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SURFACE WATER FLOODING IN URBAN AREAS: RIGHTS AND REMEDIES UNDER THE COMMON-ENEMY DOCTRINE

I. INTRODUCTION

Urban flooding is an ever increasing problem as land development intensifies in expanding metropolitan areas. This situation not only has a significant impact on the physical environment, but has substantial legal consequences as well. In urban flooding situations, rivers and streams pose obvious flood threats, but the damaged area is generally restricted to a definable flood plain.¹ Surface water presents a more subtle and pervasive problem; with heavy rainfall or poor drainage, surface runoff can submerge land not ordinarily considered subject to flood damage, further increasing riparian problems as the concentrated runoff finds its way to streams and rivers.² Although flood control measures may be instituted to reduce some of the problems,³ occasional

1. A flood plain is the "portion of a river valley, adjacent to the river channel, which is built of sediments during the present regimen of the stream and which is covered with water when the river overflows its banks at flood stages". AM. GEOLOGICAL INSTITUTE, DICTIONARY OF GEOLOGICAL TERMS 166 (rev. ed. 1976). The area is usually defined by geographic ridges, but they become less useful as indicators of the flood domain after urbanization because of the increased runoff from the developed land. See note 4 *infra*.

This comment is limited to surface water flood problems, but the United States Water Resources Council offers an excellent inexpensive paperback reference set. REGULATION OF FLOOD HAZARD AREAS TO REDUCE FLOOD LOSSES, 2 vols. (Stock No. 5245-0010) is available by mail for \$4.50 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Dealing with land and water regulation, it covers both surface water and riparian flood problems.

2. The legal definition of surface water is "that [water] which is accumulated on land from rain, springs, or snow, and is diffused over the surface of the ground, while it remains in such a diffused state or condition". 78 AM. JUR. 2d *Waters* § 117 (1975). Surface water may also be that which has escaped from a natural watercourse, as in a flood, and flows in a "vagrant or casual character, following no definite course." *Id.* However, legal concepts in this area clash with scientific definitions. Hydrologists generally refer to the waters discussed herein as diffused surface waters or overland flow. See generally 4 R. CLARK, *WATERS AND WATER RIGHTS*, § 3 (1970) [hereinafter cited as CLARK].

3. Several measures can be taken to minimize urban flooding. Zoning should include geological criteria and municipal planning should precede urban growth. See Landman, Hicks, and Ihloff, *Flood Control in Oklahoma: An Example of Land Use Preceding Land Use Planning*, 29 OKLA. L. REV. 16 (1976) [hereinafter referred to

flooding must be anticipated as a natural result of urbanization. Just as our ancestors accepted floods as the price of living close to a river, urban dwellers must accept some surface water excess as one of the inconveniences of metropolitan living.⁴

Some urban flood problems, however, are unnecessary. Urban dwellers need not stoically accept the damage and inconvenience⁵

as *Flood Control in Oklahoma*]. Municipal errors should be corrected. Where once effective storm drains are now insufficient because of surrounding development, they should be replaced with adequate facilities. Real estate developers should be required to file an environmental impact statement to insure adequate study of the consequences of their proposals and to provide data for the city to consider in approving the development. Most importantly, the individual needs to be aware of nature's interaction with man's development. Just as the person who lives near the river must learn to accept some flooding, those who pave the drainage slopes must accept surface floods.

4. Ironically, though builders and planners attempt to provide a solution, urbanization is itself the problem. Urban development usually includes a series of culverts and storm sewers to provide for more efficient drainage. But there is more water to be drained following urbanization because water that formerly fell on permeable soil now falls on streets, parking lots, roofs, and other paved areas. See D. Flasch, *Effects of Urbanization on Peak Discharge: A Case Study*, (1972) (unpublished manuscript, U.S. Army Corps of Engineers, Tulsa District). Another cause of increased rainfall in urban areas is termed the "urban thermal island" theory, which notes that the heat generated by paved urban surfaces triggers precipitation in overhead air masses. See *SCIENTIFIC AM.*, Aug. 1967, at 15.

Thus, urban development provides not only a problem—more water—but a solution as well—better drainage. Where rainfall exceeds drainage capacity, the water will collect and bypass normal drainage channels. If an area is overdeveloped or underdrained, even a nominal rainfall will cause flooding. Other problems arise when development changes the grade or elevation of the land, altering the natural flow of water, and possibly diverting it into areas with insufficient drainage. Surface water problems can manifest themselves in small areas, as between urban neighbors, or may encompass entire drainage areas as urban space requirements increase. Drainage area is used here to denote what many incorrectly call a "watershed". See H. FOWLER, *MODERN ENGLISH USAGE* 688 (2d ed. E. Gowers 1965).

5. For example, in Tulsa, Oklahoma, the area along Charles Page Boulevard between Newblock Park and 41st West Avenue presents an example of the damage and inconvenience homeowners face from insufficient drainage systems. The neighborhood is drained by the Parkview drainage ditch, running from 41st West Avenue through Newblock Park, emptying into the Arkansas River. It was dug in the 1920's to collect local surface water runoff and drain the streams from the nearby Osage hills. The area was only sparsely developed at the time, but is now 95% urbanized according to the 1974 Land Activity File, Tulsa Metropolitan Area Planning Commission. With several storm sewers now adding to the ditch's responsibility for discharge, a nominal rainfall causes flooding in the area around 33rd West Avenue. The water has not yet flooded the interior of any homes, but it has undermined the foundations, rusted floor furnaces, and ruined gardens.

To combat these developments, a local homeowners association has submitted a proposal to the U.S. Army Corps of Engineers, which is currently doing a five county drainage study for the Indian Nations Council of Governments, an area planning commission. The proposal calls for a new drainage system utilizing the embankments of an existing expressway to build collector systems that would empty into the river at various points, relieving Parkview ditch of its excess water and area residents of their problems. Interview with Mrs. Fred Loving, member, West of Main Improvement Association, Inc., of Tulsa, in Tulsa, Oklahoma (April 4, 1977).

caused by developers and private landowners who disregard the safety and well-being of adjoining property and residents. In addition to municipal ordinances through which a city may enforce grading and drainage standards,⁶ the victim may take direct legal action against the offending landowner or developer.

This comment will examine various common law remedies available to resolve surface water drainage problems as exemplified in three

6. Proposed stormwater drainage criteria for the City of Tulsa state, in pertinent part:

5. The easement for an unimproved drainageway left in a natural state shall be . . . that width required to pass a 100-year frequency rainstorm under full urbanization. . . .

7. The trunk storm water drainageway system shall be designed to pass the runoff from a 100-year frequency rainstorm under full urbanization. The entire flow shall be confined within the said stormwater drainageway system.

12. The discharge velocity of a storm water drainageway system constructed for the development of a tract of land will not be greater than the velocity that existed in the drainageway at that point under natural conditions, nor will the velocity of the discharging water exceed the erodible limit of the soil in place at the point of discharge. . . .

13. Detention facilities will be required for all RS developments of 10 acres or more. Detention facilities will also be required for all other developments of 2 acres or more. This requirement is not applicable on any tract that has 100-year full urbanization drainageway capacity from the development to either the Arkansas River or Bird Creek.

14. The requirements for the storage and controlled release of storm water runoff shall be as follows:

The peak release rate of storm water runoff from the development shall not exceed the peak storm water runoff rate from the area in its natural, undeveloped state for all rainstorm intensities up to and including the 100-year frequency for all durations of rainfall.

The required volume for stormwater detention shall be calculated on the basis of the runoff from a 100-year frequency rainstorm. The detention volume required shall be that necessary to handle the runoff from a 100-year frequency rainstorm to fully urbanized conditions, for any and all durations, less that volume discharged during the same duration at the release rate as specified above.

City of Tulsa, Oklahoma, Storm Sewer and Storm Water Runoff and Detention Criteria (Mar. 19, 1976).

As of March 19, 1976, these criteria must be incorporated in subdivision plots filed with the City of Tulsa; however, the City has only administrative power, rather than police power authority, to enforce the standards. Civil actions, such as injunctions, may result from violations of the proposals, but not fines or jail sentences. The police power will be attached in the future when the City feels it has enough data to satisfy the reasonableness standards that accompany the police power. In other words, the City must be able to show that its actions are both necessary and reasonable to overcome the fifth amendment property rights of the developing landowner who is forced to comply with the city ordinances. Interview with David Pauling, City Attorney's Office, City of Tulsa, in Tulsa, Oklahoma (April 10-11, 1977). See generally Annot., 85 A.L.R. 465 (1933) which deals with the constitutionality of statutes related to control of surface water.

geological situations, typical of urban development.⁷ The scope of this article will be limited, however, to jurisdictions employing the modified common-enemy doctrine. The three geological situations are:

1. Landowner is on the lower end of a watershed and upper development causes increased velocity or volume of runoff.⁸
2. Landowner occupies a depression and subsequent development causes standing or slow draining water. Two distinct types, the single lot depression⁹ and the larger urban depression,¹⁰ yield different legal results.
3. Landowner is recipient of collected artificial discharge¹¹ from another landowner.

II. BACKGROUND

Three substantive rules have been developed to determine landowners' rights to protect themselves from surface water: the common-enemy doctrine, the civil-law rule and the reasonable use rule. Contrary to the deceptive labels, all three rules are products of the American common law.¹² While some authorities believe the rules are merging,¹³ they are distinct in theory and should not be viewed as similar means to accomplish one particular end.

7. One common problem not considered in this article is the damming back of water or the obstruction of a man-made or natural drain. It is not covered because it generally is typified by the tortious act itself rather than the act in conjunction with a particular geological condition. Moreover, it involves the cessation of flow instead of acceleration or diversion. For a general discussion of the problem, see 78 AM. JUR. 2d *Waters* § 130 (1975); 93 C.J.S. *Waters* § 114 (4) (1950); annot., 59 A.L.R. 2d 421, § 8 (1958).

8. This situation is taken from various readings cited in this comment and subsequently discussed with Don Flasch, hydrologist for the United States Army Corps of Engineers, Tulsa District, in September and October, 1976.

9. *Id.*

10. *Id.*

11. *Id.*

12. See notes 15-27 *infra* and accompanying text. The English common law offers similarities to both the common-enemy and civil law rules and has mistakenly been interpreted as precedent for each, even though the two rules were developed in American courts. The English rule on surface water drainage didn't develop until the mid-nineteenth century, and followed the civil law rule. See Kinyon and McClure, *Interferences With Surface Waters*, 24 MINN. L. REV. 891, 899 (1940) [hereinafter cited as *Interferences With Surface Waters*]. Another author believes there has never been any justification to support the common-enemy doctrine with English common law precedent. See Thompson, *Surface Waters*, 23 AM. L. REV. 372, 391 (1889).

13. Authors generally avoid terms as conclusive as "merger," referring instead to trends in which the rules are becoming "less and less distinguishable" and "as presently applied will reach substantially similar results in most cases." Note, *Surface Water Drainage in Iowa*, 50 IOWA L. REV. 818, 823 (1965) [hereinafter cited as *Surface Water*].

The Common-Enemy Doctrine

The term "common enemy" was coined in *Union v. Durkes*,¹⁴ wherein water was held to be the common enemy and universal problem of every landowner. Under the original doctrine, a landowner had an unqualified right to fend off surface water as he deemed necessary, without consideration of the adverse effects that such defensive measures might have on adjoining property owners. Likewise, neighboring property owners had the same right to protect themselves from surface waters in whatever manner they deemed necessary.¹⁵ A

Drainage in Iowa]. The inevitable source for this analysis is the previously cited Kinyon and McClure article in which the authors observed:

With the foregoing modifications and qualifications of the civil law and common-enemy rules in mind, it should be rather apparent that the uniform and predictable conflict of decision which would seem inevitable from the general statements of the two rules is not an actuality, and that in many types of situations, *though by no means in all*, the actual decisions under both rules are harmonious.

Interferences With Surface Waters, *supra* note 12, at 934 (emphasis added). They conclude that the rules are not coinciding, but that states seem to be evolving into the reasonable use rule:

The Minnesota cases, of which there have been many, present a striking picture of the complete cycle: first, the unqualified common enemy rule; then specific exceptions; then the 'qualified' common enemy rule; and finally, the gradual adoption of the reasonable use principle as the sole test. Several other states have completed all but the last step in this cycle, and it seems only a matter of time until many will have finished it.

Id. at 935 (footnotes omitted). The "cycle" was predicted in 1940, and in 1977 the common-enemy doctrine still enjoys wide usage, probably because it fosters a predictability in favor of the developing landowner, avoiding the uncertainty inherent in reasonable use standards.

Because common-enemy states haven't completed the cycle predicted by Kinyon and McClure in 1940, critics of the rule have interpolated the prediction to mean that the rules are becoming indistinguishable. This is also incorrect; the opposing presumptions inherent in the common-enemy and civil law rules prevent this. *See generally* Dobbins, *Surface Water Drainage*, 36 NOTRE DAME LAWYER 518, 525-26 (1960-1961) [hereinafter cited as *Surface Water Drainage*].

14. 38 N.J.L. 21 (Sup. Ct. 1875). Chief Justice Beasley borrowed the "common-enemy" label from Lord Tenterden's opinion in *Rex v. Commissioners of Sewers*, 108 Eng. Rep. 1075 (1828). Lord Tenterden intended the doctrine to apply only to seawater. *See generally* Annot., 59 A.L.L.R.2d 421 (1958). The application may have been unintended, but the doctrine was enlarged to include surface waters. *See* 3 H. FARNHAM, *THE LAW OF WATERS AND WATER RIGHTS*, § 889c (1904) [hereinafter cited as FARNHAM].

15. *Gannon v. Hargadon*, 92 Mass. (10 Allen) 106, 87 Am. Dec. 625 (1865), introduced the theory that provided a basis for the *Union v. Durkes* "common-enemy doctrine". Citing the maxim "*cujus est solum, ejus est usque ad coelum*" ("whose is the soil, his it is even to the skies"), the court upheld the defendant's right to fill in ruts in a roadway, even though it caused his neighbor's land to flood. Such injuries were held to be "*damnum absque injuria*" (loss that does not give rise to a legal action).

Although the common-enemy concept of self protection from inland surface water was developed in the United States, it has been erroneously credited to the English common law, which was imprecise and supported both the civil law rule and the common-enemy theory at different times. *See* FARNHAM, *supra* note 14, at § 889c.

harsh and inflexible rule evolved from the legal precepts developed in the initial "common enemy" cases; because landowners were permitted unrestrained measures in fending off surface water, cooperation between neighbors was discouraged. The only certain way to avoid receiving runoff water from adjacent property was to occupy the highest ground.¹⁶ In urban areas, the problem was amplified. Since the property of many urban landowners was not situated on sloping terrain, flood damage, in many instances, was very severe, affecting the entire premises of the urban dweller.

Courts responded to abuses arising out of the common-enemy doctrine by developing the modified common-enemy doctrine.¹⁷ This doctrine imposed a duty of reasonableness on the party who intended to alter drainage, either intentionally, as with the construction of a culvert, or unintentionally, as in the situation where drainage is inadvertently affected by the development of a non-drainage area such as a parking lot. Under the present construction of the rule, a developing landowner must act in good faith, without negligence and without unnecessary harm to others.¹⁸ Because urban development requires alteration of natural drainage, several courts have concluded that urban areas are best served by the modified common-enemy doctrine; it is now applied in the urban areas of twenty-three states and the District of Columbia.¹⁹

16. See Annot., 59 A.L.R. 2d 421, 424 (1958); see also, FARNHAM, *supra* note 14, at 2595.

17. The modifications began almost as early as the rule itself. See *Livingston v. McDonald*, 21 Iowa 160 (1866); *Freudenstein v. Heine*, 6 Mo. App. 287 (Ct. App. 1878). See also Annot., 59 A.L.R.2d 421, 426-29 (1958) for cases employing the rule for other states.

18. Annot., 59 A.L.R.2d 421, 434 (1958).

19. Authorities differ concerning which jurisdictions adhere to a particular doctrine. In 1972, the following jurisdictions were cited as subscribing to the common-enemy doctrine: Alabama, Arizona, Arkansas, Connecticut, District of Columbia, Indiana, Kansas, Maine, Massachusetts, Mississippi, Missouri, Montana, Nebraska, New Mexico, New York, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Virginia, Washington, West Virginia, Wisconsin. 5 CLARK, *supra* note 2, at 490.

Oklahoma adopted the common-enemy rule in *Chicago, R.I. & Pac. Ry. Co. v. Groves*, 20 Okla. 101, 93 P. 755 (1908). In *Gulf, C. & S.F. Ry. Co. v. Richardson*, 42 Okla. 457, 141 P. 1107 (1914), the court altered its position and embraced the modified version of the doctrine. In its decision, the court incorrectly cited *Chicago, R.I. & Pac. Ry. Co. v. Johnson*, 25 Okla. 760, 107 P. 662 (1910), as having modified the common-enemy rule in Oklahoma. Actually, the *Johnson* decision merely noted the states subscribing to the modified and strict versions of the rule. The court then noted that the distinction was moot in *Johnson* and thus failed to expressly adopt the modified rule. *Id.* at 764, 107 P. at 663.

In *Interferences With Surface Waters*, *supra* note 4, however, the authors assert that Oklahoma appears to have based the decision in *Garrett v. Haworth*, 183 Okla. 569, 83 P.2d 822 (1938), on the civil law rule. *Id.* at 933. This inference is countered by

The Civil-Law Rule

Based on the preservation of natural drainage, the civil-law rule is the antithesis of the common-enemy doctrine. Employing the fiction of easements between higher and lower elevated parcels, the doctrine imposes a servitude on the lower estate, requiring that it receive all surface water flowing down through it in its natural course. Mutual burdens are imposed on the higher and lower estates; the owner of the servient estate cannot interrupt the drainage from the dominant estate, but the owner of the dominant estate may not enlarge the easement or otherwise increase the burden on the lower landowner.²⁰

If strictly applied, the civil-law rule would inhibit or prevent all development of land that is likely to cause a change in natural drainage. However, jurisdictions still under the rule have modified it to diminish its harsh effects,²¹ while others, recognizing the rule as ill-suited for urban problems, have retained the natural flow theory only for rural areas.²² Several other states have abandoned the rule entirely.²³

The Reasonable Use Rule

The concept of reasonableness in the modified common-enemy doctrine was borrowed from the "reasonable use" rule. Developed in the courts of New Hampshire²⁴ and Minnesota,²⁵ the rule permits a

the language of the decision, which holds that Oklahoma followed the rule that surface water was considered a common enemy which each property owner could turn back or pass on to the next landowner without liability. The court noted, however, that the rule had been modified so that each owner could exercise such right only if he did not injure his neighbor's property. Rather than an acknowledgment of the civil law rule, *Garrett v. Haworth* seems instead to be a forerunner of *King v. Cade*, 205 Okla. 666, 240 P.2d 88 (1952).

In spite of the Oklahoma Supreme Court's mistake in noting the common law origin of the doctrine, subsequent cases leave little doubt that Oklahoma now subscribes to the common-enemy rule. See *Iven v. Roder*, 431 P.2d 321 (Okla. 1967); *Lynn v. Rainey*, 400 P.2d 805 (Okla. 1964); *Gregory v. Bogdanoff*, 307 P.2d 841 (Okla. 1957); *Haskins v. Felder*, 270 P.2d 960 (Okla. 1954). It should further be noted that despite the popularity of the common-enemy rule, the Restatement of Torts endorses the reasonable use rule. See 4 RESTATEMENT OF TORTS, §§ 822-831, 833 (1939). Cf. 1 RESTATEMENT (SECOND) OF TORTS, § 158 (1965).

20. *Surface Water Drainage in Iowa*, *supra* note 13, at 818-19.

21. 52 CHI. KENT L. REV. 169 (1975).

22. *Id.*

23. Of the twenty-seven states that originally applied the civil-law rule, only thirteen now apply it to urban areas: California, Colorado, Florida, Illinois, Iowa, Louisiana, Maryland, Michigan, Nevada, North Carolina, Oregon, Tennessee, Texas. 5 CLARK, *supra* note 2, at § 452.2(B).

24. *Swett v. Cutts*, 50 N.H. 239, 9 Am. Rep. 276 (1870); *Bassett v. Salisbury Mfg. Co.*, 43 N.H. 569, 82 Am. Dec. 179 (1862).

25. *Enderson v. Kelehan*, 226 Minn. 163, 32 N.W.2d 286 (1948); *Sheehan v. Flynn*, 59 Minn. 436, 61 N.W. 462, 26 L.R.A. 632 (1894).

landowner to improve or otherwise make reasonable use of his land without fear of liability for resulting water damage, after a court has ruled on the "reasonableness" of his intention. Reasonableness is determined generally on the basis of certain criteria: (1) the surrounding circumstances of the particular case involved; (2) the nature and extent of the improvements sought to be made; (3) the extent of the interference with the natural flow of the surface waters; (4) the value of the improvements as compared with the injury to the plaintiff; and (5) the foreseeability of any harm.²⁶

The reasonable use test has varied in application,²⁷ but basically involves a balancing of the various interests involved. Therein lies the distinction between this rule and the modified common-enemy doctrine; whereas the reasonable use rule requires that the proposed use of the land meet court approval and that the developing landowner's interest outweigh the damage to his neighbor, the common-enemy rule requires only that malice and negligence be avoided, thus favoring the foreseeability of any resulting harm.

Have the Rules Merged?

The common-enemy and civil-law doctrines have been substantially modified by the reasonableness concept. Along with the reasonable use rule, both doctrines now consider a landowner's need to develop his land along with the corresponding right in adjacent landowners to be free from excessive surface water runoff. Predictably, jurisdictions using different doctrines often reach similar results in analogous fact situations,²⁸ creating the deceptive impression that the three rules are merging.²⁹

26. *Swett v. Cutts*, 50 N.H. 439, 446 (1870), cited in Comment, *Diffused Surface Waters in Mississippi*, 46 Miss. L.J. 118, 126 (1975) [hereinafter cited as *Diffused Surface Waters in Mississippi*].

27. For variations, see Annot., 59 A.L.R.2d 421, § 7 (1958); *Diffused Surface Waters in Mississippi*, *supra* note 25, at 128 n.73. The following states apply the reasonable use rule: Alaska, Delaware, Hawaii, Kentucky, Minnesota, New Hampshire, New Jersey, North Dakota, South Dakota, Texas (municipalities only, statute provides for civil law rule in other areas), Utah, Wyoming. 5 CLARK, *supra* note 2, at § 453.2.

28. Jurisdictions under the differing rules generally allow some acceleration and diversion of diffused surface waters by an upper landowner. However, in most states, a landowner may not collect unusual amounts of surface water and discharge it onto adjoining land to its injury, or divert surface water onto another's land, to its injury, from an area that did not drain in that direction naturally. 5 CLARK, *supra* note 2, at § 451.2 (E).

29. See note 13 *supra* and accompanying text.

It should be noted, however, that the three theories evolved from opposite concepts and that sufficient distinctions remain between the various jurisdictions to rebut any conclusion of a doctrinal merger.³⁰ The civil-law rule, for example, favors retention of natural drainage, but bends to permit development if the drainage burden isn't increased. The common-enemy doctrine favors the landowner's right to develop his property, but limits him to a reasonable use that will not cause unnecessary damage to adjoining property. The reasonable use rule is designed to balance the interests of the parties involved, but offers no prior determination of what is reasonable, which is always a factual question for judicial resolution. Although fairness and the demands of urban development have brought about similar decisions under the three rules, their diverse origins and the distinctions that remain in their applications in some states refute the idea of merger. Since the common-enemy doctrine is the most widely used, the following situations are discussed only in reference to those jurisdictions which apply the common-enemy rule.³¹

III. THREE COMMON GEOLOGICAL PROBLEMS IN URBAN DRAINAGE

A. INCREASED GENERAL RUNOFF

Increased surface water discharge is a natural result of urbanization. Urban development causes an increase in surface water discharge in a number of ways, such as by paving or otherwise covering permeable soil, or by filling in natural drainage courses, such as creeks and gullies. As a result, adjacent and lower lands receive the additional discharge volume, frequently at an increased velocity, since the greater mass of water flows over an impermeable surface. Because the developer or upper landowner may have redefined the contours of the land, water may be discharged onto bordering property at new points, washing away topsoil and creating gullies.³²

30. For an example of diverse decisions between civil-law and common-enemy jurisdictions, see note 44 *infra*. See also *Surface Water Drainage*, *supra* note 13, at 525.

31. This article cites diverse common-enemy jurisdictions to provide a broad coverage of the urban United States. Recent cases are generally used in place of older decisions to reflect newer trends, but many nineteenth-century cases, both urban and rural, are still controlling precedent. An attempt to provide Oklahoma illustrations is limited by the small number of urban cases on record. Some footnotes contained herein illustrate problems that were not litigated, either for lack of legal remedies, out of court settlement, or failure to initiate court action; they nonetheless serve as examples of urban problems in Oklahoma.

32. A problem illustrative of the first hypothetical situation exists in the 71st and

Generally, there is no legal recourse against a mere increase in surface water runoff. The upper landowner may augment the flow of water to lower lands either by increasing the volume or by changing the mode of flow.³³ He must be acting in reasonable use of his land, without negligence, however, and the additional discharge must not be through a drain or artificial channel onto adjacent property.³⁴ Thus, in *Bennett v. Cupina*,³⁵ improvements which caused the flow of water to be reversed down a driveway and onto plaintiff's land were held not actionable. The court observed that although the driveway formed an outlet, it was not an artificial conduit. Similarly, a Pennsylvania court held that a lower landowner had no actionable claim where the defendant purposefully diverted the flow of water on his own property, finding that the defendant's use was reasonable and that the surface waters entered plaintiff's land at the same point that they had for years, even though there was an increase in volume.³⁶

Several courts have recognized the right to improve land for

Sheridan area of Tulsa, Oklahoma. The Hardesty Company is currently developing the northeast corner of 71st and Sheridan for a large shopping center. Area homeowners are concerned that the additional runoff will tax an already overburdened drainage system beyond its capacity. The Southeast Tulsa Homeowners Assoc. (S.E.T.H.A.) sought a writ of mandamus in Tulsa County Court to compel Hardesty to either comply with municipal drainage requirements or stop work on the project. S.E.T.H.A. alleges that although the architects' plans for the project were in compliance with municipal ordinances, they were not followed in the construction phase. See *S.E.T.H.A. v. Tulsa City Commissioners*, C76 1613 (Filed in Tulsa County Dist. Ct., Oct. 6, 1976). The writ was denied when the City of Tulsa testified that it had no power to enforce the drainage criteria since the subdivision plat was approved in 1965, and the drainage criteria referred to by S.E.T.H.A. was not adopted until 1976. Any future court action by the homeowners must await the development of actual property damages in spite of professional opinions that such damage is certain to occur. Interview with Mrs. Sharon Seals, member, S.E.T.H.A., in Tulsa, Oklahoma (April 4, 1977).

The homeowners in Valley Brook, Oklahoma, a suburb of Oklahoma City, were more successful in pursuing an action similar to that proposed by S.E.T.H.A. In the construction of the Crossroads Shopping Center, thirteen acres which previously drained away from the plaintiffs were regraded and paved for parking, causing drainage to then flow toward Valley Brook. The community's drainage system was unable to accommodate the increased runoff and flooding resulted. The homeowners filed suit; however, the matter was settled out of court for \$60,000—the estimated cost of enlarging Valley Brook's drainage system. See *Town of Valley Brook v. Corland Corp.*, CJ75-28 (Filed in Okla. County Dist. Ct., January, 1975). Interview with Edwin Shapard, attorney for Valley Brook, in Oklahoma City (April 6, 1977).

33. *Haferkamp v. City of Rock Hill*, 316 S.W.2d 620 (Mo. 1958).

34. See notes 50-55 *infra* and accompanying text.

35. 253 N.Y. 436, 171 N.E. 698 (1930).

36. *Leiper v. Heywood-Hall Construction Co.*, 381 Pa. 317, 113 A.2d 148 (1955). See also *Kuklinska v. Maplewood Homes, Inc.*, 146 N.E.2d 523 (Mass. 1957); *Drive-In Realty Corp. v. Lewis*, 28 Misc. 2d 237, 212 N.Y.S.2d 671 (Sup. Ct. Westchester County 1961).

reasonable uses, even though the lower land suffers an additional drainage burden, as long as the resultant drainage is held to a minimum. One case held that in the absence of an unreasonable or negligent act by the upper landowner in the improvement of his land, the lower landowner had no cause of action, in spite of an increase in runoff and resultant incidental damages.³⁷ A New Jersey court stated that if an upper landowner could improve his land by changing the volume of surface drainage without causing lower landowners substantial damage, he could do so, and the lower landowners had no right to complain unless they could show material injury.³⁸

In the leading case of *Chamberlin v. Ciaffroni*,³⁹ the court held that a higher landowner was not liable for damages to lower land caused by water which naturally flowed from one level to another. Moreover, the court ruled that the defendant could improve his land by regrading or building upon it without legal responsibility for any consequent diversion of surface waters to lands of adjoining owners, since changes or alterations in the surface may be essential to the enjoyment of urban property.

Courts in common-enemy jurisdictions have consistently endorsed reasonable development of urban land, even to the detriment of neighboring landowners in some cases. The underlying philosophy for burdening adjoining lots is illustrated in *Bowers v. Price*,⁴⁰ where the court ruled that owners of urban lots buy and own land with the manifest condition that the natural or existing surface is subject to change by the progress of municipal development. All urban owners have equal rights, neither lessened nor increased by priority of improvement. The primary right of each owner is to protect his lot from loss or inconvenience due to the flow of surface water and to the extent that he acts upon his right to protect enjoyment of his own property, any incidental loss to his neighbor is *damnum absque injuria*—an injury for which there is no cause of action at law.

The fact that mass home building and urbanization may be considered socially beneficial, however, does not suggest that the cost of surface water drainage should be borne in every case by adjacent landowners instead of by those who profit from the development. Following this line of reasoning, a New Jersey court called for a balancing

37. *Ratcliffe v. Indian Hill Acres*, 93 Ohio App. 231, 113 N.E.2d 30 (1952).

38. *Hughes v. Knight*, 33 N.J. Super. 519, 111 A.2d 69 (1955).

39. 373 Pa. 430, 96 A.2d 140 (1953).

40. 56 Pa. D. & C. 256 (1945).

of interests test to replace the common-enemy doctrine and its practice of predetermination.⁴¹ With that decision, New Jersey, the state that coined the term "common-enemy," switched its allegiance to the reasonable use rule. This case may provide precedent which will further thin the ranks of common-enemy jurisdictions, thereby leading to an abandonment of the presumption favoring a landowner's right to develop his land.⁴²

A preferable alternative to this movement is retention of the common-enemy rule and its pro-development posture, accompanied by increased judicial and political awareness of the special problems of urban areas.⁴³ This would assure the landowner's right to use and enjoy his land, but also insures his awareness of his duty to neighboring landowners and, in the case of the commercial developer, his duty to those who purchase from him.

B. THE DEPRESSION

Larger natural depressions, including moist lowlands, swamps and marshes, are readily foreseeable as areas of drainage difficulty for landowners. More common and less noticeable are the smaller depressions which may occupy a single urban lot, or larger depressions created by the recontouring of land during urban development. This section of

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

42. *See* Annot., 59 A.L.R.2d 421, § 4 (1958).

43. Special problems of urban areas include:

1. Drainage is altered as a result of urbanization. *See* note 4 *supra* and accompanying text.
2. Roofs, paved areas, and other urban structures decrease the amount of permeable land available to retain surface water. *id.*
3. Urban landowners occupy smaller lots than their rural counterparts, thereby having fewer available options in combating the increased surface water runoff. Options available to the rural resident include diversion of runoff from adjacent land to a suitable area, such as a pond or watercourse, or relocating whatever is threatened. The urban resident, on the other hand, may not have the space necessary to divert the runoff, and may not have access to a convenient watercourse. He has little chance of relocating the damaged property on his small urban lot. If the foundation of his house is threatened by adjacent runoff because of its location on the slope, he may have no choice except to move. Although large rural buildings are not easily relocated, the rural owner at least has more choice than the urbanite in determining the building's initial location.
4. The urban dweller has lost his geological awareness. He usually purchases from a builder or real estate developer, and doesn't consider the geological surroundings in relation to his house. Even where the homeowner does have a choice in locating his home, he probably does not consider its location in terms of surface water problems.
5. City governments sometimes refuse to take responsibility for planning, although this is changing. *See generally Flood Control in Oklahoma, supra* note 3.

the article will focus on the enclosed urban depression, noting the geological and legal distinctions between the single-lot depression and the larger man-made urban depression.

The Single-Lot Depression

The single-lot, or backyard depression, is quite common and may occur naturally or from adjacent development, such as by a neighbor filling in his land to alleviate his drainage problem with the resulting creation of an artificial depression on neighboring lands. Whatever the origin, the resulting problem is standing water and moist, spongy soil for several days after each rain.

Modified common-enemy jurisdictions generally uphold the right of either an upper or lower proprietor to raise the surface of his land without incurring legal liability.⁴⁴ The use and enjoyment of urban property is often dependent upon the power to fill existing depressions or to otherwise improve the land surface for construction purposes. A party damaged by the elevation of neighboring property is expected to take similar measures to protect his property, despite the fact that no problem existed prior to the adjacent improvement. A developing landowner is restricted, however, to acting in good faith, without negligence, in improving his land. A cause of action arises where the plaintiff can establish that the defendant's acts were wanton, unnecessary, or careless.⁴⁵

The Larger Depression

The larger depression is typically man-made, occurring where large scale development diverts or eliminates natural drainage.⁴⁶ It

44. *Kossoff v. Rathgeb-Walsh, Inc.*, 3 N.Y.2d 583, 148 N.E.2d 132, 170 N.Y.S.2d 789 (1958). *Mason v. Lamb*, 189 Va. 348, 53 S.E.2d 7 (1949). The civil-law rule, in calling for natural drainage, has frequently been interpreted to hold that a landowner may not refuse to receive adjacent runoff by filling his own land. This has caused several civil-law jurisdictions to apply the common-enemy doctrine in cases involving the elevation of land in urban areas. See 78 AM. JUR. 2d *Waters* § 133 (1975).

45. *Mason v. Lamb*, 189 Va. 348, 53 S.E.2d 7 (1949).

46. Tulsa offers an excellent example of this problem. A natural depression exists approximately one block east of South Yale Avenue, running from 24th Street to 30th Street, where the Broken Arrow Expressway blocks off the area. The open depression was drained by a small creek prior to residential use of the area. Developers graded the land and eliminated the creek when houses were built, but the depression remained open until the Broken Arrow Expressway roadbed closed the south end of the area, the former drainage outlet. Drainage is now insufficient and rainfall results in soggy ground; heavier storms leave standing water for several days. On May 30, 1976, a heavy rainfall caused the sanitary sewers to back up in the neighborhood. Thirty home-

also may exist naturally with no significant drainage problem until adjacent development causes additional runoff into the area. Expressways, shopping centers and other large landfills may create an area with no natural outlet, so that rainfall exceeding drainage capacity will cause flooding. As a result, residents in such areas will have marshy soil, despite the adequacy of street drainage, unless their lots are sloped toward a large artificial drain.

Problems created by large urban depressions have not been frequently litigated, primarily because the large depressions have been judicially analogized to the single lot depression or the increased general runoff situation both of which require the injured party to exercise self-help if the developing landowner is neither careless nor negligent.⁴⁷

Unfortunately, self-help is not an adequate remedy in the larger depression situation. While the occupant of the smaller single lot depression may simply fill in his land, a similar solution would require occupants of the larger depression to raise the level of the land several feet, often burying structures in the middle of the depression. Nor should the problem be viewed as the same as that of increased general runoff; since large depressions are enclosed, no outlet exists for diversion of the augmented flow.

Even in the absence of case precedent, the common-enemy theory should allow recovery for residents of the larger depression where nearby development unreasonably increases the drainage burden. The special nature of the problem, as outlined above, should be clearly presented to the court, stressing the fact that the plaintiff has no realistic self-help remedies and therefore is vulnerable to the adverse effects of surrounding development.

Where the large urban depression is man-made, rather than natural, a landowner should have a better chance of successfully obtaining a legal remedy. Several logical steps should be followed when seeking legal relief. First, the act that created the depression must be determined. Developers may have filled creeks or regraded the land, or a governmental body may have built a roadbed, thereby enclosing a previously open depression. Relief in damages or a judicial order

owners formed the Darlington Park Homeowners Association, and filed a complaint with the Tulsa City Commission on July 12, 1976. The city has taken no positive action as of April 19, 1977. Interview with Manly Johnson, Chairman, Darlington Park Homeowners Association in Tulsa, Oklahoma (October 17, 1976).

47. See notes 40 and 44 *supra* and accompanying text.

requiring adequate drainage may be available if the plaintiff can show the acts complained of constitute an unreasonable use of the land, negligence or bad faith.⁴⁸ If the large depression is not man-made, the damaged party may still have a remedy if he can demonstrate that the developer should have anticipated that drainage problems would occur after the area had been urbanized. The plaintiff must establish that the problem results from a negligent failure to provide sufficient drainage for normal rainfall or that the developer has failed to account for runoff from higher ground.

Aside from a cause of action based upon a negligence theory, an additional remedy may exist in situations where the damage suffered by the homeowner is due to the actions of the developer from whom the plaintiff purchased his property, as opposed to the developer of neighboring property. In an action against a developer with whom the homeowner has contractual privity, the plaintiff may sue, in appropriate situations, on the express warranties in the sales or construction contract, or on an implied warranty of habitability and fitness,⁴⁹ as well as on the standard negligence or nuisance complaints.

C. ARTIFICIALLY COLLECTED DISCHARGE

The importance of the "common-enemy doctrine" and its modifications is that the landowner himself determines the best means of protecting his estate from possible water damage. As discussed previously, the landowner may fill, grade, pave and build on his property, bound only by a standard of reasonableness and be secure from liability for incidental damage to nearby property. Therefore, the common-enemy doctrine is essentially a mandate for urban development, with one crucial distinction; an upper landowner ordinarily has no right to artificially collect surface water and discharge it in mass upon a lower proprietor to the latter's damage.

This principle is applicable to a variety of situations. Where the

48. *Lambert v. Alcorn*, 144 Ill. 313, 33 N.E. 53 (1893).

49. In Oklahoma City, Quail Creek resident Anthony Zahn filed an action against the developer for breach of an implied warranty of habitability and fitness for the use intended. The plaintiff alleged that the developer provided inadequate drainage, and graded the area in such a way that surface water could not drain. The case was originally set for trial in February, 1977, but was subsequently postponed. It has been reset for May, 1977. See *Zahn v. Land Co.*, CJ 74 3709 (filed in Okla. County Dist. Ct., Oct. 17, 1974). Interview with Anthony Zahn in Oklahoma City (April 6, 1977). See also Comment, *Developments In Actions For Breach of Implied Warranties of Habitability in the Sale of New Houses*, 10 TULSA L.J. 445 (1975).

upper landowner creates an actual channel by laying drainage tile or pipe, or by digging a ditch, and causes water to discharge onto lower land, an actionable wrong arises without requiring a showing that the channel was constructed or maintained in a defective, unsafe, dangerous or obstructive manner.⁵⁰ In the absence of an actual channel, courts have nonetheless found artificial discharges arising from the drainage systems constructed for parking lots,⁵¹ an apartment complex,⁵² a hotel,⁵³ a housing addition⁵⁴ and a municipality.⁵⁵

IV. GOVERNMENTAL LIABILITY

In General

As noted in the introduction, this comment is intended to provide only a survey of urban surface water drainage under the common-enemy doctrine. Government liability within state jurisdictions is especially difficult to generalize; the frequency of impleading the public sector, however, necessitates some coverage of the subject.⁵⁶

Basically, municipal corporations have no obligation to provide for

50. *Lytwyn v. Town of Wawarsing*, 43 App. Div. 2d 618, 349 N.Y.S.2d 35 (1973). *But see* *Watters v. National Drive In*, 226 Wis. 432, 63 N.W.2d 708 (1954) where the court, in holding for the defendant, said that the installation of drainage tiles did not conclusively establish that water had been artificially collected. Also note the importance of proper pleading. Where the plaintiff alleged the defendant's change of grade in his property caused a collection of surface water and subsequent overflow onto her land, the complaint was dismissed for failure to allege that the water was collected or directed by means of ditches, drains, or channels. *Tench v. Highfield Estates*, 2 App. Div. 2d 991, 157 N.Y.S.2d 850 (1956).

51. *Groff v. Circle K Corp.*, 86 N.M. 531, 525 P.2d 891 (Ct. App. 1974).

52. *Abrams v. Wright*, 202 S.E.2d 859 (S.C. 1974).

53. *Allied Hotels, Ltd. v. Barden*, 389 P.2d 968 (Okla. 1964).

54. *Tidewater Oil Sales Corp. v. Shimelman*, 158 A. 229 (Conn. 1932).

55. *Oklahoma City v. Bethel*, 175 Okl. 193, 51 P.2d 313 (1935).

56. This section discusses the government as an actual tortfeasor, but not as an insurer against "Act of God" storms (unpredictable storms of unusual severity), or the private developer's misfeasance. Damaged homeowners and other interested parties have frequently requested municipal compensation where homes were purchased in an area with subsequent flooding problems, under the impression that the city acted as guarantor in zoning the area for residential use. The parties are further angered when the city appears to "pass the buck" by seemingly invoking immunity or otherwise avoiding the would-be plaintiff(s). The truth is that immunity has not been invoked, zoning is not a geological guarantee, and there is no cause of action against the city. Residential zoning generally includes criteria to insure health and property values by restricting residential areas to residential use, and building codes may further insure health and safety by requiring adequate drainage and sewage disposal systems. But if zoning does not include geological criteria, perhaps it should. City planning boards could include natural drainage needs in the zoning equation, and the damaged homeowners would have a remedy if they could establish in court that the area was not zoned in accordance with available data. *See* *Annot.*, 35 A.L.R.2d 1135 (1954), for a discussion of enforcement of zoning ordinances.

drainage of surface water, nor is there any liability for the non-exercise of governmental power to construct drains preventing the flow of surface water onto adjacent properties.⁵⁷ When constructing, grading or otherwise improving a street or highway, a municipality is not obliged to protect adjoining property from the natural flow of surface water by the construction of sewers, drains, or other devices.⁵⁸

However, where a city does undertake the construction of drainage outlets, it is generally liable for damage to adjacent lands caused by an unusual accumulation of water or by an artificial collection and discharge.⁵⁹ A municipality is liable for work negligently done,⁶⁰ and may also incur liability under a nuisance theory.⁶¹ The extreme position is that a city government is liable if it actively injures private property by surface water, even if the damage is the necessary result of work carefully performed and within the scope of municipal functions.⁶²

Another approach to governmental liability for surface water damage is eminent domain. Several cases have held that compensation is required for damages to land arising from the diversion, obstruction or other interference with the flow of surface water.⁶³ The theory underlying this type of liability is that although the land is not directly taken, damage must be compensated where the owner's use and enjoyment is sufficiently interfered with so as to constitute a taking within the meaning of the fifth amendment.⁶⁴

57. *Fair v. City of Philadelphia*, 88 Pa. 309 (1879); *Carr v. The Northern Liberties*, 35 Pa. 324 (1860); see also 57 AM. JUR. 2d *Municipal, Etc., Tort Liability* § 238 (1971).

58. *Salzman v. New Haven*, 81 Conn. 389, 71 A. 500 (1908); see also 39 AM. JUR. 2d *Highways, Streets, and Bridges* § 114 (1968).

59. See 57 AM. JUR. 2d *Municipal, Etc., Tort Liability* § 114 nn. 14, 15 (1971).

60. *Smith v. Village of Victor*, 134 Misc. Rep. 888, 236 N.Y.S. 566 (Sup. Ct. 1929). See also 63 C.J.S. *Municipal Corporations* § 873 n.68 (1950); 39 AM. JUR. 2d *Highways, Streets, and Bridges* § 114 n.9 (1968).

61. See also 63 C.J.S. *Municipal Corporations* § 880 (1950).

62. *Tearney v. Smith*, 86 Ill. 391 (1877). See also 57 AM. JUR. 2d *Municipal, Etc., Tort Liability* § 239 n.20 (1971).

63. See *Avondale v. McFarland*, 101 Ala. 381, 13 So. 504 (1893); *Woodbury v. Beverly*, 153 Mass. 245, 26 N.E. 851 (1891); *In re: Chatham Street*, 191 Pa. 604, 43 A. 365 (1899); *Ulery v. Kitsap County*, 188 Wash. 519, 63 P.2d 352 (1936).

64. The fifth amendment states, in pertinent part: "nor shall private property be taken for public use, without just compensation." This guarantee insures that private parties will not have to bear alone the entire loss where land is taken for public use, See *Armstrong v. United States*, 364 U.S. 40, 49 (1960). Prior to the adoption of the fourteenth amendment, only the federal government was subject to the just compensation clause of the fifth amendment. *Green v. Frazier*, 253 U.S. 233 (1920). By 1897 the Supreme Court held that the due process clause of the fourteenth amendment afforded

Government Immunity

The selection and implementation of public works are viewed as discretionary or governmental acts, rendering a city immune from consequential damages.⁶⁵ The construction and maintenance of public systems are ministerial and liability may result under theories of negligence, nuisance, or trespass.⁶⁶ However, an argument has been made that the provision of sewers and drainage systems is beneficial to public health, safety and sanitation and is, therefore, a protected governmental function.⁶⁷

It is doubtful that immunity could be successfully invoked where the damage results from the construction of government property, such as office buildings for city, state and federal governments. Although no pertinent surface water drainage cases were found, it is well settled that the government, as landowner, acts in a strictly proprietary capacity.⁶⁸

V. CONCLUSION

If an urban drainage problem can be placed in one of the above categories, the potential litigant should have a good idea of his remedies⁶⁹ or liabilities. The artificially collected discharge generally involves negligence and a lack of good faith. Where a valid cause of action exists, ordinarily, the available remedies are injunctive relief, damages or both. There is no established legal precedent to suggest the precise remedies available in the larger urban depression hypothesis. However, logically, suitable relief should exist if the plaintiff can prove that drainage has been altered and can identify the negligent party.

On the other hand, the single lot depression and the increased

property owners the same protection against the states as the fifth amendment did against the federal government. *Chicago, B. & Q. R.R. Co. v. City of Chicago*, 166 U.S. 226 (1897).

65. 63 C.J.S. *Municipal Corporations* § 873 nn. 72 & 73 (1950).

66. *Id.* at 253 n.80.

67. *Id.* at 253 n.75.

68. This statement refers to property which a governmental entity owns or leases for proprietary purposes. *See generally* 63 C.J.S. *Municipal Corporations* § 896 (1950).

69. In addition to the judicial and self-help remedies discussed in this comment, the damaged landowner should consider political action. One example is the planning initiative taken by the West of Main Improvement Association. *See note 5 infra*. Other possibilities include lobbying both city and state governments and participating in any open meetings or hearings held locally. This may be done individually or with a homeowners group, such as those mentioned in notes 5, 32 and 46 *supra*.

general runoff problems usually present situations where no cause of action will lie unless the damaged party can make a special showing of lack of care, excessive damage or malice, or can demonstrate a more adequate drainage system is feasible. The reason for this is that these problems arise from normal urban growth, and a landowner should be able to improve his land without assuming liability for all the natural results of the improvement. Urban dwellers must accept the fact that the features of urbanization—paved streets, parking areas, drainage and sewer systems, roofs, sidewalks, and playgrounds—produce some inconveniences along with the benefits they provide. One of these inconveniences is excess surface water runoff; like traffic congestion and steadily rising property taxes, it is part of the urban environment.

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