness.

29. *E.g.*, *Martin v. Jett*, 12 La. 501 (1838).

30. *E.g.*, *La Fleur v. Kolda*, 71 S.D. 162, N.W.2d 741 (1946).

31. *E.g.*, *Ratcliffe v. Indian Hill Acres, Inc.*, 93 Ohio App. 231, 113 N.E. 2d 30 (1952); *Thompson v. Andrews*, 39 S.D. 477, 165 N.W. 9 (1917).

32. *E.g.*, *Vinson v. Turner*, 252 Ala. 271, 40 So.2d 863 (1949); *Battisto v. Perkins*, 210 Md. 542, 124 A.2d 288 (1956).

33. *E.g.*, *Cundiff v. Kopseiker*, 245 Iowa 179, 61 N.W.2d 443 (1953); *Bishop v. Richard*, 193 Md. 6, 65 A.2d 334 (1949).

34. *E.g.*, *Hughes v. Anderson*, 68 Ala. 280 (1880).

35. *E.g.*, *Martin v. Jett*, 12 La. 501 (1838).

36. *See* Annot., 81 A.L.R. 262 (1932).

37. *See* text accompanying notes 69-71 *infra*.

38. *Taylor v. Harrison Constr. Co.*, 178 Pa. Super. 544, 115 A.2d 757 (1955).

2. The Common-Enemy Rule

In its pure form the common-enemy rule gives each landowner the right to deal as he pleases with surface water on his land without regard to the consequences to his neighbor. The doctrine originated in the right of a property owner to use his own property as he pleases,³⁹ but has been justified on the basis of the right to fight the "common enemy",⁴⁰ and on the ground that it encourages land improvement and cultivation.⁴¹ Some courts have also felt compelled to adopt the rule on the mistaken assumption that it represented the common law of England.⁴² Because of the early extension of the common drains to all portions of England, there are few English decisions on the question of interference with the flow of surface waters,⁴³ but what authority there is favors the civil-law doctrine.⁴⁴

Taken literally, the common-enemy rule means that the upper owner may drain or divert the flow of surface waters onto the land of his neighbor at will and that the lower owner is free to obstruct the water as he pleases and back it up onto the upper owner again. The rule has the advantage of simplicity, and since there can be no invasion of one another's legal rights, litigation should be minimized. On the other hand, landowners are encouraged to engage in contests of hydraulic engineering in which might makes right, and breach of the peace is often inevitable. Fortunately, the rigors of the common-enemy rule have led the courts adopting the rule to affix qualifications to meet the various situations arising.

Several modifications have taken place in the application of this rule. For example, in *Sheehan v. Flynn*,⁴⁵ the Minnesota court announced that even under the common-enemy rule it is the duty of an owner draining his land to deposit surface water in some natural water body, if one is reasonably accessible. In another case applying

39. *Gannon v. Hargadon*, 92 Mass. (10 Allen) 106 (1865), citing the maxim *cujus est solum, ejus est usque ad coelum*.

40. *Town of Union v. Durkes* 38 N.J.L. 21, (1875).

41. *E.g.*, *Timmons v. Clayton*, 222 Ark. 327, 259 S.W.2d 501 (1953); *Barkley v. Wilcox*, 86 N.Y. 140 (1881); *Bowlsby v. Speer*, 31 N.J.L. 351 (1865).

42. *E.g.*, *Walker v. New Mexico & S.Pac.R.R.*, 165 U.S. 593 (1897); *Jordan v. City of Benwood*, 42 W. Va. 312, 26 S.E. 266 (1896); *Little Rock & Ft. Ry. v. Chapman*, 39 Ark. 463 (1882).

43. *See* 3 H. Farnham, *Waters and Water Rights* § 889b (1904).

44. *E.g.*, *Ewart v. Cochrane*, 4 Macq. H.L. Cas. 117, 7 Jur. N.S. 925, 5 L.T.N.S. 1, 10 Week Rep. 3 (1861) (existence of natural drain held to establish upper owner's right to drain).

45. 59 Minn. 436, 61 N.W. 462 (1894).

the common-enemy rule, the Missouri court held that a landowner was not justified in improving his own property so as to seriously interfere with adjacent properties.⁴⁶ The modern common-enemy rule can be said to give the landowner the right to obstruct or divert surface water only so long as such obstruction or diversion is incident to ordinary use, improvement, or protection of his land, and is done without malice or negligence.⁴⁷

3. A Comparison of the Rules

It is appropriate to compare the modified common-enemy rule with the modified civil-law rule. The complimentary way by which the modifications of each rule tend to bring them toward the same result is evident. For example, the civil-law owner may *never* drain his land *except* by following the natural drainage, but the common-enemy owner may *always* drain his land except that he may not use artificial channels. The civil-law owner may *never* obstruct the natural flow of surface waters *unless* he acts reasonably, while the common-enemy owner may always obstruct the flow *if* he acts reasonably. It would be erroneous, however, to conclude that the rules have been so modified as to be indistinguishable. Although the same result might theoretically be reached in a particular situation under either rule, the practical question of prediction and proof is still substantially different. The basic premise of the civil-law rule is that neither landowner may interfere with the natural flow of surface waters, and upon the owner who does so would go the burden of proving that his interference falls within one of the recognized exceptions. Under the common-enemy rule, a landowner starts with an unqualified right to do as he pleases and it is for the injured neighbor to show that his conduct falls within one of the modifications of that rule.

4. The Reasonable-Use Rule

The more recently developed rule of reasonable use occupies the middle ground between the common-enemy and civil-law rules in their extreme form and produces results similar to the modified versions of both. The advantage of the rule is that it embodies tort principles and disregards the cumbersome property notions of servitude and absolute ownership, but since the question of reasonable-

46. *Freudenstein v. Hine*, 6 Mo. App. 287 (1878).

47. *See Dobbins, Surface Water Drainage*, 36 Notre Dame Law 518, 523-24 (1961).

ness is regarded as a mixed question of law and fact for the jury,⁴⁸ much of the predictability embodied in the other rules is lost.

The rule as adopted by the *Restatement of Torts*⁴⁹ is that liability for invasion of a person's interest in the use and enjoyment of his land resulting from interference with natural or normal flow of surface waters depends upon whether the action, if intentional, was unreasonable or, if unintentional, was negligent, reckless, or ultra hazardous.⁵⁰ The courts more often simply recognize the right of each owner to deal with surface water as he wishes so long as his act is reasonable under all the circumstances.⁵¹

The doctrine of reasonable use was first applied in New Hampshire⁵² and has since been expressly adopted by New Jersey,⁵³ Minnesota,⁵⁴ and Alaska.⁵⁵ Other states, without expressly adopting the rule have reached practically the same results through modification of the traditional rules.⁵⁶ The Maryland courts, for example, follow the civil-law rule but equity courts apply the doctrine of reasonable use when it appears that undue hardship will result from the civil-law rule.⁵⁷

Although the courts have treated the doctrine of reasonable use as a separate rule of property law on equal footing with the civil-law and common-enemy rules, it is in reality merely the general tort principle which would decide such cases in the absence of the application of either of the two "property" rules. The relationship between adjoining landowners, in the absence of specific property rights, has always been governed by the maxim, *sic utere tuo ut alienum non laedas*, (use your property in such a manner as not to injure that of another). Much confusion and strained reasoning could be avoided if

48. *Franklin v. Durgée*, 71 N.H. 186, 51 A. 911 (1901); *Swett v. Cutts*, 50 N.H. 439 (1870).

49. 4 *Restatement, Torts* §§ 822-31, 833 (1939).

50. *Id.* § 833 Comment (a).

51. *E.g.*, *Sheehan v. Flynn*, 59 Minn. 436, 61 N.W. 462 (1894).

52. *Franklin v. Durgée*, 71 N.H. 186, 51 A. 911 (1901); *Swett v. Cutts*, 50 N.H. 439 (1870).

53. *Hopler v. Morris Hills Regional Dist.*, 45 N.J. Super. 409, 133 A.2d 336 (Super. Ct. App. Div. 1957); *Armstrong v. Francis Corp.*, 20 N.J. 320, 120 A.2d 4 (1956).

54. *Sheehan v. Flynn*, 59 Minn. 436, 61 N.W. 462 (1894); *Enderson v. Kelehan*, 226 Minn. 163, 32 N.W. 2d 286 (1948).

55. *Weinberg v. Northern Alaska Dev. Corp.*, 384 P.2d 450 (Alaska 19663).

56. *See* pp. 10, 11, *supra*.

57. *Whitman v. Forney*, 181 Md. 652, 31 A.2d 630 (1943); *See* 11 Md.L.Rev. 58 (1950).

the courts would limit the application of the traditional rules to the narrowest possible situation⁵⁸ or discard them altogether.

B. Application of the Rules

Little real insight into the relative rights and duties of landowners with regard to surface waters is gained by discussion in terms of the traditional rules. Emphasis on abstract rules leads to sweeping generalities in which the application of the rules to specific fact situations is obscured or confused. The true nature of the law of surface waters can be better understood through examination of the commonly recurring fact situations in which these rights and duties are in issue. Surface water litigation almost invariably arises from situations in which an upper owner seeks to drain his land or in which a lower owner attempts to prevent surface waters from flowing onto his land.

Since the civil-law rule impresses a servitude upon the lower land for the flow of surface waters and the common-enemy courts frequently differentiate between the rights of upper and lower owners, it is well to consider the rights and duties of the upper owner and of the lower owner separately. It should be recognized, also, that it is the situation of the land in its natural state that determines whether it is to be considered upper or lower. If the lands are artificially elevated by filling or grading to a level above that of naturally higher neighboring land, the land so raised does not thereby attain the status of upper lands.⁵⁹

On the other hand, if the lower land is gradually filled by natural deposits its status can change,⁶⁰ and the possibility of changing the relative rights and duties by prescription must not be overlooked.⁶¹

1. The Upper Owner

Most surface water cases involve acts of an upper owner which cause water to flow in increased quantity or different manner onto the land of the lower owner to his injury. The abundance of such

58. See 3 H. Farnham, *Waters and Water Rights* §§ 882-903 (1904). Apparently, in Farnham's day, the courts did not attempt to apply one or the other of the "rules" to every possible surface water problem, but limited their application to the question of right to obstruct the flow of surface water in "natural channels."

59. *Biberman v. Funkhouser*, 190 Md. 424, 58 A.2d 668, original civil law easement not extinguished by filling lower land.

60. *Louisville & N.Ry. Co. v. Maxwell*, 126 Tenn. 232, 148 S.W. 692 (1912).

61. See text accompanying notes 195-203 *infra*.

cases is ready proof of the inadequacy of the traditional rules, for under the strict common-enemy rule the lower owner would have no cause of action while under the strict civil-law rule the upper owner would have no defense, and with such predictable results litigation would be infrequent. The courts have been repeatedly called upon, however, to determine to what extent and in what situations the various modifications to both rules apply.

Augmenting Natural Drainage. When a landowner seeks to improve his land by deepening or widening a natural drainage course, the lower land may be damaged by the increased flow of water. A greater total volume of water may be cast upon the lower land because water which might otherwise percolate into the upper land or evaporate is drained off, and the same total volume may do more damage because it is discharged in a shorter period. Such injury is not actionable under the common-enemy rule.⁶² Thus, in the Pennsylvania case of *Leiper v. Heywood-Hall Constr. Co.*⁶³ the defendant diverted the flow of water incident to the development of his land for housing. On a showing that the water entered the lower land at the same point it had for years, the court held that the lower owner had no cause of action even though the volume of flow was increased.

If the upper owner were prohibited from improving the natural drainage of his property much land would be condemned to sterility or uneconomic use. Therefore, this is one area where the strict civil-law rule must bend for the sake of development, and most civil-law jurisdictions allow a landowner to improve the drainage of his land so long as he merely enhances the natural drainage and does not change the direction of flow.⁶⁴ In *Turner v. Hopper*⁶⁵ the upper owner constructed a ditch 20 feet wide down a natural swale 250 feet wide through which water had previously drained, thereby increasing the velocity but not the total volume of the flow. The California court held that the upper owner's act was not such a change in natural conditions as to justify a complaint by the lower owner.

62. *E.g.*, *Holman v. Richardson*, 115 Miss. 169, 76 So. 136 (1917), drainage along natural swale improved by tile drain); *Leiper v. Heywood-Hall Constr. Co.*, 381 Pa. 317, 113 A.2d 148 (1955); *La Fleur v. Kolda*, 71 S.D. 162, 22 N.W. 2d 741 (1946).

63. 381 Pa. 317, 113 A.2d 148 (1955).

64. *E.g.*, *Turner v. Hopper*, 83 Cal. App. 2d 215, 188 P2d 257 (1948); *Willis v. Phillips* 147 Fla. 368, 2 So. 2d 132 (1941); *Stouder v. Dashner*, 242 Iowa 1340, 49 N.W. 2d 859 (1951) (dominant owner may cause water to flow in its natural direction through a ditch instead of over the surface or by percolation as formerly).

65. 83 Cal. App. 2d 215, 188 P2d 257 (1948).

Some courts are more strict on the upper owner where not only the velocity but also the total volume of flow onto the lower owner is increased.⁶⁶ In the early Ohio case of *Butler v. Peck*,⁶⁷ there was a swale or pond on the upper land with no natural outlet but which would overflow in times of heavy run-off and drain across the plaintiff's lower land. The Ohio court held that the upper owner had no right to construct a ditch draining the pond in the direction of the overflow.⁶⁸

Diversion. If an upper owner in draining his land substantially alters the natural drainage pattern, he not only may increase the quantity of water cast onto the lower land, but he may also cause it to discharge at a different point, or even onto land where it would not otherwise have found its way.

Such diversion by an upper owner is forbidden by the civil-law rule even in its modified forms.⁶⁹ The strict common-enemy rule allows the upper owner to deal with surface water as he pleases, but most courts qualify this right to divert water from its natural course with a requirement of reasonableness.⁷⁰ A similar test is applied to the upper owner who diverts surface water in a reasonable-use jurisdiction.⁷¹

Since civil-law courts may reach opposite results depending upon whether the drainage is found to be a mere augmentation of natural flow or diversion, the factual distinction between the two is critical. Unfortunately, the physical distinction is not always so apparent as the legal. When an upper owner diverts water on his own land from one natural drain to another which carries the water off his land, he will say he is merely enhancing the drainage of his land through the natural channels, but his flooded neighbor will say that he has diverted water which would not normally have flowed onto his land. When the upper owner raises the level of a major portion of his land, the water may still drain out through the same channels, but it

66. *E.g.*, *Butler v. Peck*, 16 Ohio St. 335 (1865); *Vinson v. Turner*, 252 Ala. 271, 40 So. 2d 863 (1949). (Dictum).

67. 16 Ohio St. 335 (1865).

68. *Id.*, but *cf.*, *La Fleur v. Kolda*, 71 S.D. 162, 22 N.W. 2d 741 (1946) (no liability for increasing the natural flow of surface water by cutting the rim of a bond or basin.)

69. *E.g.*, *Gough v. Goble*, 2 111. 2d 577, 119 N.E. 2d 252 (1954); *Wallace v. Schneider*, 310 Ky. 17, 219 S.W. 2d 977 (1949); *Persin v. City of Youngstown*, 95 N.E. 2d 237 (Ohio App. 1949).

70. *E.g.*, *Town of Everett v. Teigeler*, 162 Neb. 769, 77 N.W. 2d 467 (1956); *Lunsford v. Stewart*, 95 Ohio App. 383, 120 N.E. 2d 136 (1953) (urban land); *King v. Cade*, 205 Okla. 666, 240 P. 2d 88 (1951).

71. *E.g.*, *Armstrong v. Francis Corp.*, 20 N.J. 320, 120 A.2d 4 (1956).

will be hard to convince the lower owner that there has been no diversion.

The cases do not give much insight into the fact-finding process, but frequently seem to classify the upper owner's acts according to the result reached. This is not necessarily bad, for in many close cases it preserves a valuable discretion in courts bound by one or the other of the traditional rules, while the maximum predictability is retained in the clearer cases. Each landowner is aware that his land is subject to a servitude of natural flow from above, which natural flow may be increased somewhat by his neighbor incident to improvement of his land, but when a case is clearly one of diversion, the upper owner is on notice that he must be prepared to pay for the damage he does. When a case is in the gray area, the upper owner is best advised to act with utmost regard for the rights of his neighbor, anticipating that the diversion issue may well be resolved on the basis of reasonableness and the relative benefit and harm to each.

Collection and Discharge. If the upper owner collects surface water by means of dams, ditches, or otherwise and then causes or allows it to be discharged in a body onto the lower land, he is generally liable under either rule.⁷² After reviewing both common-enemy and civil-law decisions, the Florida Supreme Court in *Brumley v. Dormer* stated:

The almost universal rule, as gathered from the decisions, is that no person has the right to gather surface waters that would naturally flow in one direction by drainage, ditches, dams, or otherwise and divert them from their natural course and cast them upon the lands of the lower owner to his injury.⁷³

Such a situation is generally treated as an exception to or modification of the common-enemy rule,⁷⁴ and is clearly outside the most liberal modification of the civil-law rule.⁷⁵

The legal distinction is clear, but, again, the factual question may be a close one. When surface water is collected in a pond or reservoir and suddenly released, the point is clear, but when it is "collected" in a ditch or drain the matter is open to dispute. In a common-enemy

72. *E.g.*, *Tide Water Oil Sales Corp. v. Shimelman* 114 Conn. 182, 158 A. 229 (1932) (liability under common-enemy rule for collecting water into pockets from which it discharged onto lower land); *Butler v. Peck* 16 Ohio St. 335 (1865) (liability under the civil law rule for discharging water in natural depressions or ponds onto neighbor).

73. 78 Fla. 495, 501, 83 So. 912, 914 (1919).

74. See text accompanying notes 39-44 *supra*.

75. See text accompanying notes 24-38 *supra*.

jurisdiction that allows the upper owner to "divert" surface water, he may yet be prevented from doing so if his diversion is found in fact to have collected the water. In a civil-law jurisdiction which allows an upper owner to augment the natural drainage of his land, the upper owner who deepens or widens a natural drain may be said to have "collected" water by such a drain and cast it on his neighbor. Again, the cases give no clear indication of just what facts will amount to collection, diversion, or augmentation. Many cases decided on the basis of collecting and discharging water could easily be classified as diversion or hastening of natural flow cases, and the factual distinctions give the courts considerable discretion in arriving at an equitable result.

Raising the Level of the Land. When potholes, sag holes, or other depressions in the land are filled, or when the general level of the land is raised, the natural flow of surface water over the land is almost inevitably altered. This presents a problem very much like that of diversion. Water which formerly flowed onto the land from above may be backed up onto the upper land⁷⁶ or diverted onto other lands. When the natural drainage courses on the land are altered by grading or filling, surface water is almost surely discharged onto the lower land in a different manner.

Under the strict common-enemy view there is no liability for damage to the lower land resulting from such acts.⁷⁷ In *Mason v. Lamb*⁷⁸ defendant filled a depression in which surface water ordinarily accumulated and raised the overall elevation of his property. The Virginia court, following the common-enemy rule, held that he was not liable for injury done by water diverted over plaintiff's land.

Most common-enemy courts place a limitation on the right to divert surface water by grading and filling. This limitation may be expressed in terms of reasonableness,⁷⁹ or as a prohibition against collection and discharge⁸⁰ or against discharge in an artificial channel.⁸¹ However expressed, such limitations provide a means whereby extreme hardship under the common-enemy rule can be judicially tem-

76. See text accompanying notes 130 and 131 *infra*.

77. *E.g.*, *Stein v. Coleman* 73 Conn. 524, 48 A. 206 (1901); *Liston v. Scott*, 108 Kan. 180, 194 P. 642 (1921); *Mehrnay v. Foster*, 132 Mo. App. 229, 111 S.W. 882 (1908).

78. 189 Va. 348, 53 S.E. 2d 7 (1949).

79. *E.g.*, *Freudenstein v. Helne*, 6 Mo. App. 287 (1878); *Carter v. Gundy* 259 P. 2d 528, (Okla. 1953).

80. *E.g.*, *Smith v. Atkinson*, 133 Ind. App. 430, 180 N.E.2d 542 1962; *Behm v. King Louie's Bowl, Inc.* 350 S.W.2d 285 (Mo. App. 1961); *Granger v. Elm Tree Village*, 23 N.J. Super 592, 93 A.2d 641 (1952).

81. *Kuklinska v. Maplewood Homes, Inc.*, 336 Mass. 489, 146 N.E. 2d 523 (1957).

pered. In *Freudenstein v. Heine*,⁸² for example, the Wisconsin court, while affirming the owner's right to raise the level of his lot, refused to allow him to do so in a manner that caused his neighbor's cellar to be flooded.

A curious distinction has been made in cases in New York and Connecticut,⁸³ both following the common-enemy rule, between water originating on defendant's property and that flowing down from above. In *Tide Water Oil Sales Corp. v. Shemmelmman*,⁸⁴ the plaintiff complained on two counts of injury from surface waters brought about by defendant's filling his land. His first complaint was that defendant had obstructed the natural flow of waters from above and caused them to be diverted onto plaintiff's land. The Connecticut court dealt with this in a manner consistent with the common-enemy rule that allowed the defendant to repel the waters as he pleased. The second complaint was that defendant's fill had caused surface waters originating on defendant's land to flow in a different manner to the plaintiff's land. The court found the defendant liable on the second count on a theory very much akin to the civil-law rule. In summary the court stated:

Speaking generally our law may be summarized as follows: A land-owner is under no duty to receive upon his land surface water from adjacent properties, but in the use of improvement of it he may repel such water at his boundary. . . . But he may not use or improve his land in such a way as to increase the total volume of surface water which flows from it to adjacent property⁸⁵

Civil-law jurisdictions usually impose liability on the upper owner on the theory that he has diverted surface water from its natural course.⁸⁶ In *Blocker v. McArthur*,⁸⁷ plaintiff had built a basement apartment at a time when water flowing from defendant's higher lot was of no consequence. Defendant subsequently raised the level of his lot, causing the apartment to be flooded. The Texas court approved a finding of the jury that the raising of the ground level was

82. 6 Mo. App. 287 (1878).

83. *Barkley v. Wilcox*, 86 N.Y. 140 (1881); *Tide Water Oil Sales Corp. v. Shimelman*, 114 Conn. 182, 158 A. 229 (1932).

84. 114 Conn. 182, 158 A. 229 (1932).

85. *Id.*, at 189, 158 A. at 231.

86. *E.g.*, *Looby v. Buck*, 20 Ill. App. 2d 156, 155 N.E.2d 641 (1959); *Steinke v. North Vernon Lumber Co.*, 190 Ky. 231, 227 S.W. 274 (1921); *Blocher v. McArthur*, 303 S.W.2d 529 (Tex. Civ. App. 1957).

87. 303 S.W.2d 529 (Tex. Civ. App. 1957).

the instrumentality by which surface water was diverted and concentrated.

A strict prohibition against leveling or filling property would substantially hinder the improvement and development of urban property; therefore, courts frequently except city lots from the application of the civil-law rule.⁸⁸ This does not necessarily mean that the owner of a city lot may disregard the rights of his neighbors, however. In *Kay-Noojin Development Co. v. Hackett*,⁸⁹ the Alabama court recognized that city lots were excepted from the civil-law rule in Alabama, but that this did not give an upper owner the right to collect surface water in a channel and cast it in concentrated volume onto the lower land.

The civil-law rule may not deny the landowner the right to improve his land if he can show that he has not changed the general natural drainage pattern of the area. This is a branch of the exception to the civil-law rule which allows an upper owner to hasten the flow of surface waters off his property by improving the natural drainage. In *Switzer v. Yunt*⁹⁰ the owner of a tract of land described as "hog wallow" land graded and leveled his land and planted grape vines. He also partly filled in a "duck pond" and other depressions. As a result, more surface water flowed from the upper land than previously, and the lower land suffered erosion. The California court found that the upper owner had not violated the civil-law prescription against altering the natural flow of surface waters. The court emphasized that the flow of waters after the upper owner had leveled the "hog wallows" and filled the "duck pond" was the same as it would have been before had these depressions overflowed, and that the general natural slope and drainage of the locality was unchanged.

Rendering the Surface Impervious. When a property owner erects a building which completely occupies his lot or paves a major portion of his land for use as a parking area the natural system of water disposal is drastically altered. Water which formerly percolated into the soil must now find another means of escape and water

88. *Hall v. Rising*, 141 Ala. 431, 37 So. 586 (1904) (Defendant filled his land to street level causing flooding of neighbor's basement; no liability). *Lunsford v. Stewart*, 95 Ohio App. 383, 120 N.E.2d 136 (1953) (but only if reasonable). *But see*, *Lawrence v. Eastern Airlines*, 81 So. 2d 632 (Fla. 1955), (urban nature not considered); and *Carland v. Aurin*, 103 Tenn. 555, 53 S.W. 940 (1899) (distinction for urban land refused).

89. 253 Ala. 588, 45 So. 2d 792 (1950).

90. 5 Cal. App. 2d 71, 41 P.2d 974 (1935).

which normally flowed off the land in natural depressions may now flow in a different direction or be concentrated by rain spouts and gutters or other artificial drainage features.

Where rain spouts and gutters on a building discharge water directly onto neighboring land, the owner of the building is usually held liable.⁹¹ Where the roof waters are not discharged directly onto neighboring land but are mingled with other surface waters before flowing onto the neighboring land, the rules concerning diversion of surface water are appropriate. Thus, in the Kansas case of *Liston v. Scott*,⁹² where waters from the upper owner's roof and paved walk mingled with other surface waters before flowing off the upper land in a natural channel, the upper owner was found not liable under the common-enemy rule.

Where the surface of the land is paved there would seem to be sufficient alteration of the natural flow of surface waters to create liability under the civil-law rule.⁹³ Under the common-enemy rule paving is treated as any other diversion of surface water, and there is generally no liability unless the defendant's action can be characterized as a collection and discharge of surface waters.⁹⁴ But in *Johnson v. Goodview Homes, Inc.*,⁹⁵ the plaintiff charged the defendant with diverting and accelerating the flow of surface waters onto the plaintiff's land by the construction of hard surface parking areas. Although Ohio purports to follow the common-enemy rule with respect to urban lands and there was no clear showing of diversion, the court held that defendant was liable for causing substantially increased quantities of water to flow over plaintiff's lot.

91. *E.g.*, *Friedman v. Andreson*, 257 Mass. 107 153 N.E. 337, (1926); *Schlessinger v. Rosenheim*, 2 Tenn. App. 529 (1926); *Harms v. Kuchta*, 141 Md. 610, 119 A. 454 (1922). *See also*, 3 H. Farnham, *Waters and Water Rights* § 888 (1904). *But see*, *Melin v. Richman*, 96 Conn. 686 115 A. 426, (1921) (no liability unless artificial distribution of surface water shown.)

92. 108 Kan. 180, 194 P. 642 (1921).

93. *E.g.*, *Weimer v. Cauble*, 214 Ga. 634, 106 S.E.2d 781 (1959) (construction of houses and streets which changed the natural flow of surface waters); *Battisto v. Perkins*, 210 Md. 542, 124 A.2d 288 (1956) (grading, removal of vegetation, and house-building increased flow of surface waters). *See also*, *Moore v. Standard Paint & Glass Co.*, 145 Colo. 1151, 358 P.2d 33 (1960) where defendant held liable on negligence theory very similar to reasonable use for flooding caused by construction of a parking lot. Dissent urged adoption of common-enemy rule.

94. *E.g.*, *Nathanson v. Wagner*, 118 N.J. Eq. 390, 179 A. 466 (1935) (roof and concrete yard; no liability); *Kapayanis v. Fishbein*, 344 Mass. 86, 181 N.E. 2d 653 (1962) (may erect house without regard to surface water unless it is discharged onto lower land in a definite artificial channel); *Liston v. Scott*, 108 Kan. 180, 194 P. 642 (1921).

95. 82 Ohio L. Abs., 167 N.E.2d 132 (Ohio C.P. 1960).

Drainage into a Natural Watercourse. When a landowner improves the surface drainage of his land, by ditches or otherwise, into a natural watercourse flowing through or past his land, the flow of the watercourse may be increased causing overflow of lower land along the watercourse. This is an area where the law of surface water overlaps the law of riparian rights and some confusion has understandably resulted.

Viewed as a Surface Water Problem. Many courts have developed a special rule that, regardless of whether a state follows the civil-law or common-enemy doctrine, a landowner has the right to drain surface water into a natural watercourse without liability.⁹⁶

There are three recognized limitations on this rule, which may be applied singly or in combination depending on the jurisdiction. These limitations are: (1) the drainage must result from a reasonable use of the land; (2) waters must not be diverted into the watercourse which would not have found their way there naturally; (3) the capacity of the watercourse must not be overtaxed.⁹⁷

The limitation that the acts of the upper owner which result in drainage into a natural watercourse must be reasonable is almost universal.⁹⁸ The reasonable-use limitation has been interpreted by some courts to mean without negligence,⁹⁹ but other courts have treated it as a requirement that the use of the land be reasonable.¹⁰⁰

The courts giving the requirement of reasonable use the latter interpretation rarely bother to define just what use would be considered unreasonable. In *Archer v. City of Los Angeles*,¹⁰¹ for example, the court stated the rule that:

[H]e may discharge [surface waters] *for a reasonable purpose* into a stream into which they naturally drain without incurring liability for damage to lower land caused by the increased flow of the stream.¹⁰²

96. *E.g.*, *Walley v. Wiley*, 56 Ind. App. 171, 104 N.E. 318 (1914); *Board of Drainage Comm'rs v. Board of Drainage Comm'rs*, 130 Miss. 764, 95 So. 75 (1923); *City of Hamilton v. Ashbrook*, 62 Ohio St. 511, 57 N.E. 239 (1900).

97. 56 Am. Jur., *Waters* § 73 (1947); *Annot.*, 28 A.L.R. 1262 (1924).

98. *See, e.g.*, *Callens v. Orange County*, 129 Cal. App. 2d 255, 276 P.2d 886 (1954); *North Dakota v. Minnesota*, 263 U.S. 583 (1924); *Anthony v. Huntley Estates* 137 N.Y.S.2d 664 (1954).

99. *E.g.*, *Willison*, 50 Md. 138, 33 Am.R. 304 (1878); *Todd v. York County*, 72 Neb. 207, 100 N.W. 299 (1904).

100. *E.g.*, *Archer v. City of Los Angeles*, 47 Cal. App. 2d 68, 119 P.2d 1 (1941); *People ex rel. Speck v. Peeler*, 290 111. 451, 125 N.E. 306 (1919) (sanitary & agricultural); *Board of Drainage Comm'rs v. Board of Drainage Comm'rs*, 130 Miss. 764, 95 So. 75 (good husbandry).

101. 47 Cal. App. 2d 68, 119 P.2d 1 (1941).

102. *Id.*, 119 P.2d at 6 (emphasis added).

without any further discussion of the meaning of "reasonable purpose." In the *Archer* case the purpose, disposal of storm waters by the city, was apparently deemed reasonable, since a nonsuit in favor of the city was affirmed.¹⁰³

Still other courts give a third interpretation to the reasonable use limitation. These courts emphasize the reasonableness with respect to the lower owner.¹⁰⁴ It is doubtful that the reasonableness limitation when interpreted in this manner adds anything to the lower owner's protection. No case has been found where such unreasonableness alone made the upper owner's act unlawful, and any such act would doubtless violate one of the other limitations anyway.

It seems fair to say that the limitation of reasonableness, while almost universally given lip service, is seldom a deciding factor and is significant only insofar as it provides a basis for possible exercise of judicial discretion in future cases.

In addition, most courts purport to require that only waters be drained into a natural watercourse which would have found their way there naturally,¹⁰⁵ but here again it is difficult to find a case denying the upper landowner's right on this ground alone. Some courts, mostly in common-enemy jurisdictions, refuse to apply this limitation or use it only in combination with one of the other limitations.¹⁰⁶

Lastly, many courts, both in common-enemy, and civil law jurisdictions, allow drainage into a natural watercourse only if the capacity of the watercourse is not exceeded.¹⁰⁷ Other courts have refused to

103. Other uses apparently considered reasonable, are: residential development, *Anothony v. Huntley Estates* 137 N.Y.S.2d 664 (1954); drainage of swampland for cultivation, *Mizell v. McGowan* 120 N.M. 134, 26 S.E. 783 (1897); better health conditions and promotion of agriculture, *Board of Drainage Comm'rs v. Board of Drainage Comm'rs*, 130 Miss. 764, 95 So. 75 (1923).

104. *E.g.*, *North Dakota v. Minnesota*, 263 U.S. 583 (1924) (cannot burden lower owner with more than is reasonable); *Leiper v. Heywood-Hall Constr. Co.*, 381 Pa. 317, 113 A.2d 148 (1955) (cannot unreasonably or unnecessarily change quantity or quality of water in stream); *Thompson v. Andrews*, 39 S.D. 477, 165 N.W. 9 (1917) (no unusual or unnatural quantities).

105. *See, e.g.*, *Everett v. Davis*, 18 Cal. 2d 389, 115 P.2d 821 (1941); *Stoer v. Ocala Mfg., Ice & Packing Co.*, 157 Fla. 4, 24 So. 2d 579 (1946); *Mizell v. McGowan*, 129 N.C. 93, 39 S.E. 729 (1901); *Coleman v. Wright*, 155 S.W. 2d 382 (Tex. Civ. App. 1941).

106. *E.g.*, *Baldwin v. Ohio Tp.*, 70 Kan. 102, 78 p. 424 (1904) (diversion allowed if damage not serious); *Bainard v. City of Newton*, 154 Mass. 255, 27 N.E. 995 (1891) (where change only slightly and occasionally enlarged the flow within the capacity of the stream).

107. *E.g.*, *People ex. rel. Speck v. Peeler* 290 111. 451, 125 N.E. 306 (1919); *Baldwin v. Ohio Tp.*, 70 Kan. 102, 78 p. 424 (1904).

apply this limitation, but have instead emphasized either the dominant owner's absolute right to drain his land through natural channels,¹⁰⁸ the difficulty of determining the natural capacity,¹⁰⁹ or the impracticality of the limitation.¹¹⁰

Failure to apply the natural capacity limitation has been criticized as disregarding the fundamental principle that surface water cannot be gathered into a body and cast onto the property of a lower owner,¹¹¹ and it may be said that one should not be privileged by indirection to cast his residual waters upon the surface of the lower land when he is not privileged to do so directly.¹¹²

Viewed as a Watercourse Problem. When surface water is drained into a natural watercourse it becomes part of the watercourse and loses its character as surface water. Therefore, it seems inappropriate to attempt to apply the law of surface waters when a lower owner is damaged by the increased flow of the watercourse, since the law of riparian rights defines the relative rights and duties of owners of land on watercourses. Much of the conflict and confusion found in the cases discussed *supra* is the result of the struggle to fit a riparian square peg into the common-enemy or civil-law round hole.

A riparian owner has the right to use water from a watercourse flowing through or by his land so long as such use is reasonable with respect to the similar rights of the riparians, and this right extends to the use of the watercourse as a conduit for disposal of his excess surface water.¹¹³ In the leading case of *Noonan v. City of Albany*¹¹⁴ the New York court said: "The right of a riparian owner to drain the surface water on his lands into a stream which flows through them . . . is an incident to his right as a riparian owner to the reasonable use of the stream."¹¹⁵

The practical results under the law of riparian rights are the

108. *E.g.*, Board of Drainage Comm'rs v. Board of Drainage Comm'rs, 130 Miss. 764, 95 So. 75 (1923).

109. *E.g.*, Mizell v. McGowan, 129 N.C. 93, 39 S.E. 729 (1901), where the court asked: does "capacity" mean at high water or low? how far downstream does it apply? how can damages be apportioned when several contribute to the overflow?

110. San Gabriel Valley Country Club v. Los Angeles County, 182 Cal. 932, 118 p. 554 (1920) (limitation would destroy the rule); Mizell v. McGowan 129 N.C. 93, 39 S.E. 729 (1901) (limitation would prevent drainage of large bodies of swamplands rendering them useless and hindering progress).

111. *See Annot.*, 28 A.L.R. 1262, 1270 (1924).

112. 6 American Law of Property § 28.64, p. 193 (Casner ed. 1954).

113. *See*, 3 H. Farnham, Waters and Water Rights § 488 (1904).

114. 79 N.Y. 470 (1879).

115. *Id.*, at 477.

same as under the general surface water rules. An owner is allowed to drain into a watercourse so long as he does not do "unreasonable" harm to other riparians,¹¹⁶ so long as water is not diverted into the stream which would not have found its way there naturally,¹¹⁷ and so long as the natural capacity of the stream is not exceeded.¹¹⁸ Although the diversion and natural capacity rules are frequently expressed as limitations on the right to reasonably drain into a stream, they are merely acts judicially determined to be unreasonable.

Other advantages of applying the riparian doctrine are that there is a considerably larger body of precedent available to help determine questions of reasonableness, and the wide conflict in results in different jurisdictions brought about by the diversity of surface water rules is reduced.

2. The Lower Owner

Interpretation of the traditional rules of surface water law is also required when a landowner deals with his land in such a way that the normal flow of surface waters onto his land from higher land is obstructed and the water is backed up on the higher land.

Damming Back. When the lower owner constructs a dam or dike or otherwise blocks the flow of a natural drain he is generally liable under the civil-law rule for the damage caused by the water backed up or diverted. This constitutes an actionable interference with the upper owner's civil-law easement of drainage across the lower property.¹¹⁹ In *Lewallen v. Davenport*,¹²⁰ the lower proprietor constructed a dirt fill fifty feet long and five feet high to protect himself from surface waters flowing onto his land. A Kentucky court held the lower owner liable for damages to the upper owner's grist mill caused by the backed-up waters.¹²¹

Under the strict common-enemy rule, the lower owner may deal

116. *Noonan v. City of Albany*, 79 N.Y. 470 (1879); *e.g.*, *Kay v. Kirk*, 76 Md. 41, 24 A. 326 (1892) (flow increased so as to injure owner's dam); *cf.* *Hicks & Carter v. Owensboro, City of*, 6 Ky. L. Rep. 225 (1884) (no liability for damage to lower owner's building erected below the level of the banks).

117. *E.g.*, *Baldwin v. Ohio Tp.* 70 Kan. 102, 78 P. 424 (1904); *Tillotson v. Smith*, 32 N.H. 90 64 Am. Dec. 355 (1855).

118. *E.g.*, *Noonan v. City of Albany*, 79 N.Y. 470 (1879); *Jackman v. Arlington Mills*, 137 Mass. 277 (1884).

119. *E.g.*, *Lewallen v. Davenport*, 255 S.W.2d 16 (Ky. 1953); *Bishop v. Richard*, 193 Md. 6, 65 A.2d 334 (Md. 1949); *Robinson v. Belanger*, 332 Mich. 657, 52 N.W. 2d 538 (1952).

120. 255 S.W. 2d 16 (Ky. 1953).

121. *Id.*

with the common enemy in such a manner without liability.¹²² But in *McGehee v. Tidewater Ry. Co.*,¹²³ the railroad constructed a right of way filling a depression through which surface water had formerly flowed. Since any harm could easily have been prevented by the installation of culverts under the road bed, a Virginia court held that the railroad had been careless in exercising its right to fend off surface waters and was liable for damage caused when storm waters were backed up.¹²⁴

Other common-enemy jurisdictions have limited the lower owner's right to fend off surface waters by treating the drain involved as a watercourse or by excepting well-defined drainways from the operation of the common-enemy rule. In the Ohio case of *McKiernann v. Grimm*¹²⁵ the lower owner filled in a natural depression or gully thereby obstructing the flow from the upper land. Although Ohio purports to follow the common-enemy rule with respect to the lower owner of urban property, the court permitted an injunction against the lower owner referring to the depression as a natural watercourse.¹²⁶

The courts of Virginia apply an exception to the common-enemy rule whereby surface water flowing in a natural channel or "watercourse" is treated as if it were water flowing in a natural stream.¹²⁷ Under this rule the lower owner is liable regardless of negligence if he obstructs the flow to the injury of the upper owner.¹²⁸ Although the courts often speak of surface water in a watercourse, it is clear that the term watercourse does not encompass a natural watercourse or stream but refers only to surface water flowing in a well-defined channel cut into the soil.¹²⁹

122. *E.g.*, *Watts v. Evansville, Mt. C. & N. Ry. Co.*, 191 Ind. 27, 129 N.E. 315 (1920); *Greeley v. Maine Cent. R. R. Co.*, 53 Me. 200, (1865); *Harvie v. Town of Caledonia*, 161 Wis. 314, 154 N.W. 383 (1915).

123. 108 Va. 508, 62 S.E. 356 (1908).

124. *See also*, Note 44 Va. L. Rev. 135, 141 (1958).

125. 31 Ohio App. 213, 165 N.E. 310 (1928).

126. *See also*, *Saelens v. Pollentier*, 7 Ill. 2d 556, 131 N.E. 2d 479 (1956) (artificial drainage ditch in existence 50 years treated as a natural watercourse).

127. *Cook v. Seaboard Air Line Ry.*, 107 Va. 32, 57 S.E. 564 (1907); *Norfolk & W. R. Co. v. Carter*, 91 Va. 587, 22 S.E. 517 (1895).

128. *See* Maloney and Plager, *Florida's Streams—Water Rights in a Water Wonderland*, 10 U. Fla. L. Rev. 294 (1957), for discussion of the rights of riparians to obstruct stream flow.

129. *See* Note, 44 Va. L. Rev. 135 (1958). Similar treatment is given surface water flowing in natural channels in other common-enemy jurisdictions. *See e.g.*, *Tidewater Oil Sales Corp. v. Shimelman*, 114 Conn. 182, 158 A. 229 (1932); *Ricenbaw v. Kraus*, 157 Neb. 723, 61 N.W.2d 350 (1953); *But cf.*, *Capes v. Barger* 123 Ind. 212, 109 N.E.2d 725 (1953) (enforcing strict common-enemy rule).

Raising the Level of the Land. The consequences of an upper owner's raising the surface of his land have been discussed *supra*, and the treatment of the lower owner is very similar. When the lower land is filled or graded to the extent that water is backed up on the upper land and the owner is liable under the civil-law rule,¹³⁰ but is not liable under the strict common-enemy rule.¹³¹

In *Farkas v. Towns*,¹³² a lower Georgia owner who raised the level of his land above that of his neighbor was held to be a wrongdoer under the civil-law rule and liable for damages from obstructed surface waters. But improvement of urban land by grading or filling represents the situation in which the urban exception to the civil-law rule is most often applied. The Alabama courts have expressly excepted city lots from application of the civil-law rule.¹³³ With respect to the rights of the lower owner the court in *Shahan v. Brown*¹³⁴ said,

Since it has been long settled in this state that town or city lots are, because of artificial conditions created or to be created, excepted from the general rule that makes land legally servient to the natural flowage of unchanneled waters, the lower proprietor of urban lots owes no duty to the upper proprietor of urban lots to afford drainage for unchanneled surface or subsurface waters in or on the upper lots, nor to refrain from the improvement of his lots because that change will interfere with or prevent the natural flowage of such waters from the upper lots upon or into such lower lots, to the end that the upper lots may be drained.¹³⁵

The early Massachusetts case of *Luther v. Winnisimmet Co.*¹³⁶ illustrates the common-enemy view. In that case it was held that the upper owner had no cause to complain that the lower owner had filled his lands so as to obstruct the natural drainage of surface waters from the upper land.

130. *E.g.*, *Farkas v. Towns*, 103 Ga. 150, 29 S.E. 700 (1897); *Pickerill v. City of Louisville*, 125 Ky. 213, 100 S.W. 873 (1907); *Carland v. Aurin* 103 Tenn. 555, 53 S.W. 940 (1899); and *Liston v. Scott*, 108 Kan. 180, 194 P. 642 (1921) (applying the urban exception).

131. *E.g.*, *Luther v. Winnisimmet Co.*, 63 Mass. (9 Cush.) 171 (1851); *Walther v. City of Cape Girardeau*, 166 Mo. App. 467, 149 S.W. 36 (1912); *Barkley v. Wilcox*, 86 N.Y. 140 (1881).

132. 103 Ga. 150, 29 S.E. 700 (1897).

133. *Hall v. Rising*, 141 Ala. 431, 37 So. 586 (1904).

134. 179 Ala. 425, 60 So. 891 (1913).

135. 60 So. 891, 894. *See also* *Liston v. Scott*, 108 Kan. 180, 194 P. 642 (1921); *Lunsford v. Stewart*, 95 Ohio App. 383, 120 N.E.2d 136 (1953).

136. 63 Mass. (9 Cush.) 171 (1851).

3. Contamination of Surface Waters

One who causes pollution of surface water may be held liable on the basis of nuisance without regard to applicability of the traditional surface water rules.¹³⁷ What is referred to here is pollution of surface waters by allowing them to become contaminated with harmful or offensive materials. The problems arising when such surface waters reach and pollute other water bodies or ground waters are discussed elsewhere.¹³⁸

The *Restatement of Torts* states the general rule that: "Non trespassory invasions of a person's interest in the use and enjoyment of land resulting from another's pollution of surface waters . . . are governed by the rules [of private nuisance]." ¹³⁹ Thus, liability may result if the defendant's act, if intentional, was unreasonable or if unintentional was negligent, reckless or ultra hazardous.¹⁴⁰

The most common situation is that in which a landowner deposits offensive wastes upon his property and it is washed onto the land of another by surface waters.¹⁴¹ In *Exley v. Southern Cotton Oil Co.*¹⁴² plaintiff alleged that defendant discharged into a draining ditch through plaintiff's land acids and waste from its oil mill which injured the adjacent land, killed vegetation, and emitted fumes, odors, and unhealthy smells. A federal court recognized that the defendant had the right under Georgia law to discharge surface waters into the ditch and that impurities might be naturally added to such water in the processes of husbandry or reasonable domestic use, but held it was unreasonable and thus a nuisance to persistently discharge such foul matter onto the plaintiff's land as defendant had done.

Another surface water pollution problem arises when a landowner allows surface water to accumulate on his property and to become stagnant and filled with unwholesome matter.¹⁴³ In such a case a

137. *E.g.*, *Holmes v. City of Atlanta*, 113 Ga. 961, 39 S.E. 458 (1901) (deposit of refuse, trash and stale vegetables).

138. A forthcoming book on eastern water law by the authors will contain a detailed discussion of these problems.

139. *Restatement of Torts* § 832 (1939).

140. *Id.* at introductory note.

141. *E.g.*, *Van Fossen v. Clark*, 113 Iowa 86, 84 N.W. 989 (1901) (creamery waste created filthy mud hole and plaintiff forced to fence out his stock); *Fisher v. Kansas City, S. & G. Ry.*, 160 La. 449, 107 So. 302 (1926) (overflow of oil from railroad shop through municipal drains); *Central Indiana Coal Co. v. Goodman*, 111 Ind. App. 480, 39 N.E. 2d 484 (1942) (escape of impounded water polluted with mine wastes).

142. 151 Fed. 101 (S.D. Ga. 1907).

143. See 3 H. Farnham, *Waters and Water Rights* § 897 (1904).

public nuisance may be created, and a municipality, by virtue of its police power, may fill or require the owner to fill depressions in the land in which surface water stagnates if it is necessary to protect the public health.¹⁴⁴ A private individual injured by a public nuisance is not ordinarily entitled to special relief unless he can show that he has suffered peculiar or special damage different in kind as well as degree from that suffered by the public generally or that as to him the nuisance is a private one.¹⁴⁵

A rather extreme case of the prohibition on private action against a public nuisance is the early South Carolina case of *Baltzeger v. Carolina Midland Ry. Co.*¹⁴⁶ The railroad blocked a natural surface water drain causing water to accumulate in a pond. This obstruction would not be wrongful under South Carolina's strict version of the common-enemy rule, but the plaintiff alleged that a nuisance was created because the water became stagnant, emitted nauseous odors and gases rendering plaintiffs dwelling house unhealthy and causing annoyance, sickness, pains, and suffering to the plaintiff and his family and the death of one of his children. The court recognized that a public nuisance existed, but sustained defendant's demurrer on the ground that the complaint did not show that plaintiff had suffered special injury even though his home was within 100 feet of the noxious pool. This seems a rather harsh and strict application of the special injury requirement. It also seems that the court might have found the nuisance to be private as to the plaintiff, since he alleged that his home was rendered unhealthy and dangerous to live in, which should be sufficient interference with the use and enjoyment of property to constitute a private nuisance.

A more reasonable approach is found in cases where the courts refuse to let their decisions be predicated upon highly technical distinctions between ordinary "public injury" and "special" or "peculiar" injury. Two such cases¹⁴⁷ allowed actions by fishermen

144. *City of Charleston v. Werner*, 38 S.C. 488, 17 S.E. 33 (1893), *writ of error dismissed* 151 U.S. 360 (1894) (owner required to pay cost up to $\frac{1}{2}$ value of land), *Bowes v. City of Aberdeen*, 58 Wash. 535, 109 P. 369 (1910) (special assessment of lands benefitted). See also note 138, *supra*.

145. If one is injured in the use or enjoyment of his land by a public nuisance he does not lose his private rights merely because the nuisance happens to be public. W. Prosser, *Law of Torts* 589 (3rd ed. 1964).

146. 554 S.C. 242, 32 S.E. 358 (1899).

147. *Hampton v. North Carolina Pulp Co.*, 223 N.C. 535, 27 S.E.2d 538 (1943); *Columbia River Fishermen's Protective Union v. City of St. Helens*, 160 Or. 654, 87 P.2d 195 (1939). In *Hampton*, the trial court sustained the defendant's demurrer. The appellate court reversed, holding "To deny private redress, [on public nuisance] the

against upstream industries which had so polluted the streams as to destroy, or virtually destroy, their fishing businesses. The actions were allowed although the pollution amounted to a public nuisance.

C. Remedies

1. Nature of the Action

When surface waters are wrongfully allowed to invade another's property, liability may be based on a theory of trespass, negligence, or nuisance. The development of specialized rules of liability for interference with surface waters has tended to blur the distinctions between the different theories of action, and modern courts frequently disregard the nature of the action altogether. The theory of action adopted cannot always be disregarded, however, for important procedural consequences may sometimes turn on the theory applied.

2. Trespass to Land

When there is a physical invasion of the plaintiff's property by wrongfully diverted surface waters, some courts treat it as a trespass to real property.¹⁴⁸ At common law every unauthorized entry of a person or thing upon the soil of another is a trespass.¹⁴⁹ Therefore, if the defendant's act is unauthorized because it violates the rule of interference with surface waters applicable in his jurisdiction and if a physical invasion of the plaintiff's property by surface waters results, a trespass has been committed. Under the old common law approach such an indirect invasion would have required an action on the case for consequential injuries,¹⁵⁰ and this distinction has survived to the present to the extent that the plaintiff may be required to show that the invasion was intentional or the result of negligent or ultra-hazardous conduct and also that substantial damage has resulted.¹⁵¹

Since the key to the action of trespass is physical invasion of the

incidence of infraction must be as uniformly public as the right which is exclusively committed to public protection." 27 S.E.2d at 544. In *Columbia*, the court held that the plaintiffs had suffered "special injury" 87 P.2d at 197, 199.

148. *Brumley v. Dorner*, 78 Fla. 495, 83 So. 912 (1919) (water diverted onto plaintiff's property by defendant's roadway and ditch).

149. See W. Prosser, *Law of Torts* § 13 (3rd ed. 1964).

150. See *Woodland v. Lyon*, 78 Ida. 79, 298 P.2d 380 (1956) (action on the case for consequential injuries to real estate from obstruction of a watercourse).

151. W. Prosser, *Law of Torts* § 13 at 65-69 (3rd ed. 1964); *Restatement (Second) of Torts* § 166 (1965).

land, there is generally no cause of action, and the statute of limitations does not begin to run, until an actual invasion occurs. Thus, an action of trespass might be available when an action in nuisance against the activity causing the trespass is barred by the limitation period. When the negligence of the defendant causes an overflow of plaintiff's property, the theory of trespass may also be desirable from the plaintiff's viewpoint to avoid the defense of contributory negligence or to make the remedy of injunction available.

3. Negligence

Some courts impose liability for interference with surface waters on the basis of the negligence of the defendant.¹⁵² This is the only theory available in some common-enemy jurisdictions where acts of interference with surface water are actionable only if negligently done. A negligence action has the advantage that it does not usually accrue, and thus the statute of limitations does not begin to run, until actual harm is done.¹⁵³ But there is the disadvantage that the plaintiff's action may be defeated entirely by his own contributory negligence.

4. Nuisance

The preponderance of modern cases treat surface water interference on the theory of private nuisance.¹⁵⁴ Nuisance has traditionally been defined as an unlawful act which causes injury to a person in the enjoyment of his estate, unaccompanied by an actual invasion of the property itself;¹⁵⁵ this latter distinction is frequently disregarded today.¹⁵⁶ In order for a surface water case to fit this definition, attention must be focused on the defendant's act as the nuisance and not the resulting overflow which actually invades the plaintiff's property. If emphasis is placed on the overflow of the property, then the theory of trespass may appear more appropriate. When defendant creates a condition which threatens imminent overflow, the plaintiff may be successful in abating the condition as a nuisance, while he might be required to wait for actual injury if he sued in

152. *E.g.*, *City of Ashland v. Kittle*, 305 S.W.2d 768 (Ky. 1957) (negligently installed and maintained culvert); *McGehee v. Tidewater Ry. Co.*, 108 Va. 508, 62 S.E. 356 (1908).

153. *See* text accompanying notes 186-88 *infra*.

154. *See, e.g.*, *Lawrence v. Eastern Air Lines*, 81 So. 632 (Fla. 1955); *Deason v. Southern Ry. Co.*, 142 S.C. 328, 140 S.E. 575 (1927); *Henry v. Ohio River Ry. Co.*, 40 W. Va. 234, 21 S.E. 863 (1895).

155. *W. DeFuniak, Handbook of Modern Equity* § 32 (2d ed. 1956).

156. *See Town of Miami Springs v. Lawrence*, 102 So. 2d 143 (Fla. 1958).

trespass or negligence. On the other hand, some courts treat the limitation period in such cases as beginning to run upon completion of the structure, regardless of when actual overflow occurs.

5. Injunction

The preferred type of relief against wrongful interference with surface waters is the injunction. This is because injunctive relief is preventive and can furnish relief before rather than after a threatened violation. Moreover, an injunction may in many cases be the only effective sanction because provable injury may be so small that a judgment for damages would be valuable only as a means of preventing the gaining of a prescriptive right by the defendant.

An injunction will ordinarily issue only if the plaintiff establishes facts that would entitle him to an injunction according to the traditional equity rules governing issuance of injunctions. Thus, the plaintiff must show not only that the defendant's act is unlawful, but also that the threatened injury is irreparable, or one that cannot be adequately compensated by an action at law, or that an injunction is necessary to prevent a multiplicity of suits at law.¹⁵⁷ Although these factors are undoubtedly prerequisites, in theory at least, for an injunction against interference with surface waters, they are rarely considered in direct terms by modern courts. Instead, it seems clear from the cases that any actionable interference with surface waters will give rise to an injunction if the plaintiff can show a definite threat of substantial continuous or future injury.¹⁵⁸ The reason for this liberal treatment of persons injured by surface waters is the unique nature of real estate. Damages for its invasion by surface waters will nearly always be an inadequate remedy, and to force the person injured to give up some of his rights of ownership in return for damages confers a power of eminent domain on the wrongdoer. However, in cases in which the public benefit from the continuance of the nuisance outweighs the harm to the injured party, the injunction may be denied by some courts as a matter of discretion under the balance of convenience doctrine.¹⁵⁹

157. *Koch v. Wick*, 87 So. 2d 47 (Fla. 1956) (plaintiff seeking injunction and damages against city in ground water case); *Roughton v. Thiele Kaolin Co.*, 209 Ga. 577, 74 S.E.2d 844 (1953); *see generally* 56 Am. Jur. Waters § 421 (1947).

158. *New Homes of Pensacola, Inc. v. Mayne*, 169 So.2d 345 (1st D.C.A. Fla. 1964); *Hunt v. Smith*, 238 Iowa 543, 28 N.W.2d 213 (1947); *see also*, *Mader v. Mettenbrink*, 159 Neb. 118, 65 N.W.2d 334 (1954); *Dixon v. City of Nashville*, 29 Tenn. App. 282, 203 S.W.2d 178 (1946).

159. *State ex rel. Harris v. City of Lakeland*, 141 Fla. 795, 193 So. 826 (1940); *City of Lakeland v. State ex rel. Harris*, Fla. 761, 197 So. 470 (1940) (court used

6. Damages

The measure of damages for wrongful interference with the flow of surface waters depends upon the nature and extent of the injury sustained. The identification of an injury as permanent or temporary determines the manner in which damages may be collected.¹⁶⁰

If the injury is permanent, there can be but one action, and all damages past, present, and future are recoverable therein.¹⁶¹ The normal recovery is the difference in market value of the land before and after the injury¹⁶² or the cost of restoring the land to substantially the same condition as before the nuisance.¹⁶³ The position of the *Restatement of Torts* is that the plaintiff should have his election between the two.¹⁶⁴ This does not preclude recovery for diminution in the value of the use of the property when its market value is not materially affected by the damage.¹⁶⁵

If the injury is temporary in nature, recovery is allowed only for damages up to the time of suit, and successive recoveries in subsequent actions are permitted if the injury continues or recurs.¹⁶⁶ If the damages to realty are temporary, the general recovery is the loss in rental value, or the depreciation in the value of the use of the property if it is not rented.¹⁶⁷ When specific damage to buildings, crops, or other property is incurred, or when continued injury is

balance of convenience doctrine to refuse injunctive relief against city); Maloney, *The Balance of Convenience Doctrine in the Southeastern States, Particularly as Applied to Water*, 5 S.C.L.Q. 159 (1952). The fact that the defendant is a municipality is not necessarily controlling: *Lawrence v. Eastern Air Lines*, 81 So.2d 632 (Fla. 1955).

160. See Maloney & Plager, *Florida's Ground Water: Legal Problems in Managing A Previous Resource*, U. Miami L. Rev. (1967), the permanent-temporary injury dichotomy.

161. *Town of Miami Springs v. Lawrence*, 102 So. 2d 143, 146 (Fla. 1958); *Albany v. Jackson*, 33 Ga. App. 30, 125 S.E. 478 (1924).

162. *Rouse v. City of Kinston*, 188 N.C. 1, 123 S.E. 482 (1924) *Kinney*, *Irrigation and Water Rights* § 1144 (2d ed. 1912).

163. *Superior Const. Co. v. Elmo*, 204 Md. 1, 102 A.2d 739 (1954).

164. *Restatement of Torts* § 929 (1939).

165. *Labruzzo v. Atlantic Dredging & Const. Co.*, 54 So. 2d 673 (Fla. 1951).

166. *Town of Miami Springs v. Lawrence*, 102 So. 2d 143 (Fla. 1958) *Archer v. J. S. Compton, Inc.*, 238 Iowa 1182, 30 N.W.2d 92 (1947); *Phillips v. Chesson*, 231 N.C. 566, 58 S.E.2d 343 (1950). In surface water cases some courts take the position that if the condition is physically abatable, it will be considered temporary. *Town of Miami Springs v. Lawrence*, 102 So. 2d 143, 146 (Fla. 1958); *City of Albany v. Jackson*, 33 Ga. App. 30, 125 S.E. 478 (1924).

167. *Willoughby v. Southern Pac. Co.*, 83 Cal. App. 2d 414, 188 p.2d 816 (1948); *Lewallen v. Davenport*, 255 S.W.2d 16 (Ky. 1953).

threatened, the reasonable cost of repairs, removal, or abatement may be recovered.¹⁶⁸

D. Defenses

1. Contributory Negligence

Contributory negligence is conduct on the part of the plaintiff contributing to his damages as a legal cause.¹⁶⁹ When the act of the injured party substantially contributes to the occurrence of the injury, the wrongdoer may be excused fully from liability. Such a result would properly be based on contributory negligence, but no Florida surface water case has been found expressly adopting that theory. In *Bray v. City of Winter Garden*¹⁷⁰ the upper owner drained surface waters into a watercourse which overflowed to the plaintiff's injury. The plaintiff was denied relief when the Florida court found that he had allowed the watercourse to become obstructed where it crossed his land and was thus the cause of his own injury. The defense of contributory negligence was not expressly available in *Bray* because the complaint was not based on a charge of negligence. The court, utilizing the same reasoning, based its conclusion on the lack of causation on the part of the defendant. Regardless of the technical theory adopted, it seems clear that if the plaintiff's negligence is so involved with the defendant's that it is not possible to tell whether or to what degree either was the proximate cause of the injury, the plaintiff may be denied recovery.

2. Assumption of Risk

The doctrine of assumption of risk relieves the defendant of his legal obligation to the plaintiff because of the plaintiff's expressed or implied consent to injury from a particular risk.¹⁷¹ The doctrine of assumption of risk often parallels an alternative doctrine, such as contributory negligence, which the court may use to preclude recovery on behalf of the plaintiff. In one case¹⁷² the court refused relief for plaintiff against defendant's diversion because of his failure to keep open the natural watercourses which would have adequately

168. *Farrow v. Eldred Drainage & Levee Dist.*, 268 Ill. App. 432 (1932); *cf. Cason v. Florida Power Co.*, 74 Fla. 1, 76 So. 535 (1917).

169. W. Prosser, *Law of Torts* § 64 (3d ed. 1964).

170. 40 So. 2d 459 (Fla. 1949).

171. *Priestly v. Fowler*, 3 M. & W. 1, 7 L. J. Ex. 42, 150 Eng. Rep. 1030 (1837).

172. *Stoer v. Ocala Mfg., Ice & Packing Co.*, 157 Fla. 4, 24 So. 2d 579 (1946).

carried off the surface waters. In a similar case¹⁷³ in which contributory negligence was not available,¹⁷⁴ the court based its decision on lack of causation on the part of the defendant. The court noted, however, that the injury caused by the overflow of surface waters was acknowledged by the plaintiffs and resulted from their failure to protect their property.

3. Avoidable Consequences

The doctrine of avoidable consequences imposes an affirmative duty on one injured by the fault of another to protect himself against the consequences of such injury by reasonable conduct.¹⁷⁵ The factual determination as to what constitutes "reasonable conduct" is often a difficult question. In one case in which the \$100 surface water drainage damage to plaintiff's land could have been prevented by an expenditure of \$25 the court applied the doctrine.¹⁷⁶

Another court refused to apply the doctrine when it would have required the expenditure of \$300 by plaintiff¹⁷⁷ in order to protect himself against overflow from the defective construction of a roadbed. The court found such expense was beyond "ordinary care and effort" required of the plaintiff.

Even taking into account the difficult factual determinations involved with the use of this doctrine, it produces an equitable result in many cases. The injured owner, if found to be at fault, is not barred from relief altogether, but is merely denied recovery for those damages which he could have prevented. The one doctrinal weakness in the application of avoidable consequences may be in those cases in which the wrongful act of another has already been committed but no overflow has taken place. If the plaintiff fails to anticipate the damage and improves the land the doctrine may be held inapplicable, since most courts would hold that there is no invasion of plaintiff's rights until there is actual injury or overflow.¹⁷⁸

4. Comparative Negligence

One approach to more equitably apportioning the damages between the parties is the doctrine of comparative negligence.¹⁷⁹ Under

173. *LeBrun v. Richards*, 210 Cal. 308, 291 P. 825 (1930).

174. The complaint was based on nuisance theory, not negligence.

175. W. Prosser, *Law of Torts* § 64 (3 ed. 1964).

176. *Lloyd v. Lloyd*, 60 Vt. 288, 13 A. 638 (1888).

177. *Galveston, H. & S.A.Ry. Co. v. Borsky*, 2 Tex. Civ. App. 545, 21 S.W. 1011 (1893).

178. *City of Garrett v. Winterich*, 84 N.E. 1006 (Ind. App. 1908).

179. See Maloney, *From Contributory to Comparative Negligence: A Needed Law Reform*, 11 U. Fla. L. Rev. 135 (1958).

this approach the defendant is held liable for all damages except those he can prove were caused by the plaintiff. The doctrine has long been successfully applied in admiralty courts¹⁸⁰ and in many other areas by statute.¹⁸¹ Although the courts have not expressed themselves in terms of comparative negligence in the surface water cases, it has been suggested that the rules of avoidable consequences, contributory negligence and assumption of risk are merely judicial rules for such apportionment.¹⁸²

5. Self-Help

The right of a landowner to interfere with waters artificially flowing onto his land is subject to varying considerations primarily depending on whether the artificial flow was caused by the party complaining of the interference or by an outsider. Initially, the lawfulness of the diversion must be determined according to the rules applicable to the diversion of surface waters in the particular jurisdiction; then the availability of self-help as a defense by the landowner can be assessed.

Water Diverted by the Complaining Party. Regardless of whether the common-enemy, civil-law, or reasonable-use rule is followed in a particular jurisdiction, it is well settled that a landowner who has unlawfully diverted water onto another's land will not be heard to complain of the actions of the other in defending himself from such unlawful flow.¹⁸³ This rule undoubtedly does much to resolve minor problems and reduce unnecessary litigation. The owner injured by his neighbor's unlawful act thus has a choice of suing or protecting himself and forcing the other party to sue, with the incidental advantages of the defense.

Water Diverted by a Third Party. The availability of self-help as a defense to a landowner whose actions would injure an innocent party is not so well established. For example, a remote owner, *X*, unlawfully collects and diverts surface waters so that they now flow over the lands of *A* onto the lands of *B*. May *B* dam back these waters to the injury of *A*? Or may *B* further divert the waters onto the land of *C* onto which they would not otherwise pass?

The question has not been raised in a common-enemy jurisdiction, and the scant civil-law authority is in some conflict. The issue under

180. See, e.g., *The Schooner Catherine*, 58 U.S. (17 How.) 170 (1854).

181. See, e.g., Fla. Stat. § 769.03 (1961) (hazardous occupations); 45 U.S.C. §§ 51-59 (1964). (Federal Employers' Liability Act).

182. W. Prosser, *Torts* § 66 (3d ed. 1964).

183. *Jackson v. Keller*, 95 Ark. 242, 129 S.W. 296 (1910); *Hancock v. Stull*, 206 Md. 117, 110 A.2d 522 (1955); *King v. Cade*, 205 Okla. 666, 240 P.2d 88 (1951).

the civil-law rule is generally whether the flow interfered with by the defendant is to be considered "natural" so as to invoke the civil-law servitude.

In a California case¹⁸⁴ the surface water was diverted from its natural course by the county while making road improvements. The diverted water flowed over plaintiff's land onto defendant's where an embankment constructed by defendant caused the water to back and overflow plaintiff's land. In refusing defendant's claim of a right to fend off the unnatural flow, the court held that "natural" did not mean "original", but referred merely to water undiverted by the plaintiff upper proprietor. However, in a similar Texas case¹⁸⁵ in which defendant obstructed surface waters which had been diverted onto his land by a third party, the court denied relief to the innocent third party, holding that a lower owner is not burdened with a servitude to receive water not naturally flowing onto the land.

Holding the obstructing owner liable to his innocent neighbor seems to reach the more logical result. Since there is very little land on which the original natural drainage patterns have not somehow been altered by development of other lands, to hold that such alteration constitutes a defense for unlawful acts of the present owner would present extremely complex problems of proof, and inject further uncertainty into an already confused area of the law.

6. Statutes of Limitations

One of the most commonly raised defenses in a suit for diffused surface water damages is the statute of limitations. The primary difficulty in this area is determining when the statutory period begins to run. When the plaintiff is seeking relief for wrongful interference with surface waters on the theory of trespass or negligence the cause of action accrues, and the statute of limitation begins to run when his land is injured or overflowed.¹⁸⁶

When the theory of action is nuisance, there exists a divergence of view as to when the period begins to run. In *Town of Miami Springs v. Lawrence*¹⁸⁷ the city raised the elevation of the street adjoining

184. *LeBrun v. Richards*, 210 Cal. 308, 291 P. 825 (1930); *accord*, *Lewallen v. Davenport*, 255 S.W.2d 16 (Ky. 1953).

185. *Higgins v. Spear*, 283 S.W. 584 (Tex. Civ. App. 1926), *aff'd*, 118 Tex. 310, 15 S.W.2d 1010 (1929).

186. Trespass: *Brumley v. Dorner*, 78 Fla. 495, 83 So. 912 (1919); *see* 34 Am. Jur. *Limitations of Action* § 113 (1941). Negligence: *Missouri P. R. Co. v. Holman*, 204 Ark. 11, 160 S.W.2d 499 (1942).

187. 102 So. 2d 143 (Fla. 1958).

plaintiff's property in the summer of 1952. No injury was noticed until January of 1953. The defendants alleged that the statute of limitations¹⁸⁸ ran from 1952. The court found "that the statute does not begin to run until actual harm is inflicted to the plaintiff's land, regardless of the installation date of the construction or obstruction causing the overflow."¹⁸⁹

Other courts hold that, if the structure which constitutes the nuisance is of a permanent character and necessarily injurious, a cause of action for the entire injury, both present and prospective, arises when the structure is completed.¹⁹⁰ Even under this view, however, if the nuisance is not permanent or is not such that its continuance is necessarily injurious, a cause of action arises only when injury occurs.¹⁹¹ The factors determining the permanent-temporary classification are discussed elsewhere.¹⁹²

Regardless of whether the running of the statute is keyed to the occurrence of actual harm to the plaintiff or to the erection of the structure by the defendant, each new injury creates a new cause of action.¹⁹³ It should be noted, however, that if the injury is classed as permanent based on the nature of the structure involved, the statute runs once for the entire action.¹⁹⁴

7. Prescription

A right to overflow another's land in an otherwise unlawful manner may be acquired by prescription. Thus, an upper owner may acquire a prescriptive easement of drainage over the lower land, and a lower owner may extinguish by prescription the natural easement of drainage over his land.¹⁹⁵ Such a right may consist of the right to

188. Fla. Stat. § 95.24 (1967) (one year statute of limitations and notice-of-claim to municipal corporations).

189. *Miami Springs v. Lawrence*, 102 So. 2d 143, 145 (Fla. 1958). *Accord*, *Heath v. Texas & P.R. Co.*, 37 La. Ann. 728 (1885); *Baker v. Fort Worth*, 146 Tex. 600, 210 S.W.2d 564 (1948); *Southern Ry. Co. v. Watts*, 134 Va. 503, 114 S.E. 736 (1922).

190. *E.g.*, *Wheeler v. Sanitary Dist.*, 270 Ill. 461, 110 N.E. 605 (1915); *Dugan v. Long*, 234 Ky. 511, 28 S.W.2d 765 (1930); *Annot.*, 5 A.L.R. 2d 302, 314 (1949).

191. *Gabbett v. City of Atlanta*, 137 Ga. 180, 73 S.E. 372 (1911); *Gibbs v. Mills*, 198 N.C. 418, 151 S.E. (1930).

192. See the forthcoming book by the authors on Florida water law.

193. *International Paper Co. v. Maddox*, 203 F.2d 88 (5th Cir. 1953); *City of Clanton v. Johnson*, 245 Ala. 470, 17 So. 2d 669 (1944).

194. *Miami Springs v. Lawrence*, 102 So. 2d 143, 146 (Fla. 1958); *Smith v. Central of Georgia Ry. Co.*, 22 Ga. App. 572, 96 S.E. 570 (1918); 56 Am. Jur. Waters § 443 (1947).

195. *See, e.g.*, *Voorhies v. Pratt*, 200 Mich. 91, 166 N.W. 844 (1918); *Naporra v. Weckwerth*, 178 Minn. 203, 226 N.W. 569 (1929); *Roberts v. Von Briesen*, 107 Wis. 486, 83 N.W. 755 (1900).

maintain a ditch or tile drain over the lower land;¹⁹⁶ or the right to discharge water onto the lower land through ditches, culverts, or tiles;¹⁹⁷ or the right to divert the natural flow of surface water onto the lower land by erection and maintenance of a building, terrace, embankment, or other obstruction.¹⁹⁸

Acquisition of a right by prescription should not be confused with the bar of an action by the statute of limitations. The running of the statute of limitations merely bars suit by the injured party for the defendant's wrongful act. The passage of the prescriptive period makes the wrongful act rightful. Suppose *A* unlawfully diverts water onto the land of *B* by means of a ditch. If the statute of limitations has run, *B* may not sue *A*, but *B* may erect a dam to keep the waters off his land. The running of the statute is on *B*'s right to defend his property from wrongfully diverted surface water, but if *A* has a prescriptive right to the diversion, then *B*'s land is subject to an easement of flow and *B* is liable if he interferes with it.¹⁹⁹

Prescriptive rights are usually acquired by methods substantially similar to those by which title may be acquired by adverse possession.²⁰⁰ The claimant must prove actual, continuous, adverse use with the actual or presumed knowledge of the owner for the prescribed period. Prescription differs from adverse possession in that title is acquired through adverse possession, while only an easement or right to use is obtained by prescription; and such right as is acquired by prescription is limited to the extent of the user. Adverse possession must be exclusive, but exercise of prescriptive rights may be in common with the owner or with the public.

The period required may also present an important difference. Thus, in Florida the prescriptive period is twenty years,²⁰¹ while the adverse possession period is only seven,²⁰² and the limitation period for an action for trespass to realty is three.²⁰³

8. Priority of Occupation

The defense of priority of occupation, or coming to a nuisance,

196. *See, e.g.*, *McCracken v. MacNeal*, 169 Mich. 414, 135 N.W. 461 (1912) (tile); *Naporra v. Weckwerth*, 178 Minn. 203, 226 N.W. 569 (1929) (ditch).

197. *See, e.g.*, *Peacock v. Stinchcomb*, 189 Mich. 301, 155 N.W. 349 (1915).

198. *See, e.g.*, *Crumbaugh v. Mobile & O.R. Co.*, 105 Miss. 485, 62 So. 233 (1913).

199. *See, e.g.*, *Darr v. Carolina Aluminum Co.*, 215 N.C. 768, 3 S.E.2d 434 (1939).

200. *Hunt Land Holding Co. v. Schramm*, 121 So. 2d 697 (2d D.C.A. Fla. 1960); *see also* 2 American Law of Property § 8.52 (Casner ed. 1952).

201. *Hunt Land Holding Co. v. Schramm*, 121 So. 2d 697 (2d D.C.A. Fla. 1960).

202. Fla. Stat. § 95.12 (1967).

203. Fla. Stat. § 95.11 (1967).

has been rejected in England for more than one hundred years.²⁰⁴ A small minority of courts in the United States, however, still hold that this factor alone is sufficient to deny relief.²⁰⁵ Some jurisdictions which subscribe to the reasonableness test in determining whether the use constitutes a nuisance regard priority of occupation as an important, although not necessarily controlling, factor to be considered with other matters in the decision.²⁰⁶

Most jurisdictions reject priority of occupation as a valid defense.²⁰⁷ As one court pointed out, a person "cannot place upon his land any thing which the law would pronounce a nuisance, and thus compel his neighbor to leave his land vacant, or to use it in such a way only as the neighboring nuisance will allow."²⁰⁸ The nuisance concept itself supports this position. Historically, a nuisance must involve an injury to the use and enjoyment of property or to the property itself.²⁰⁹ A nuisance does not exist if the activity is conducted in a vacant area beyond the reach of harm to others.²¹⁰ Under such analysis there can be no problem of moving to a nuisance, since the nuisance does not exist until someone is injured by it.

PART III

CONSUMPTIVE USE OF DIFFUSED SURFACE WATER

The right to the use of surface water has been a relatively unimportant issue in the past, and thus rarely litigated. Surface water has generally been treated as an undesirable quantity which drowns crops, erodes and silts land, and causes floods. The major emphasis has been on its disposal. As the competition for available water has increased, more attention has been given to the potential uses of diffused surface waters and it is expected that the questions surround-

204. See *Bliss v. Hall*, 4 Bing. N.C. 183, 132 Eng. Rep. 758 (1838).

205. *Barth v. Christian Psychopathic Hospital Ass'n.*, 196 Mich. 642, 646, 163 N.W. 62, 63 (1917) (dictum); *East St. Johns Shingle Co. v. City of Portland*, 195 Ore. 505, 246 P.2d 554 (1952); *Powell v. Superior Portland Cement, Inc.*, 15 Wash. 2d 14, 129 P.2d 536 (1942).

206. *E.g.*, *Martin Bldg. Co. v. Imperial Laundry Co.*, 220 Ala. 90, 124 So. 82 (1929); *McIntosh v. Brimmer*, 68 Cal. App. 770, 777, 230 P. 203, 204 (1924) (dictum).

207. *E.g.*, *Cain v. Roggero*, 28 Del. Ch. 131, 38 A.2d 735 (1944); *Susquehanna Fertilizer Co. v. Malone*, 73 Md. 268, 20 A. 900 (1890); *Forbes v. City of Durant*, 209 Miss. 246, 46 So.2d 551 (1950).

208. *Campbell v. Seaman*, 63 N.Y. 568, 584, 20 Am. Rep. 567, 582 (1875).

209. *W. Walsh*, Equity § 33 (1930).

210. See *Georgia R. & Banking Co. v. Maddox*, 116 Ga. 64, 42 S.E. 315 (1902) (dictum); *Sooy v. Giacomucco*, 31 Del. Co. 345 (Pa. 1952); *Sturges v. Bridgman*, 11 Ch.D. 852 (1879).

ing the competing rights to such waters will assume even greater importance in the future.²¹¹

A. Common Law Rule

From the relatively few cases in which the issue of ownership of surface water has been raised, the common law view appears clearly settled. As a general rule, the owner of the soil has an absolute right to the surface water thereon, and he may in the improvement of his lands, or for his own use, retain all such water, and prevent it from flowing onto the land of an adjoining proprietor.²¹² This rule has been applied both in common-enemy²¹³ and civil-law jurisdictions.²¹⁴ The basis of the rule is the maxim that a man's land extends to the center of the earth below and to the skies above, but in reality diffused surface water is of such a vagrant, unpredictable nature the difficulty in enforcing any other rule lends great weight to this approach. Even if a lower owner could prove that the surface water had been prevented from flowing onto his land, the task of accurately measuring the amount is virtually insurmountable.

To avoid the strict consequences of the absolute ownership rule, the New Hampshire Supreme Court has made the reasonable-use rule applicable to the use of diffused surface waters.²¹⁵ The court indicated the difficulty in distinguishing surface waters from percolating waters and waters flowing in a defined watercourse in many instances and the injustice that often arises from that distinction. The Minnesota Supreme Court, which also follows the reasonable-use rule with respect to disposal of surface waters,²¹⁶ has indicated by dictum that the reasonable-use rule might apply to the use of surface waters.²¹⁷ Other jurisdictions have appeared reluctant to adopt the New Hampshire approach directly. Research has disclosed no cases outside that jurisdiction repudiating the doctrine of absolute owner-

211. See, e.g., *Irrigation With Non-Riparian Surface Water and Subterranean Water in Kentucky*, 42 Ky.L.J. 493 (1954) (estimating that roughly one-half of the state's irrigation water comes from impounded non-riparian surface water); Shaffer, *Surface Water in Indiana*, 39 Ind. L. J. 69, 100 (1963).

212. *Taylor v. Fickas*, 64 Ind. 167 (1878); 3 H. Farnham, *Waters and Water Rights* § 883 (1904); 6A *American Law of Property* § 28.62 (Casner ed. 1954).

213. See, e.g., *Taylor v. Fickas*, 64 Ind. 167 (1878); *Pettigrew v. Village of Evansville*, 25 Wis. 223 (1870).

214. See, e.g., *Washington County Irr. Dist. v. Talboy*, 55 Idaho 382, 43 P.2d 943 (1935); *Benson v. Cook*, 47 S.D. 611, 201 N.W. 526 (1924); *Pecos Cty. Water Control & Improvement Dist. v. Williams*, 271 S.W.2d 503 (Tex. Civ. App. 1954).

215. *Swett v. Cutts*, 50 N.H. 439 (1870).

216. *Sheehan v. Flynn*, 59 Minn. 436, 61 N.W. 462 (1894).

217. *Bush v. City of Rochester*, 191 Minn. 591, 255 N.W. 256 (1934).

ship, but occasional abstract dicta and loose use of the term "surface water" in the context of lakes and streams might well indicate that the judicial mood may change as the issue becomes more important.²¹⁸

Natural Waterbodies. The strict approach of the common law rule of absolute ownership is conditioned on a finding that the water involved is in fact diffused surface water. The chief distinction between diffused surface water and other forms is their impermanence.²¹⁹ Therefore, in most cases substantial enough to justify legal action in which the lower owner has been deprived of surface water, there is at least an argument that it is not in fact diffused water.

If the flow of water in a particular path is sufficiently constant, the lower owner may be able to show that the water constitutes a natural watercourse and that the upper owner by obstructing or diverting the flow has interfered with the lower owner's rights as a riparian owner.²²⁰ Similarly, depending on its permanence, standing water, in either a natural or artificial ditch, canal, or pond, may be treated as a natural water body.²²¹ In most cases in which riparian rights have attached to artificial waterbodies, the conditions have existed for considerable periods, and the prescriptive period in a particular jurisdiction may be especially significant.²²² Permanence of a ditch draining water is not of itself enough unless the characteristics of the flow also meet the test of a natural watercourse.²²³ The cases indicate that in some situations artificially created lakes or ponds may take on the attributes of natural lakes.²²⁴

B. Modern Developments

The use or drainage of surface waters may affect other forms of water. First, over-use or over-drainage may considerably reduce the

218. See, e.g., *Orchard v. Cecil F. White Ranches*, 97 Cal. App. 2d 35, 217 P.2d 143 (1950); *Kinyon & McClure, Interferences With Surface Waters*, 24 Minn. L. Rev. 891 (1940).

219. 3 H. Farnham, *Waters and Water Rights* § 878 (1904). *Restatement of Torts* § 846 (1939).

220. See *Thompson v. New Haven Water Co.*, 86 Conn. 597, 86 A. 585 (1913); *Kistler v. Watson*, 156 N.E.2d 833 (1957).

221. See, e.g., *Schaefer v. Marthaler*, 34 Minn. 487, 26 N.W. 726 (1886) (natural pond declared to be a lake to which rules of natural watercourses applied); *Jack v. Teegarden*, 151 Neb. 309, 37 N.W.2d 387 (1949) (artificial channel designated as permanent, riparian rights held to attach.).

222. See text accompanying notes 195-203 *supra*.

223. *Fryer v. Warne*, 29 Wis. 511, (1872) (ditch in existence 18 years held not to be natural because it lacked continuity of flow).

224. See note 222, *supra*.

ground water levels and in turn reduce the flow of streams in dry periods. Second, in periods of heavy rainfall increased drainage tends to increase stream flows, thus contributing to flooding. On the other hand, capture of surface waters by means of ponds, terraces and other methods tends to decrease the amount of initial runoff, thus reducing downstream flooding and causing more water to be absorbed into the ground, adding to ground water supplies and contributing to the maintenance of stream flows during dry periods.

Because of the interrelationship between diffused surface waters and ground waters, lakes, and streams, considerable criticism of the common law rule of absolute ownership of surface waters has developed.²²⁵ Several states have enacted statutes affecting the consumptive use of surface waters. A number of the statutes substantially reaffirm the common law rule.²²⁶ Iowa²²⁷ and Mississippi²²⁸ have substantially identical provisions giving a landowner the right to surface waters so long as provision is made for continued established average minimum flow when such flow is required to protect the rights of water users below. The practical applicability of these statutes to diffused surface water is questionable since if an "established average minimum flow" can be determined, a natural watercourse is very likely to be involved.

The 1957 Florida Water Resources Law²²⁹ authorizes the diversion of excess water beyond riparian or overlying land, although the statute provides specifically only for the capture, storage, and use of water of lakes, watercourses and ground water.²³⁰ The act does state that its purpose is to provide "maximum beneficial utilization, development and conservation of the water resources of the state in the best interest of all its people and to prevent the waste and unreasonable use of said resources,"²³¹ and this statement is broad enough to bring diffused surface water within the terms of the act.²³² This

225. Dolson, *Diffused Surface Water and Riparian Rights: Legal Doctrine in Conflict*, 1966 Wis. L. Rev. 58; Shaffer, *Surface Water in Indiana*, 39 Ind. L. J. 69 (1963); Kinyon & McClure, *Interferences with Surface Waters*, 24 Minn. L. Rev. 891 (1940).

226. Ind. Stat. Ann. § 27-1402 (Supp. 1967); S.D. Code § 61.0101 (Supp. 1960); Okla. Stat. Ann. tit. 60, § 60 (Supp. 1966).

227. Iowa Code § 455 A.27 (Supp. 1966).

228. Miss. Code Ann. § 5956-01-(1)-(Supp. 1960).

229. Fla. Stat. § 373.071-373.241 (1967).

230. Fla. Stat. § 373.141 (1967).

231. Fla. Stat. § 373.101 (1967).

232. See also, the declaration of policy that:

"The ownership, control of development and use of waters for all beneficial purposes is within the jurisdiction of the state which in the exercise of its

statement has not as yet been implemented by any further statutory provisions or administrative action.

CONCLUSION

The contrast between the rather full development of legal precedents respecting the disposition of excess surface water and the paucity of legal rules, court made, or statutory, with regard to consumptive use of diffused surface water is a striking one. It stems from the fact that until modern technological developments made it easier and less costly to trap, store and use surface water, the right to the use of such water was a relatively unimportant issue, and led to little litigation. But this state of affairs is rapidly changing, and far more legal activity in this area is to be anticipated.

This change in attitude toward diffused surface water is startlingly illustrated in Florida. In the period prior to World War II, the major emphasis was on drainage to dispose of excess surface water, particularly in the rapidly developing agricultural areas of south Florida. The topography of this area is very flat, and rainfall often remained on the land for long periods unless it was removed by drainage works. In the earlier period, primary and often sole emphasis was placed on the construction of these works. Single purpose drainage districts, including the large Everglades Drainage District,²³³ and hundreds of smaller drainage districts were formed,²³⁴ with little thought other than to remove the surface water from the land. The same development began to take place in central Florida, where the Green Swamp, a perched swamp which provided one of the major recharge areas for the Floridan aquifer in that part of the state, was being rapidly drained.²³⁵

But much of Florida is subject to lengthy periods of little or no rainfall, and it became evident that in the recurring periods of severe rainfall deficiency the surface water which was being wasted into the sea through drainage works could be much better used for irrigation²³⁶ and ground water recharge.²³⁷ One result was the formation

powers may establish measures to effectuate the proper and comprehensive utilization and protection of the waters."

Fla. Stat. § 373.072-(2)-(1967).

233. Fla. Laws 1913, ch. 6456, § 1, at 129.

234. See Fla. Dep't. of Agric., *Drainage Districts of Florida*, Bull. 67, New Series 9-14 (1931).

235. Maloney, *Florida's New Water Resources Law*, 10 U. Fla. L. Rev. 119, 133 (1957).

236. Florida's Water Resources 87.

237. *Id.* at 88.

of the Central and Southern Florida Flood Control District, a multi-purpose district in which conservation and use of diffused surface water rapidly became of equal importance to its disposition in periods of excess rainfall. Indeed, the Corps of Engineers and the District are presently developing plans to conserve and store almost all of the surface water in the district presently being dumped into the oceans in periods of heavy rainfall, in order to provide for the growing needs for urban water supplies, industry, agriculture, ground water recharge to stem salt water intrusion, and to provide a more adequate supply of water to the Everglades National Park. These developments, and the complex legal problems they present, are discussed in detail elsewhere.²³⁸ Federal assistance in constructing the necessary storage facilities and channels for transporting surface water is playing an important part in its increasing use. This assistance through the U.S. Department of Agriculture in small watershed improvement²³⁹ and the construction of farm ponds²⁴⁰ will play a growing part in maximizing the use of diffused surface water, as will the future development of additional large storage areas by the Corps of Engineers such as those of the Central and Southern Florida Flood Control District.²⁴¹

These developments may well lead to further judicial refinement of the common law rules with regard to consumptive use of diffused surface water. Since this use will usually be made possible only through the cooperative effort of many landowners in the establishment of multi-purpose water management districts, with state or federal assistance or both, it seems likely that the coming years will witness rapid development of statutory and administrative regulation of the use of diffused surface water, at least where such water is trapped and used beyond the property of the landowner on whose land it falls. Developments in administrative regulation through the use of a permit system by the Central and Southern Florida Flood Control District to regulate the use of captured surface water are

238. See Maloney, Plager & Baldwin, *Florida Water Law & Administration*, c. 8 (1968).

239. Watershed Protection and Flood Prevention Act of 1954 (Hope-Aiken Act), 16 U.S.C. §§ 1001-1007 (1964).

240. Under the Consolidated Farmers Home Administration Act of 1961, loans are authorized to farm owners or tenants specifically for purposes of land and water development, 7 U.S.C. § 1924 (1964). The farm ponds provisions were formerly subsumed under the Farmers' Home Administration Act, 16 U.S.C. 590 (x-2) (1958), *repealed by* 75 Stat. 318 (1961).

241. H.R. Doc. No. 643, 80th Cong., 2d Sess. 3-5 (1949).

discussed elsewhere.²⁴² While the exact topographical and hydrological features of that District are not likely to be duplicated elsewhere, the approach of the District to the problems of administrative regulation may provide valuable lessons for other states as they begin to realize the diffused surface water is not always a scourge, but indeed may be the bounty which, properly developed, will help solve the growing problems of water shortage which are plaguing many of our states today.

242. See the forthcoming book, by the authors, on Florida water law.